The Incremental Validity of Feedback Orientation on Performance: Beyond C & G

Elissa Ann Liguori

Old Dominion University, elissaliguori@gmail.com

Follow this and additional works at: https://digitalcommons.odu.edu/psychology_etds

Part of the Applied Behavior Analysis Commons, and the Cognitive Psychology Commons

Recommended Citation

Liguori, Elissa A.. "The Incremental Validity of Feedback Orientation on Performance: Beyond C & G" (2024). Master of Science (MS), Thesis, Psychology, Old Dominion University, DOI: 10.25777/1eaq-bz76
https://digitalcommons.odu.edu/psychology_etds/433

This Thesis is brought to you for free and open access by the Psychology at ODU Digital Commons. It has been accepted for inclusion in Psychology Theses & Dissertations by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.
THE INCREMENTAL VALIDITY OF FEEDBACK ORIENTATION ON PERFORMANCE:

BEYOND C & G

by

Elissa Ann Liguori
B.A. May 2019, The Pennsylvania State University

A Thesis Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF SCIENCE

PSYCHOLOGY

OLD DOMINION UNIVERSITY
May 2024

Approved by:

Ian Katz (Director)
Jeffrey Olenick (Member)
Abby Braitman (Member)
ABSTRACT

THE INCREMENTAL VALIDITY OF FEEDBACK ORIENTATION ON PERFORMANCE: BEYOND C & G

Elissa Ann Liguori
Old Dominion University, 2024
Director: Dr. Ian M. Katz

The current study examined the incremental validity of feedback orientation to predict task and contextual performance above and beyond two robust predictors of performance (conscientiousness and cognitive ability). Additionally, this study tested if feedback orientation could ameliorate the effects of adverse impact. 185 adults employed in the United States completed a survey assessing their levels of feedback orientation, cognitive ability, and conscientiousness. It was hypothesized that feedback orientation would incremental validity to predict contextual (H1) and task performance (H2) above and beyond conscientiousness and cognitive ability. Furthermore, the authors expected that feedback orientation would ameliorate the effects of adverse impact when coupled with cognitive ability in the selection assessment process (H3). Results supported hypotheses 1 and 2 but did not support hypothesis 3. Implications for practice as well as future directions are discussed.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>iv</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>BACKGROUND</td>
<td>6</td>
</tr>
<tr>
<td>FEEDBACK ORIENTATION</td>
<td>6</td>
</tr>
<tr>
<td>METHOD</td>
<td>17</td>
</tr>
<tr>
<td>PARTICIPANTS AND PROCEDURE</td>
<td>17</td>
</tr>
<tr>
<td>MEASURES</td>
<td>17</td>
</tr>
<tr>
<td>RESULTS</td>
<td>21</td>
</tr>
<tr>
<td>PRELIMINARY ANALYSIS</td>
<td>21</td>
</tr>
<tr>
<td>HYPOTHESIS TESTING</td>
<td>24</td>
</tr>
<tr>
<td>ADVERSE IMPACT ANALYSIS</td>
<td>31</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>35</td>
</tr>
<tr>
<td>PRACTICAL IMPLICATIONS</td>
<td>37</td>
</tr>
<tr>
<td>THEORETICAL IMPLICATIONS</td>
<td>39</td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>41</td>
</tr>
<tr>
<td>FUTURE DIRECTIONS</td>
<td>42</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>44</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>45</td>
</tr>
<tr>
<td>VITA</td>
<td>55</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Descriptive Statistics and Correlations</td>
<td>25</td>
</tr>
<tr>
<td>2. Hierarchical Regression Results on Contextual Performance</td>
<td>25</td>
</tr>
<tr>
<td>3. Hierarchical Regression Results on Task Performance</td>
<td>27</td>
</tr>
<tr>
<td>4. Exploratory Analyses: Hierarchical Regression Results on Contextual Performance</td>
<td>29</td>
</tr>
<tr>
<td>5. Exploratory Analyses: Hierarchical Regression Results on Task Performance</td>
<td>29</td>
</tr>
<tr>
<td>6. Adverse Impact Analysis</td>
<td>32</td>
</tr>
</tbody>
</table>
INTRODUCTION

At the heart of many thriving companies are well-planned and executed selection processes. Crafting a successful selection process ensures that the employees’ attributions, goals of the organization, and work environment are a good fit and, importantly, selection procedures must be legally defensible (Cascio & Aguinis, 2018). Primarily, organizations should avoid adverse impact; which occurs when members of one group are selected at substantially higher rates than members of another group. Uniform Guidelines define adverse impact as “a selection rate for any race, sex, or ethnic group which is less than four-fifths (or eighty percent) of the rate for the group with the highest rate” (Commission, 1990). Practitioners should be mindful of any selection assessments that may contribute to adverse impact in their selection pool. It is prudent to note that this paper focuses on selection tests, however, detecting adverse impact from these assessments does not definitively indicate discriminatory practices. It is more nuanced as organizations have other tools (i.e. job analysis and job requirements) to defend their selection decisions. However, practitioners should do their best to use assessments that capture performance, while not over-favoring any group. Fundamentally, the impact of organizational selection procedures can be recognized in the organization’s performance as a whole and by examining the composition of its people. Lievens et al., (2021) note that the selection of new hires impacts performance at multiple levels; including individuals, teams, and departments. They also note that selection procedures act as an important mechanism in establishing diverse organizations.

Reducing adverse impact in selection procedures is essential for creating and maintaining a diverse workforce. Sustaining a diverse workplace relates to positive outcomes for individuals and the organization. Meta-analyses have found that demographic variety in teams is
significantly related to team performance (Wei et al., 2015) and racial diversity has an overall positive relationship with organizational performance (Moon & Christensen, 2020). Furthermore, positive perceptions of an organization’s diversity climate are important for these beneficial outcomes to come to fruition, including maintaining and retaining employees who may belong to a minority demographic group (McKay et al., 2007). Creating positive diversity climates and fostering a diverse workforce has numerous benefits at multiple organizational levels (Moon & Christensen, 2020; Wei et al., 2015) thus, it is in the organization’s best interest to try to select individuals from a multitude of backgrounds and avoid assessments that favor a specific group.

Commonly, individual differences are key predictors used in selection assessments. Ryan and Sackett, (2012) classify individual differences into distinct types: interindividual differences (differences between people) and intraindividual differences (differences in a trait over time). This paper focuses on examining interindividual differences, or traits that differ between people (Ryan & Sackett, 2012). Not every applicant can receive a job offer, thus practitioners can use individual differences (i.e. personality traits, cognitive ability, etc.) as a means to predict who will most likely be successful at their job (Cascio & Aguinis, 2018).

In performance management research, meta-analytic results have established both conscientiousness and cognitive ability as two of the strongest trait-based predictors of performance (Barrick & Mount, 1991; Hunter, 1986; Sackett et al., 2021). An individual high in conscientiousness can be described as efficient, sensible, punctual, or well-organized (Costa Jr & McCrae, 2008) and an individual with high cognitive ability (g) can be described as someone with a strong ability to learn (Hunter, 1986). Recent research has found prior meta-analytic estimates of the relationships between these predictors and performance to be inflated (Park et al., 2020; Sackett et al., 2021). Although the relationship between performance and those traits
(i.e. conscientiousness, cognitive ability) has been overestimated in prior research, methods that remedy the inflation still find these predictors to be strongly correlated with performance. However, when coupled together as predictors in the selection process, research has found that these predictors can contribute to adverse impact (Avis et al., 2002; Ryan et al., 1998).

Furthermore, findings suggest that constructs that are g-loaded have positive linear relationships with Black-White and Hispanic-White difference scores (Dahlke & Sackett, 2017; Jensen, 1999). The authors suggest this is presumed to be a result of assessor bias and differential investment. Assessor bias occurs when subjective forms of selection (i.e. interviews or assessment centers) are used as the judgement of the raters may influence an individual’s performance rating. Differential investment may occur when individuals do not receive the same opportunities to invest time and resources into developing certain knowledge or skills (Dahlke & Sackett, 2017). The authors posit that different levels of exposure to cognitive domains may influence one’s level to draw upon those domains during assessments. For example, an individual who has had the opportunity to take advanced mathematics courses will likely have more exposure to mathematics and will be able to score better on a math-based assessment compared to an individual without that opportunity. The authors suggest that differential investment impacts g-loaded constructs, but typically does not influence measures evaluating individual differences or traits (i.e. personality).

Thus, practitioners have incorporated Big Five personality traits as predictors of performance as they should not result in large racial difference scores. However, meta-analytic evidence suggests, that aside from conscientiousness, personality traits are not highly correlated to performance. Sackett et al., (2021) found conscientiousness to be a strong predictor $\rho = .19$. However, the correlations between other personality dimensions and performance were found to
be relatively small: for emotional stability $\rho = .09$, for extraversion $\rho = .10$, for agreeableness $\rho = .10$, and openness $\rho = .05$. While personality traits can be useful in predicting other important organizational outcomes, conscientiousness is generally regarded as the personality trait with the most predictive validity for performance.

Furthermore, although meta-analytic results have suggested that personality measures do not result in standardized differences between racial groups (Foldes et al., 2008), there is evidence that incorporating personality measures in the selection process may not be a panacea when trying to ameliorate the effects of adverse impact in selection assessments. Ryan et al. (1998) found that when personality measures are used with cognitive ability to predict performance, high selection ratios (where many applicants are selected) are needed to lessen the effects of adverse impact. Additionally, Avis et al. (2002) found that adverse impact was worse when cognitive ability and conscientiousness were used to predict performance compared to cognitive ability alone.

It is apparent that there are a couple of issues at play. First, while personality measures can help reduce the effects of adverse impact, the Big Five personality dimensions may not have high predictive validity for performance as evidenced in meta-analyses (Barrick & Mount, 1991; Sackett et al., 2021). This is commonly referred to as the diversity-validity trade-off. Second, although personality may play a role in reducing adverse impact, it may not be enough to be legally defensible (produce a .80 selection rate) unless there are very high selection ratios (Ryan et al., 1998). Lastly, there is evidence that the personality trait with the highest predictive ability for performance, conscientiousness, can make adverse impact worse when coupled with cognitive ability (Avis et al., 2002). Although batteries of assessments are not the only tools used in selection (i.e. interviews, biodata, etc.), if they are an initial step in the selection process to
filter through applicants, adverse impact may be present in the selection pool before using other tools. It seems evident there is a need for additional useful trait-based predictors in the selection process that do not contribute to adverse impact.

A proposed beneficial individual difference in the context of selection is feedback orientation, which is a key factor in how an individual utilizes feedback. Feedback orientation is defined as a multi-dimensional construct consisting of: utility; the tendency to believe feedback is useful, accountability; the feeling of obligation to respond to feedback, social awareness; the tendency to use feedback to know others’ perceptions of themselves, and feedback self-efficacy; individuals’ perceived ability to respond to and interpret feedback appropriately (Linderbaum & Levy, 2010). Meta-analytic research has provided evidence that feedback orientation can predict performance (Katz et al., 2023), however, feedback orientation’s incremental validity in predicting performance beyond cognitive ability and conscientiousness (two of the strongest predictors of performance), has not yet been examined. While plenty of attention is given to the Big 5 traits and selection, there is considerably less research on feedback orientation’s relationship to performance and how it can be used in combination with other predictors, specifically cognitive ability, during the selection process. The goals of this paper are twofold. First, it seeks to examine feedback orientation’s relationship to performance beyond cognitive ability and conscientiousness. With this examination, it hopes to contribute to the literature by providing an additional individual difference that is useful in the selection process: one that can detect variance in performance conscientiousness and cognitive ability cannot. Second, it seeks to examine if feedback orientation can ameliorate the effects of adverse impact when coupled with cognitive ability at an array of selection ratios.
BACKGROUND

FEEDBACK ORIENTATION

Initial conceptualizations of feedback orientation classify it as a multi-dimensional construct that determines one’s receptivity to feedback (London & Smither, 2002). The authors specify that those high in feedback orientation should view feedback as valuable because they are motivated for self-enhancement. Inherently, an individual who views feedback as valuable is more likely to use and benefit from the feedback.

Feedback orientation has also been associated with goal orientation. London & Smither (2002) note that feedback orientation should be connected to having a mastery orientation rather than a performance orientation. Individuals with mastery orientations are considered challenge-seeking and persistent in the face of obstacles, whereas an individual with a performance orientation may seek favorable responses to their competence and avoid criticisms (Dweck, 1986). Thus, individuals with a high feedback orientation should have a mastery orientation as they are more efficient at constructively utilizing feedback to achieve their goals than those with a low feedback orientation, or a performance orientation, who may only want praise for their abilities rather than constructive criticism. While a high feedback orientation is associated with having a mastery orientation, these two concepts are distinct. A mastery orientation is indicative of the type of performance goal an individual may choose, specifically, someone with a mastery orientation will likely select a more difficult goal and see the benefits of learning as they proceed to achieve their goal (Dweck, 1986). In a slightly different vein, a high feedback orientation is more representative of how an individual with a mastery orientation achieves their goals. As an individual strives to accomplish their complex goal, those with a high feedback orientation
should be skilled at processing the feedback given to them (London & Smither, 2002), and may be more efficient in achieving their complex goals than those with a low feedback orientation.

London & Smither (2002) connect feedback orientation to self-confidence and self-monitoring. Specifically, individuals with high self-confidence will look for ways to overcome failure whereas those low in self-confidence may have difficulty processing negative feedback (London & Smither, 2002). Furthermore, individuals high in self-monitoring may be more likely to vary their behavior in response to feedback to achieve what is expected from them (London & Smither, 2002).

Although feedback orientation is conceptualized as a stable individual difference (similar to personality traits), it is somewhat unique as it may be influenced over time by the feedback environment (Linderbaum & Levy, 2010; London & Smither, 2002). The feedback environment refers to “the contextual aspects of day-to-day supervisor-subordinate and coworker-coworker feedback processes rather than to the formal performance appraisal feedback session” (Steelman et al., 2004, p. 166). Feedback orientation may be a useful predictor of performance due to its interaction with the feedback environment. Specifically, those high in feedback orientation may utilize self-regulatory processes more efficiently to process the feedback received from their environment, thus improving performance.

**Feedback Orientation and Self-Regulation**

To elaborate on this concept further, it is important to review the theory of self-regulation. Self-regulation refers to the processes of attaining and keeping goals, where goals are internally represented desired states (Vancouver, 2000). Under the umbrella of self-regulation theory nests control theory. Control theory is grounded in the primary function of the cybernetic negative feedback loop (Vancouver & Day, 2005). Essentially, cybernetic systems “control” a
variable of interest by analyzing discrepancies between the variable’s anticipated state (current state) and its desired state (goal state), and via the feedback loop process, there is a reduction in discrepancies between the goal state and the current state (Vancouver & Day, 2005). Vancouver & Day (2005) note that feedback is a vital aspect of this process because feedback is used to assess goal progress. Thus, an individual with a high feedback orientation may process feedback more effectively, helping to decrease the discrepancy between the “current state” and the “goal state,” and attain goal progress more efficiently than an individual low in feedback orientation. Once again, this emphasizes a key theoretical difference in feedback orientation compared to other individual difference variables. That is, feedback orientation should be a key individual difference in this self-regulatory process in a way that is not possessed by other personality traits and subsequently has a stronger relationship to performance.

There are important theoretical distinctions as to why feedback orientation should capture unique variance in performance that g and conscientiousness do not. As stated, cognitive ability is conceptualized as one’s ability to learn and acquire knowledge (Hunter, 1986). Thus, those with high cognitive ability can acquire more job knowledge at a faster rate, leading to higher levels of job performance (Schmidt, 2002). Moreover, individuals high in conscientiousness are likely to have high impulse control, which helps to engage in goal-directed behaviors (i.e. delaying gratification, organizing, and prioritizing tasks) (John & Srivastava, 1999). Likewise, individuals that are high in conscientiousness are typically higher performers due to their ability to set difficult goals and focus their effort on achieving them over long periods of time (Barrick et al., 1993) through means of self-regulatory restraint (i.e. avoiding counterproductive behaviors) (Wilmot & Ones, 2019). In sum, g relates to performance through one’s ability to learn (Hunter, 1986), conscientious individuals heightened performance is activated via goal
setting and motivational engagement (Wilmot & Ones, 2019), and feedback orientation should capture unique variance in performance above and beyond conscientiousness and g, due to one’s ability to take in information from the environment (feedback) to subsequently modify behavior that gets them closer to their desired end state (Vancouver & Day, 2005).

**Feedback Orientation and The Performance Management Process**

Building on self-regulatory processes, London & Smither, (2002) propose the longitudinal performance management model where feedback orientation is key in processing feedback to achieve a desired end state. The model states that in response to feedback from a critical event, an individual will engage in three stages of feedback processing: stage 1: receiving feedback and experiencing initial reactions, stage 2: processing the feedback mindfully, and stage 3: using the feedback to set goals and track progress. These three stages of feedback processing are moderated by the individual’s feedback orientation and the organization’s feedback environment. A strong feedback environment would include high-quality feedback, an environment that values feedback, and one that provides support for using feedback (London & Smither, 2002). Importantly, London & Smither (2002) state that the feedback environment can affect an individual’s feedback orientation, such that when there is support for learning and readily available feedback (a strong feedback environment), individuals are more likely to develop a positive feedback orientation. When an individual experiences both a strong feedback environment and a high feedback orientation, they should experience the three stages of feedback processing more efficiently and meaningfully, thus achieving desired outcomes such as behavior change, better performance, increased self-awareness, and self-confidence (London & Smither, 2002).

In more recent literature, feedback orientation and the feedback environment maintain key roles in the performance management process. Anseel et al. (2015) offer a reciprocal model
of feedback-seeking behavior where antecedents (e.g. initial performance, role ambiguity, etc.) are mediated by feedback-seeking behavior, ultimately leading to performance. In this model, the mediated pathways are moderated by individual differences (e.g. feedback orientation) and situational factors (e.g. feedback environment). Anseel et al. (2015) propose this model as a framework for causal and reciprocal research to understand how these complex relationships occur over time.

Subsequently, Schleicher et al. (2018) propose a systems-based model of performance management where inputs and outputs are influenced by interdependent factors such as tasks, formal processes, informal processes, and individuals. Within this model, feedback orientation operates within the “individual factor” as individual differences have been widely studied within performance management research (Schleicher et al., 2018). In this model, the feedback environment is housed within the “informal processes” as it includes unwritten processes that emerge over time (Schleicher et al., 2018). These factors interact to provide a dynamic model of the performance management process that was not portrayed in earlier research (Schleicher et al., 2018).

Building on the model proposed by Schleicher et al. (2018), Tseng & Levy (2019) created a multi-level model where feedback orientation mediates the relationship between receiving feedback and performance at the individual level and the feedback environment mediates the relationship between feedback and performance at the organizational level. This model uniquely explains leaders’ roles as the catalyst of the performance management process (as they deliver feedback, coaching, etc.) and addresses how this process takes place at multiple levels within an organization (Tseng & Levy, 2019). While the performance management process is a priority for organizations, and feedback’s role within it has received ample attention,
feedback orientation is a key individual difference for additional important organizational criteria as well.

**Feedback Orientation as an Antecedent**

While feedback orientation is not as widely studied compared to other individual differences, there is substantial literature positioning feedback orientation as a significant antecedent of key organizational outcomes that may be of interest when considering criteria for selection.

Several studies have examined an individual’s feedback orientation in predicting outcomes among peers. Holt et al., (2013) found that feedback orientation significantly predicts task engagement and overall trust within teams. The findings suggest that feedback orientation could be an important individual difference to consider when building teams, specifically when trying to foster trust or task engagement. Furthermore, feedback utility, a dimension of feedback orientation, was found to significantly predict peer feedback within a team, suggesting that the more an individual believes their feedback is useful, the more they will provide feedback to their peers (Goldberg, 2018). Altogether these findings suggest that feedback orientation could be a useful individual difference among peers for collaboration and teamwork.

Additionally, feedback orientation has also been found to predict important outcomes for dyadic relationships between subordinates and their superiors. In a study looking at 103 manager-subordinate dyads, manager’s feedback orientation was found to significantly relate to subordinate perceptions of high-quality coaching behaviors (Steelman & Wolfeld, 2018) and multiple studies have found support for the positive relationship between feedback orientation and high-quality coaching relationships (Gregory & Levy, 2012; Katz et al., 2023; Steelman & Wolfeld, 2018). This suggests that feedback orientation is not only relevant in relationships among peers, but it can also be a meaningful individual difference in managerial relationships.
with their subordinates. Several studies have found that feedback orientation is positively related to favorable feedback environments (Dahling et al., 2017; Katz et al., 2023; Steelman & Wolfeld, 2018) and LMX (Dahling et al., 2012; Katz et al., 2023). All in all, these findings support the notion that feedback orientation is vital for successful supervisor-subordinate relationships.

Herold & Fedor, (2003)’s findings show that training performance is supported by feedback orientation in situations where external feedback sources are primary sources for performance feedback. This study demonstrates the additional utility of feedback orientation beyond the selection process as it can be beneficial in training contexts once employees are hired. Gong et al. (2017)’s research showed that feedback orientation was significantly and negatively correlated to job burnout and emotional exhaustion. Undeniably, the benefits of having individuals with a high feedback orientation in organizations is expansive.

**Feedback Orientation as an Antecedent of Performance.** As stated, the essence of selection is to choose the candidates the organization believes will perform the best. Therefore it is prudent to note, when empirically examining performance, it has been conceptualized as a multi-dimensional construct consisting of both contextual and task performance. Task performance is defined as the degree to which job incumbents are effective in performing activities that contribute to the organization’s core, while contextual performance activities contribute to the social context of the organization (i.e. volunteering, helping a coworker), but are not a formal part of the job (Borman & Motowidlo, 1997). This distinction is important considering predictors, such as feedback orientation, may have different relationships with contextual vs. task performance. Our study reviews literature that includes both contextual and
task performance as outcomes of feedback orientation and acknowledges this distinction within the study design.

Much of the extant research on feedback orientation has taken a nuanced approach, situating the individual difference as a mediator or moderator to the outcome of performance. Results from Dahling et al. (2012) suggest that feedback orientation’s relationship with supervisor ratings of performance is mediated by feedback-seeking behavior, conveying an indirect relationship between feedback orientation and performance. Additionally, feedback orientation is shown to moderate the effect of instructor feedback on academic performance, such that feedback leads to higher performance improvement for learners with a high feedback orientation compared to those with a low feedback orientation (Abaci, 2014). While these findings are insightful as to how feedback orientation operates in the performance management process, far less literature has looked at the direct effects of feedback orientation on contextual and task performance.

**Direct Effects on Contextual Performance.** Although theory guiding feedback within the performance management process is scarce, the model proposed by Motowidlo et al., (1997) may explain why feedback orientation relates to contextual performance. This model proposes that personality variables should relate to contextual performance through contextual habits, skill, and knowledge and g should relate to task performance through similar mechanisms. Thus, feedback orientation should map strongly onto contextual performance as it is similar to personality variables in contrast to g-loaded constructs.

Furthermore, social exchange theory could explain why individuals with a high feedback orientation may engage in more contextual performance behaviors compared to those with a low feedback orientation. Cropanzano & Mitchell (2005) posit that reciprocity is foundational in
social exchange theory. Specifically that exchanges are bidirectional: something must be given and something must be returned (Cropanzano & Mitchell, 2005). Katz et al., (2023) note that if individuals are experiencing positive reactions to feedback received from their peers, it is reasonable to presume those with a high feedback orientation may engage in contextual performance behaviors to reciprocate the positive experiences they received. This is in contrast to g and conscientiousness, which are related to performance primarily through ability (Schmidt, 2002) and goal motivation (Wilmot & Ones, 2019), and therefore may not be as strongly related to the contextual performance behaviors (i.e. helping a coworker) as feedback orientation may be.

Building from this theoretical link, feedback orientation as a predictor of contextual performance has been empirically examined in both educational and workplace contexts. In a sample of undergraduate students, Elsner Twesme et al. (2021) found a direct relationship between undergraduates’ feedback orientations and their contextual performance ratings. This research provides evidence of a direct link between feedback orientation and contextual performance in an academic setting. Additionally, Katz et al., (2023)’s meta-analysis found a positive relationship between feedback orientation and organizational citizenship behaviors (OCBs), a type of contextual performance, $r_c = 0.18$, substantiating the relationship between feedback orientation and contextual performance in a workplace context.

_Hypothesis 1_: Feedback orientation will explain variance related to contextual performance above and beyond conscientiousness and cognitive ability.

**Direct Effects on Task Performance.** Recall, that self-regulation theory can help to explain the hypothesized relationship between feedback orientation and task performance. Vancouver & Day, (2005) note that self-regulation is a process aimed at reducing the
discrepancy between an individual’s current state and their desired end state. Feedback provides key information within this process as it helps an individual to assess their goal progress (reducing the discrepancy between current and desired state) (Vancover & Day, 2005). London & Smither, (2002) build from this notion to create a longitudinal performance management model where feedback orientation and the environment impact individuals’ processing of feedback on behavioral outcomes. Thus, those with a high feedback orientation can process feedback more meaningfully and can change their behavior to increase their performance (London & Smither, 2002).

Although rather scant, there is empirical evidence detailing the direct relationship between feedback orientation and task performance. Rasheed et al., (2015) found that each dimension of feedback orientation (utility, accountability, self-efficacy, social awareness) significantly predicts performance. This attests to the proposed direct relationship between feedback orientation and task performance. Furthermore, Katz et al., (2023)’s meta-analysis reports feedback orientation’s incremental validity to predict task performance above and beyond feedback environment and feedback-seeking, $\Delta R^2 = .082, p < .01$.

Hypothesis 2: Feedback orientation will explain variance related to task performance above and beyond conscientiousness and cognitive ability.

Feedback Orientation and Adverse Impact

Most notably in the selection process, conscientiousness and cognitive ability have the strongest relationship to performance (Hunter, 1986; Sackett et al., 2021). However, there is evidence these predictors may contribute to adverse impact especially when coupled together. Avis et al. (2002) specifically found that “the cognitive ability measure alone begins to produce adverse impact at a cut score percentile of .30 (or selection ratio of .70), while the composite measure (i.e., the cognitive ability measure plus conscientiousness) begins to produce adverse
impact at a cut score percentile ratio of .10 (or selection of .90)” (Avis et al., 2002, p.97).

Furthermore, Ryan et al. (1998) found that in a large sample of firefighter applicants \( (n = 2,472) \) and police applicants \( (n = 1,700) \) when personality measures are coupled with cognitive ability, it takes very high selection ratios for personality inventories to lessen the effects of adverse impact. For example, looking at the sample of police officers in Ryan et al. (1998), when cognitive ability and personality measures are weighted 50/50 in the prediction, a selection ratio of .90 (where 90% of the applicants are selected) is needed to not have adverse impact against black applicants. It was found to be slightly better when cognitive ability is weighted at 25% and personality at 75% in the prediction: it passes the .80 threshold at a selection ratio of .80. However, adverse impact is worse when cognitive ability is weighted at 75% and personality weighted 25%. Their findings display that even at a selection ratio of .90, it still does not pass the .80 threshold.

As stated, the Big 5 personality traits may not be the best answer to the dilemma of balancing predictive validity in selection and avoiding adverse impact in a selection pool. Since feedback orientation is not a g-loaded construct and, subsequently, should not produce racial difference scores, we propose feedback orientation may fill this apparent need.

*Hypothesis 3:* Racial adverse impact will be less when cognitive ability and feedback orientation are used as predictor measures than when cognitive ability is used alone.
METHOD

PARTICIPANTS AND PROCEDURE

Participants included 185 full-time employees. Data were collected in May-June 2023. Since the sample of interest was working adults, any participant who was below the age of 18 or not working full-time in the United States, was excluded from taking the survey. The mean age of the sample was 39.29 years ($SD = 14.01$, Min. = 18, Max. = 88). One individual reported an age of 100, which was replaced with “NA” since this was likely an error in using the sliding response bar. In the sample, 48% of participants identified as White, 36% identified as Black, 7% identified as Asian, 6% identified as Latino or Hispanic, < 1% identified as Native Hawaiian or Pacific Islander, 2% identified as “other”, and < 1% identified as “preferred not to say.”

An anonymous online survey in Qualtrics was administered through the data collection company, Cint. Through Cint, each participant was given a cash incentive or points redeemable for other items. Before beginning the survey, participants read and agreed to the informed consent form. The study was reviewed by the College of Sciences Human Subjects Committee and was granted exempt status.

MEASURES

**Cognitive Ability**

Participants’ levels of cognitive ability were assessed using the 16-item International Cognitive Ability Resource (ICAR-16) (Condon & Revelle, 2014). Participants were instructed to read questions and select the item they believe is correct. Example questions include: “What number is one-fifth of one-fourth of one-ninth of 900” and “Joshua is 12 years old, and his sister is three times as old as he. When Joshua is 23 years old, how old will his sister be?” (Condon & Revelle, 2014). Cronbach’s alpha for the ICAR-16 has been found to be .81 (Condon & Revelle,
2014). The ICAR-16 has been used in recently published studies assessing cognitive ability (J. K. Wood et al., 2022; Wu, Mulflinger, Alexander III, et al., 2022). The Cronbach’s alpha value for the ICAR-16 with the current sample was .45.

**Big 5 Personality Traits**

To assess openness, conscientiousness, extraversion, agreeableness, and neuroticism, participants were given the Mini IPIP. Participants were asked to describe themselves as they are now and answer items along a 1-5 point scale (Donnellan et al., 2006). For each item, they indicated how accurate the statement is ranging from “very inaccurate” to “very accurate.” Example items of the openness subscale include: “Am not interested in abstract ideas; Have a vivid imagination.” Example items from the consciousness subscale include: “Get chores done right away; Like order.” Example items for the extraversion subscale were: “Am the life of the party; Talk to a lot of different people at parties.” Example items for agreeableness were: “Sympathize with others’ feelings; Feel other’s emotions.” Example items for neuroticism included: “Seldom feel blue; Have frequent mood swings.” Cronbach’s alpha for the openness domain ranged from .78 to .80, for conscientiousness .80 to .81, for extraversion .87 to .91, for agreeableness .80, and for neuroticism .92 to .93 (Donnellan et al., 2006). Recent research published in selection journals has used the Mini IPIP (Zhang et al., 2021). The Cronbach’s alpha value for the openness subscale within the current sample was .37; the conscientiousness subscale was .39; the extraversion subscale was .30; the agreeableness subscale was .46, and the neuroticism subscale was .26. The alphas for these scores may be low due to the limited number of items measuring each construct (there were only four items assessing each trait) and half the items assessing each trait were reverse coded. Research has found that reverse coding can have deleterious effects on reliability (Hughes, 2009; Suárez Álvarez et al., 2018).
**Feedback Orientation**

To evaluate participants’ levels of feedback orientation, the Feedback Orientation Scale (FOS) was administered, which measures an individual’s receptibility to feedback (Linderbaum & Levy, 2010). Participants answered items on a 5-point scale from “strongly agree” to “strongly disagree” (Linderbaum & Levy, 2010). Example items included: “Feedback contributes to my success at work; To develop my skills at work, I rely on feedback; Feedback is critical for improving performance.” The scale has an overall alpha of .86 (Linderbaum & Levy, 2010). The FOS has been used in prior studies to evaluate the relationship between feedback orientation and performance (Elsner Twesme et al., 2021; Whitaker & Levy, 2012). The Cronbach’s alpha value for the FOS with the current sample was .90.

**Learning Goal Orientation**

To assess individuals’ learning goal orientation, the Learning Goal Orientation subscale from the Goal Orientation scale was administered (Vandewalle, 1997). Participants answered items on a 1 to 7 Likert scale ranging from “strongly disagree” to “strongly agree.” Example items included: “I prefer challenging and difficult tasks so that I’ll learn a great deal; I truly enjoy learning for the sake of learning; I like tasks that really force me to think hard.” The subscale has a reported alpha of .89 (Vandewalle, 1997). Recent research published in selection journals has used this scale (Wu, Mulfinger, Alexander III, et al., 2022). The Cronbach’s alpha for the current sample is .81.

**Performance**

Participants’ task and contextual performance were self-assessed using an adaptation of the task and contextual performance measures in Williams & Anderson (1991). To assess task performance, participants answered items on a 7-point scale from “strongly agree” to “strongly
disagree.” Items included “I perform tasks that are expected of me; I adequately complete assigned duties; I fulfill responsibilities specified in my job description” (Williams & Anderson, 1991). In Williams & Anderson (1991), task performance was assessed by supervisors and the scale had an alpha of .91. In Krishnakumar et al. (2019), task performance was self-assessed and had an alpha of .77. This measure was used in recent prior studies to assess task performance (Krishnakumar et al., 2019; Sungu et al., 2019). The Cronbach’s alpha value for the task performance subscale with the current sample was .68.

Similarly, to assess contextual performance participants completed a composite measure of the OCBI and OCBO subscales from Williams & Anderson (1991). They answered items on a 7-point scale from “strongly agree” to “strongly disagree.” The OCBI subdimension of contextual performance measured behaviors that benefit specific individuals and included items such as: “I help others who have been absent; I help others who have a heavy workload; Passes along information to co-workers” (Williams & Anderson, 1991). The OCBO subdimension of contextual performance measured behaviors that benefit the organization broadly and included items such as: “I conserve and protect organizational property; I adhere to informal rules devised to maintain order; I give advanced notice when I cannot come to work” (Williams & Anderson, 1991). In Williams & Anderson (1991), OCBI and OCBO behaviors were assessed by supervisors and the scales had alphas of .88 and .75, respectively. In Krishnakumar et al. (2019), OCBI and OCBO behaviors were self-assessed and had alphas of .82 and .56, respectively. The Cronbach’s alpha value for the composite OCBI and OCBO scales with the current sample was .75.
RESULTS

PRELIMINARY ANALYSIS

Data Screening

Prior to performing analyses, the data was examined and cleaned. Any participant who failed one out of the two attention checks was not included in the final sample exported from Qualtrics ($N = 357$). Participants who failed one attention check were allowed to remain in the sample to retain variability in conscientiousness. Specifically, those who failed one of the two attention checks may be low in conscientiousness, but still a valid part of the sample. Furthermore, long string analysis was performed to detect insufficient effort responding (Huang et al., 2012). This flagged 131 participants. These participants were then removed due to insufficient effort responding ($N = 226$).

Missing Data

Missing Data was analyzed in SPSS using a Missing Values Analysis (MVA). This analysis detects any non-random patterns of missingness in the dataset. The test computes a $t$-test for variables with at least 5% of data missing to determine if the variable’s missing values are related to missing values among other variables. The results of the analysis reflected several $t$-tests were significant among variables with missing values. A closer look at the MVA analysis revealed that 30 individuals had missing data from question 43 to question 83. From question 70 to question 83, 34 individuals had missing data. These individuals were dropped from the sample used in hypothesis testing as they were completely missing measures of their cognitive ability and/or measures of their task and contextual performance ($N = 191$). It is likely many of these
individuals reached the cognitive ability measure and then closed out of the survey, possibly due to fatigue.

A secondary MVA was performed with those 34 cases dropped from the sample to assess if there were additional non-random patterns of missing data. There were no variables with 5% or more missing values, thus the t-test was not conducted. Only 6 cases had missing values remaining and those cases were removed (N = 185) as they appeared to be randomly missing (Tabachnick et al., 2019).

**Multivariate Outliers**

Multivariate outliers were assessed using indicators of leverage and influence. Leverage values were obtained using Mahalanobis distance, as it evaluates how unusual cases’ patterns of regressor scores are (Darlington & Hayes, 2016). Observations with a Mahalanobis distance greater than the critical chi-square value $X^2(\alpha = .05)$ of 9.48 were indicated as outliers. 8 cases exceeded this value indicating that they are multivariate outliers in terms of leverage.

Next, Cook’s D values were obtained to assess cases’ influence. Cook’s distance is proportional to the sum of squared changes in values of the dependent variable (i.e. task performance or contextual performance) across all cases when a case is deleted from the analysis (Darlington & Hayes, 2016). Several cases exceeded the critical Cook’s distance threshold for both task performance and contextual performance, indicating they were multivariate outliers in terms of influence.

Given the number of multivariate outliers present in the dataset, sensitivity analyses were performed for the main hypotheses tests and are reported below.
Linearity

Linearity was assessed using a scatterplot of the unstandardized predicted values against the unstandardized residuals for each predictor and the dependent variables. Loess lines between each predictor and dependent variable showed acceptable levels of linearity as they reflected “a child’s freehand drawing of a straight line” (Cohen et al., 2002). Thus, the assumption of linearity was not violated for either of the dependent variables.

Homoscedasticity

The assumption of homoscedasticity states that the conditional distributions of “Y” have equal variances (Darlington & Hayes, 2016). Homoscedasticity was assessed using the Breusch-Pagan Test (Breusch & Pagan, 1979). This test uses a chi-square to test the null hypothesis (the variance of the errors is constant) against the alternative hypothesis (the variance of the errors is not constant). If the test statistic is significant, the null hypothesis of constant error variance is rejected, indicating the presence of heteroscedasticity (Darlington & Hayes, 2016). The test was non-significant for all models indicating that the data do not violate the assumption of homoscedasticity.

Normality

The assumption of normality presumes that the errors in the estimation of “Y” are normally conditioned on the regressors (Darlington & Hayes, 2016). To assess the normality of the data, Q-Q plots were utilized. The Q-Q plot for each model demonstrated that the residuals closely followed the reference line, with only minor deviations, suggesting that the residuals were approximately normally distributed.
Independence

To test for lack of independence among residuals, the Durbin-Watson (DW) test was used. This statistic is a measure of the autocorrelation of errors over the sequence of cases (Tabachnick et al., 2019). Acceptable values for the DW statistic range between 1.5 and 2.5. The DW statistic for each model was within the acceptable range, indicating that there is not a violation of lack of independence of residuals.

Multicollinearity

Multicollinearity problems may occur when variables in a correlation matrix are too highly correlated (Tabachnick et al., 2019). Multicollinearity was assessed for each predictor using tolerance and VIF values. The lowest tolerance value was .651. However, the corresponding VIF value was below the commonly used threshold of 10 (VIF = 1.53), suggesting that multicollinearity did not influence the regression estimates.

HYPOTHESIS TESTING

Descriptive statistics and correlations can be found in Table 1. To test hypothesis 1 (feedback orientation’s incremental ability to predict contextual performance above and beyond conscientiousness and cognitive ability) a hierarchical linear regression was performed. In the first step of the regression, conscientiousness and cognitive ability were entered as predictors of contextual performance. This model was significant, $F(2,182) = 9.83, p < .000$, and accounted for 10% of the variance in contextual performance ($R^2 = .10$) (see Table 2). Conscientiousness significantly predicted contextual performance ($\beta = .30, p < .000$), but cognitive ability was nonsignificant ($\beta = .05, p = .463$). In the second step, feedback orientation was added to the model. The change in $R^2$ was 18%, ($\Delta R^2 = .18$), and the model was significant $F(2, 182) =$
23.56, \( p < .000 \). With feedback orientation in the model, the total variance explained rose to 28\% \( (R^2 = .28) \). In this final model, feedback orientation emerged as a significant predictor \( (\beta = .44, \ p < .000) \), indicating that feedback orientation provided incremental validity in predicting contextual performance. Conscientiousness remained significant \( (\beta = .22, \ p < .000) \) and cognitive ability remained nonsignificant \( (\beta = .10, \ p = .102) \).

### Table 1

**Descriptive Statistics and Correlations**

<table>
<thead>
<tr>
<th></th>
<th>( M )</th>
<th>( SD )</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. FO</td>
<td>3.72</td>
<td>0.62</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ( g )</td>
<td>3.86</td>
<td>2.20</td>
<td>-10</td>
<td>.45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. C</td>
<td>3.47</td>
<td>0.77</td>
<td>.19</td>
<td>.08</td>
<td>.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Task P</td>
<td>3.70</td>
<td>0.70</td>
<td>.29</td>
<td>.20</td>
<td>.30</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>5. Context</td>
<td>3.61</td>
<td>0.54</td>
<td>.47</td>
<td>.08</td>
<td>.31</td>
<td>.60</td>
<td>.75</td>
</tr>
</tbody>
</table>

*Note: \( N = 185 \). \( g \) = cognitive ability. FO = feedback orientation. C = consciousness. Task P = task performance. Context P = contextual performance. \( * p < .05 \), \( ** p < .001 \). The diagonal reflects Cronbach’s Alpha values.*
Table 2

Hierarchical Regression Results on Contextual Performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Contextual Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td>g</td>
<td>.05</td>
</tr>
<tr>
<td>C</td>
<td>.30**</td>
</tr>
<tr>
<td>FO</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>9.83**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.10</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td></td>
</tr>
</tbody>
</table>

Note: $N = 185$. Standardized regression weights were reported. $g = $ cognitive ability. FO = feedback orientation. C = consciousness. Task P = task performance. Context P = contextual performance *$p < .05$, **$p < .001$.

Similarly to hypothesis 1, to test hypothesis 2 (feedback orientation’s incremental ability to predict task performance above and beyond conscientiousness and cognitive ability) another hierarchical linear regression was performed (see Table 3). In the first step of the regression, conscientiousness and cognitive ability were entered as predictors of task performance. This model was significant, $F(2, 182) = 12.63, p < .000$, and accounted for 12% of the variance in task performance ($R^2 = .12$). Conscientiousness significantly predicted task performance ($\beta = .29, p < .000$), as did cognitive ability ($\beta = .17, p = .014$). In the second step, feedback orientation was added to the model. The change in $R^2$ increased by .07% ($\Delta R^2 = .07$), and the model remained significant $F(2, 182) = 14.14, p < .000$. With feedback orientation in the model, the total variance explained rose to 19% ($R^2 = .19$). Feedback orientation emerged as a significant predictor ($\beta = .27, p = .000$), indicating that feedback orientation provided incremental validity in
predicting task performance. The effects of conscientiousness ($\beta = .24, p = .000$) and cognitive ability ($\beta = .20, p = .002$) remained significant.

These results suggest that feedback orientation is a meaningful predictor of both task and contextual performance beyond the effects of conscientiousness and cognitive ability.

Table 3

Hierarchical Regression Results on Task Performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Task Performance</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td></td>
</tr>
<tr>
<td>$g$</td>
<td>.17*</td>
<td>.20**</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>.29**</td>
<td>.24**</td>
<td></td>
</tr>
<tr>
<td>FO</td>
<td></td>
<td>.27**</td>
<td></td>
</tr>
<tr>
<td>$F$</td>
<td>12.63**</td>
<td>14.14**</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.12</td>
<td>.19</td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td></td>
<td>.07</td>
<td></td>
</tr>
</tbody>
</table>

Note: $N = 185$. Standardized regression weights were reported. $g =$ cognitive ability. FO = feedback orientation. C = consciousness. Task P = task performance. Context P = contextual performance. *$p < .05$, **$p < .001$.

Exploratory Analyses

As mentioned, ample theorizing of feedback orientation’s effects on performance has stemmed from goal orientation. Thus, the authors wanted to explore a model where the incremental effects of feedback orientation on contextual and task performance were analyzed
above and beyond learning goal orientation as well as the previous predictors (conscientiousness and cognitive ability).

In the first step of the regression, conscientiousness, cognitive ability, and learning goal orientation were entered as predictors of contextual performance. This model was significant, \( F(3,181) = 18.06, p < .000 \) and accounted for 23\% of the variance in contextual performance \( (R^2 = .23) \), see Table 4. Conscientiousness significantly predicted contextual performance \( (\beta = .22, p = .001) \), as did learning goal orientation \( (\beta = .38, p < .000) \), however cognitive ability was nonsignificant \( (\beta = .01, p = .157) \). In the second step, feedback orientation was added to the model. The change in \( R^2 \) was .07\% \( (\Delta R^2 = .07) \), and the model remained significant \( F(4, 180) = 19.63, p < .000 \). With feedback orientation in the model, the total variance explained rose to 30\% \( (R^2 = .30) \). In this model, feedback orientation emerged as a significant predictor \( (\beta = .33, p < .000) \), indicating that feedback orientation did provide incremental validity in predicting contextual performance. Conscientiousness remained significant \( (\beta = .20, p = .002) \) as did learning goal orientation \( (\beta = .19, p = .015) \) and cognitive ability remained nonsignificant \( (\beta = .11, p = .074) \).

Next a similar model, but with task performance as the outcome, was tested. This model was significant, \( F(3,181) = 16.79, p < .000 \) and accounted for 22\% of the variance in task performance \( (R^2 = .22) \), see Table 5. Conscientiousness significantly predicted task performance \( (\beta = .22, p = .001) \), as did cognitive ability \( (\beta = .21, p = .002) \), and learning goal orientation \( (\beta = .32, p < .000) \). In the second step, feedback orientation was added to the model. The change in \( R^2 \) only increased by 1\% \( (\Delta R^2 = .01) \), and the model remained significant \( F(4, 180) = 13.36, p < .000 \). With feedback orientation in the model, the total variance explained rose slightly to 23\% \( (R^2 = .23) \). In this final model, feedback orientation was a nonsignificant predictor \( (\beta = .13, p = .107) \), indicating that feedback orientation did not provide incremental validity in predicting
contextual performance. Conscientiousness remained significant ($\beta = .21, p = .002$) as did
cognitive ability ($\beta = .21, p = .001$), and learning goal orientation ($\beta = .25, p = .002$).

The results suggest that when learning goal orientation is added as a predictor to the
model, feedback orientation has incremental validity to predict contextual performance, but not
task performance.

Table 4

*Exploratory Analyses: Hierarchical Regression Results on Contextual Performance*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Contextual Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td>$g$</td>
<td>.01</td>
</tr>
<tr>
<td>$C$</td>
<td>.22**</td>
</tr>
<tr>
<td>LO</td>
<td>.38**</td>
</tr>
<tr>
<td>FO</td>
<td></td>
</tr>
<tr>
<td>$F$</td>
<td>18.06**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.23</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td></td>
</tr>
</tbody>
</table>

*Note: $N = 185$. Standardized regression weights were reported. $g =$ cognitive ability. FO = feedback orientation. $C =$ consciousness. LO = learning goal orientation. Task $P =$ task performance. Context $P =$ contextual performance. *$p < .05$, **$p < .001$.***
Table 5

Exploratory Analyses: Hierarchical Regression Results on Task Performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Task Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td>g</td>
<td>.21*</td>
</tr>
<tr>
<td>C</td>
<td>.22**</td>
</tr>
<tr>
<td>LO</td>
<td>.32**</td>
</tr>
<tr>
<td>FO</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>16.79**</td>
</tr>
<tr>
<td>R²</td>
<td>.22</td>
</tr>
<tr>
<td>ΔR²</td>
<td></td>
</tr>
</tbody>
</table>

Note: N = 185. Standardized regression weights were reported. g = cognitive ability. FO = feedback orientation. C = consciousness. LO = learning goal orientation. Task P = task performance. Context P = contextual performance. *p < .05, **p < .001.

Sensitivity Analyses

Sensitivity analyses were performed due to the detection of multiple outliers in the sample. Outliers in models predicting both task performance and contextual performance were removed, creating two different subsets of the data. The above analyses were performed using the subsets of data without the models’ outliers included. Notable changes included: in a hierarchical model with contextual performance regressed on all predictors (i.e. the exploratory analyses), learning goal orientation became a nonsignificant predictor. In a hierarchical model with task performance regressed onto all predictors (i.e. the exploratory analyses), feedback orientation became a significant predictor. Thus, excluding the outliers did not change the parameters in a meaningful way other than for two predictors in the exploratory analyses.
ADVERSE IMPACT ANALYSIS

Hypothesis Test

To analyze if feedback orientation contributes to or ameliorates adverse impact, selection ratios using cognitive ability (g) alone and cognitive ability paired with feedback orientation as predictors of task performance were calculated across a myriad of hypothetical cut scores similar to the analysis employed in Avis et al., (2002). Specifically, two regressions were run: one with cognitive ability as the predictor of task performance, and then a second one with cognitive ability and feedback orientation as predictors of task performance. This gave two sets of predicted performance scores (one set of scores predicted from g and one set of scores predicted from g and feedback orientation). Next, the data was subset into the top 10% (90th percentile), top 20% percent (80th percentile), etc. - testing these increments up to the 50th percentile. Within each set of predicted performance scores (predicted scores from g and predicted scores from feedback orientation and g), impact ratios were calculated (the selection rate of Black applicants divided by the selection rate of White applicants) at each selection ratio increment. Chi-square tests of significance were also done at each increment to determine if the selection rate for white individuals and the selection rate for black individuals significantly differed.

Hypothesis 3 stated that racial adverse impact will be less when cognitive ability and feedback orientation are used as predictors of task performance compared to when cognitive ability is used alone. This hypothesis was not supported (see Table 6). Contrary to expectation, at each selection rate, g alone had a higher impact ratio than when FO was added to the prediction with g. For example, at a selection rate of 20%, g had an impact ratio of .63 whereas g and FO had an impact ratio of .20. While neither of these impact ratios are above the accepted
value of .80, g alone was closer to the acceptable threshold compared to when FO is added to the prediction with g.

**Exploratory Analyses**

Since the Big 5 personality traits are often included in the conversation of selection and adverse impact, authors thought it would be interesting to include all the Big 5 traits in combination with g in an adverse impact analysis. The adverse impact analysis mentioned was replicated for all Big 5 traits paired with g. If a set of predictors reached an impact ratio > .80, testing of the increments stopped. Notably, the combination of extraversion and g was the most effective at mitigating adverse impact. At the 10% increment, the selection rate for White individuals and Black individuals was equal, thus it yielded an impact ratio of 1. No other combination of predictors with g had an acceptable impact ratio. The closest combinations occurred between the 40% - 50% selection rate. At a 40% selection rate, g alone produced an impact ratio of .64, followed by openness and g at a 50% selection rate with a selection ratio of .68. For complete results of this analysis, please see Table 6.
### Table 6

**Adverse Impact Analysis**

<table>
<thead>
<tr>
<th>Selection %</th>
<th>Predictors</th>
<th>Selection Rate</th>
<th>Selection Rate</th>
<th>Impact Ratio</th>
<th>Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td>Openness &amp; g</td>
<td>0.06</td>
<td>0.03</td>
<td>0.500</td>
<td>( p = .320 )</td>
</tr>
<tr>
<td></td>
<td>C &amp; g</td>
<td>0.054</td>
<td>0.027</td>
<td>0.500</td>
<td>( p = .477 )</td>
</tr>
<tr>
<td></td>
<td>Extraversion &amp; g</td>
<td>0.037</td>
<td>0.037</td>
<td>1.000</td>
<td>( p = 1.00 )</td>
</tr>
<tr>
<td></td>
<td>Agreeableness &amp; g</td>
<td>0.070</td>
<td>0.021</td>
<td>0.300</td>
<td>( p = .047 )</td>
</tr>
<tr>
<td></td>
<td>Neuroticism &amp; g</td>
<td>0.064</td>
<td>0.010</td>
<td>0.156</td>
<td>( p = .024 )</td>
</tr>
<tr>
<td></td>
<td>FO &amp; g</td>
<td>0.075</td>
<td>0.016</td>
<td>0.213</td>
<td>( p = .019 )</td>
</tr>
<tr>
<td></td>
<td>g alone</td>
<td>0.059</td>
<td>0.027</td>
<td>0.457</td>
<td>( p = .598 )</td>
</tr>
<tr>
<td>20%</td>
<td>Openness &amp; g</td>
<td>0.102</td>
<td>0.059</td>
<td>0.578</td>
<td>( p = .183 )</td>
</tr>
<tr>
<td></td>
<td>C &amp; g</td>
<td>0.118</td>
<td>0.048</td>
<td>0.406</td>
<td>( p = .024 )</td>
</tr>
<tr>
<td></td>
<td>Agreeableness &amp; g</td>
<td>0.124</td>
<td>0.043</td>
<td>0.346</td>
<td>( p = .006 )</td>
</tr>
<tr>
<td></td>
<td>Neuroticism &amp; g</td>
<td>0.097</td>
<td>0.043</td>
<td>0.443</td>
<td>( p = .025 )</td>
</tr>
<tr>
<td></td>
<td>FO &amp; g</td>
<td>0.135</td>
<td>0.027</td>
<td>0.200</td>
<td>( p = .000 )</td>
</tr>
<tr>
<td></td>
<td>g Alone</td>
<td>0.102</td>
<td>0.064</td>
<td>0.627</td>
<td>( p = .183 )</td>
</tr>
<tr>
<td>30%</td>
<td>Openness &amp; g</td>
<td>0.178</td>
<td>0.059</td>
<td>0.331</td>
<td>( p = .000 )</td>
</tr>
<tr>
<td></td>
<td>C &amp; g</td>
<td>0.178</td>
<td>0.075</td>
<td>0.421</td>
<td>( p = .008 )</td>
</tr>
<tr>
<td></td>
<td>Agreeableness &amp; g</td>
<td>0.194</td>
<td>0.064</td>
<td>0.329</td>
<td>( p = .000 )</td>
</tr>
<tr>
<td></td>
<td>Neuroticism &amp; g</td>
<td>0.162</td>
<td>0.070</td>
<td>0.432</td>
<td>( p = .009 )</td>
</tr>
</tbody>
</table>
Table 6 Continued

<table>
<thead>
<tr>
<th>Selection %</th>
<th>Predictors</th>
<th>Selection Rate</th>
<th>Selection Rate</th>
<th>Impact</th>
<th>p = .000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g Alone</td>
<td>0.167</td>
<td>0.091</td>
<td>0.544</td>
<td>p = .061</td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td>Openness &amp; g</td>
<td>0.281</td>
<td>0.108</td>
<td>0.384</td>
<td>p = .000</td>
</tr>
<tr>
<td></td>
<td>Agreeableness &amp; g</td>
<td>0.232</td>
<td>0.086</td>
<td>0.370</td>
<td>p = .000</td>
</tr>
<tr>
<td></td>
<td>Neuroticism &amp; g</td>
<td>0.216</td>
<td>0.097</td>
<td>0.449</td>
<td>p = .001</td>
</tr>
<tr>
<td></td>
<td>FO &amp; g</td>
<td>0.281</td>
<td>0.059</td>
<td>0.209</td>
<td>p = .000</td>
</tr>
<tr>
<td></td>
<td>g Alone</td>
<td>0.237</td>
<td>0.151</td>
<td>0.637</td>
<td>p = .049</td>
</tr>
<tr>
<td>50%</td>
<td>Openness &amp; g</td>
<td>0.243</td>
<td>0.167</td>
<td>0.687</td>
<td>p = .073</td>
</tr>
<tr>
<td></td>
<td>C &amp; g</td>
<td>0.270</td>
<td>0.140</td>
<td>0.518</td>
<td>p = .003</td>
</tr>
<tr>
<td></td>
<td>Agreeableness &amp; g</td>
<td>0.270</td>
<td>0.124</td>
<td>0.459</td>
<td>p = .000</td>
</tr>
<tr>
<td></td>
<td>Neuroticism &amp; g</td>
<td>0.281</td>
<td>0.151</td>
<td>0.537</td>
<td>p = .003</td>
</tr>
<tr>
<td></td>
<td>FO &amp; g</td>
<td>0.335</td>
<td>0.086</td>
<td>0.256</td>
<td>p = .000</td>
</tr>
<tr>
<td></td>
<td>g Alone</td>
<td>0.362</td>
<td>0.221</td>
<td>0.610</td>
<td>p = .002</td>
</tr>
</tbody>
</table>

Note: N = 185. g = cognitive ability. FO = feedback orientation. C = consciousness. Task P = task performance. Context P = contextual performance. Impact ratios are calculated by dividing the smaller selection rate / larger selection rate.
DISCUSSION

A major issue with this study is low reliability across all the personality measures as well as the cognitive ability measure. This makes it difficult to draw conclusions from these results as these specific scales were not cohesively measuring their intended constructs. Thus, the conclusions stated in this discussion section should be interpreted with extreme caution.

The purpose of this research was to examine feedback orientation’s ability to predict two important facets of employee performance (task and contextual) above and beyond two strong and established predictors of performance (cognitive ability and conscientiousness). Subsequently, this research sought to examine if feedback orientation could reduce adverse impact created by selection assessments. Selection procedures are primarily designed to select the highest performers in an applicant pool, as new hires impact the organization’s performance as a whole (Lievens et al., 2021). Given the importance of selection for organizational outcomes, practitioners must incorporate predictors that are reliable and valid, while also maintaining a diverse selection pool. Although personality traits can offset the presence of adverse impact, facets of individual’s personality typically do not have the strongest relationships with performance (Barrick & Mount, 1991; Sackett et al., 2021). In an effort to provide another valid predictor of performance that is effective at reducing adverse impact, this study proposed three hypotheses: 1) feedback orientation will explain variance related to contextual performance above and beyond conscientiousness and cognitive ability, 2) feedback orientation will explain variance related to task performance above and beyond conscientiousness and cognitive ability, and 3) racial adverse impact will be less when cognitive ability and feedback orientation are used as predictor measures of task performance than when cognitive ability is used alone.
As indicated in the results, hypothesis 1 was supported as feedback orientation significantly predicted variance in contextual performance above and beyond conscientiousness and cognitive ability. These results align with prior research that establishes a direct relationship between feedback orientation and contextual performance (Elsner Twesme et al., 2021; Katz et al., 2023). Theoretically, this result is sensible. Contextual performance includes the activities that contribute to the social context of the organization (Borman & Motowidlo, 1997). Since social awareness is a facet of feedback orientation, it is possible that those high in feedback orientation (and subsequently social awareness) are more likely to engage in contextual performance behaviors (i.e. helping, volunteering) to manage others’ perceptions of themselves. Furthermore, through the lens of social exchange theory, it is possible that those with high feedback orientations have positive experiences with feedback and pay it forward with proactive workplace behaviors (Katz et al., 2023).

Likewise, results supported hypothesis 2 as feedback orientation had incremental validity to predict task performance beyond conscientiousness and cognitive ability. This finding aligns with prior research that has established a direct effect of feedback orientation on task performance (Katz et al., 2023; Rasheed et al., 2015). Theoretically, it is possible that those high in feedback orientation are better at self-regulation. Since feedback is essential to the self-regulation process (Vancouver & Day, 2005), those high in feedback orientation could be better at self-regulating while at work and therefore had higher scores on task performance. It is important to note that since this data is cross-sectional, that process is not adequately captured within the dataset, however, it is plausible self-regulation is an underlying mechanism that contributes to the relationship between feedback orientation and task performance.
Surprisingly, hypothesis 3 was not supported as feedback orientation was not more effective at reducing adverse impact in the prediction of task performance compared to g alone. This is in contrast to articles that argue racial differences tend to be higher among highly g-loaded predictors compared to low g-loaded predictors (Dahlke & Sackett, 2017; Goldstein et al., 2010; Jensen, 1999; Reeve & Hakel, 2002). It is possible that feedback orientation did not ameliorate the effects of adverse impact in the prediction of task performance compared to g alone due to the low reliability of the measure capturing g. As mentioned, since g’s consistency was relatively low (α = .45), cognitive ability was not assessed consistently across participants and likely contributes to this surprising finding.

PRACTICAL IMPLICATIONS

The goal of this research was to provide researchers with an additional, useful individual difference to use in the selection process. Given feedback orientation’s incremental ability to predict both contextual and task performance beyond consciousness and g (hypotheses 1 and 2), results support the idea that feedback orientation may be of value to practitioners when creating batteries of assessments to use within the selection process. Specifically, feedback orientation detected unique variance in both task and contextual performance that conscientiousness and g did not. Thus, these results support the notion that feedback orientation may play a distinctive role in what makes an employee successful. This has been seen in prior research as feedback orientation has been shown to relate to important outcomes at multiple levels within an organization.

Feedback orientation’s utility extends beyond the prediction of performance within the selection process. Once employees are hired, those with a high feedback orientation are of value to organizations as this trait is related to several important individual-level outcomes. Feedback
orientation has been related to positive training (Herold & Fedor, 2003), supervisor-supervisee relationships (Dahling et al., 2012; Katz et al., 2023; Liao et al., 2023), and negatively related to burnout (Gong et al., 2017; Katz et al., 2023). Thus, after these employees have been selected, a high feedback orientation is related to success as they navigate important roles within the workplace.

Furthermore, feedback orientation has been found to relate to positive outcomes within teams and to those who hold leadership positions. Specifically, feedback orientation has been associated with task engagement and trust within virtual teams (Holt et al., 2013). Moreover, it is common for organizations to promote employees from within, thus those in management and leadership roles are often individuals who started as new hires of the firm. Thinking beyond the scope of selection, feedback orientation remains an important trait for employees to embody as they rise in rank. This trait is especially valuable for leaders who are in positions to mentor. Research has found leaders’ levels of feedback orientation is related to subordinates’ perceptions of quality coaching, and their subordinate’s level of feedback orientation (Steelman & Wolfeld, 2018).

All in all, feedback orientation should be a sought-after trait among employees of the workforce as it has positive outcomes related to individual’s job performance (Katz et al., 2023; Rasheed et al., 2015) training outcomes (Herold & Fedor, 2003), team outcomes (Holt et al., 2013), and quality of coaching among leaders (Steelman & Wolfeld, 2018).

Another important practical implication of this research must be mentioned. It is prudent to note that feedback orientation did not ameliorate the effects of adverse impact when added to the prediction of task performance with g (hypothesis 3). The results suggest that practitioners should consider alternative ways to ensure their selection assessments do not contribute to
adverse impact. However, this recommendation should be interpreted with caution as \( g \) was not reliably measured.

**THEORETICAL IMPLICATIONS**

Although this research is focused on the application of feedback orientation in selection, there are some theoretical insights to be gleaned from these findings. Primarily, feedback orientation’s ability to detect unique variance in task performance supports the notion that there are potentially different underlying processes occurring between people high in \( g \), conscientiousness, or feedback orientation, and their ability to perform. As mentioned, \( g \)’s relationship to performance can be attributed to one’s ability to acquire job knowledge at a faster rate, thus attaining better performance (Schmidt, 2002). However, since consciousness and feedback orientation are not \( g \)-loaded constructs, their relationship to performance occurs through slightly different self-regulatory processes. Conscientious individuals are thought to utilize self-regulatory processes to avoid counterproductive behavior and ultimately are motivated through goal attainment (Wilmot & Ones, 2019). The unique variance in task performance predicted by feedback orientation suggests that there is a slightly different self-regulatory process that is occurring that relates this construct to performance. Specifically, these results are congruent with the idea that those high in feedback orientation are likely able to utilize the information given by individuals and the environment to adjust their behavior to better perform, thus aligning with the self-regulatory model proposed by Vancouver and Day, (2005), where feedback plays a key role in adjusting one’s behavior from the current state to the desired end state. All in all, the results support that there are different underlying processes that relate these important predictors to performance.
These findings also support the propositions asserted in several performance management processes that exist in the feedback literature. For example, the Longitudinal Performance Management Model proposed by London and Smither, (2002) proposed that, in response to a critical event, those high in feedback orientation will be more efficient in navigating the three stages of feedback processing (i.e. initial reactions to feedback, mindfully processing the feedback, utilizing the feedback to track goals), resulting in favorable outcomes such as: behavior change, better performance, and or increased self-confidence. The significant relationship between feedback orientation and task performance aligns with this model and supports the notion that those high in this trait are likely able to utilize information from their environment to process feedback more efficiently and modify their behavior in ways that are conducive to better performance. Similarly, Tseng & Levy, (2019) proposed a model where, in response to a leader’s feedback, self-regulatory traits (i.e. feedback orientation) mediate the relationship between the feedback received and individual performance. While a mediation model is not directly tested in this research, the significant finding between feedback orientation and task performance is congruent with this model’s proposition that feedback orientation is a key antecedent of an individual’s performance. Ultimately, the results of this study complement the performance management models proposed within the feedback literature that suggest feedback orientation plays a key role in an individual’s performance over time (Anseel et al., 2015; London & Smither, 2002; Schleicher et al., 2018; Tseng & Levy, 2019).

Additionally, the exploratory analyses reflect that feedback orientation did not have incremental validity in predicting task performance when learning goal orientation was added to the model. This may indicate that learning goal orientation and feedback orientation conceptually overlap in how they relate to performance. It is possible that individuals high in these constructs
both adopt a similar regulatory focus. Regulatory focus theory is used to conceptualize self-regulation systems where an individual may adopt a promotion or prevention focus (Lanaj et al., 2012). The authors specify that those with a promotion focus attain their goals through achievement and advancement and are overall more sensitive to positive outcomes (i.e. rewards). Conversely, those with a prevention focus regulate security needs and focus more on duties and responsibilities. These individuals are also more sensitive to negative outcomes (i.e. a disciplinary action). Meta-analytic evidence suggests that learning goal orientation has a stronger relationship with a promotion focus compared to a prevention regulatory focus (Gorman et al., 2012). Thus, it is possible that those high in feedback orientation and learning goal orientation are experiencing similar promotion focus regulatory systems and therefore are capturing similar aspects of job performance.

**LIMITATIONS**

While the results of this study provide insight into feedback orientation’s relationship to performance relative to other important predictors, several limitations must be addressed. Primarily, several scales exhibited low reliability (openness: $a = .37$; conscientiousness: $a = .39$; extraversion: $a = .30$; agreeableness: $a = .47$; neuroticism $a = .26$; $g: a = .45$). This may create issues for the generalizability of the findings, as the measures may not have been consistently measuring the constructs within the sample. Researchers decided to use the MINI-IPIP and ICAR-16 (a shortened version of the ICAR inventory) in an effort to reduce participants’ fatigue. However, given that low reliability can be indicative of measurement error within the constructs, results and conclusions should be interpreted with caution.

An additional limitation of the study is that both contextual and task performance were self-reported. This means that the measures of both dependent variables could be conflated with
biases such as social desirability. Social desirability is the human tendency to underestimate one’s likelihood to perform undesirable behaviors and, inversely, to overestimate one’s likelihood to perform desirable behaviors (Chung & Monroe, 2003). In the context of reflecting upon one’s workplace performance, it is possible participants overestimated their positive workplace behaviors (contextual performance) and ability to perform their day-to-day tasks (task performance). This bias is likely more of a problem for the outcome of task performance. Meta-analyses have indicated that mean differences in OCB (i.e. contextual performance) ratings of self-report vs. other-report are typically small (Carpenter et al., 2014).

A final limitation includes the study’s cross-sectional design. This limits the ability to infer a causal relationship between feedback orientation, g, conscientiousness, and task/contextual performance. Although it is unlikely that performance would subsequently predict personality traits, a time-lagged design would need to be implemented to make strong inferences of causalitiy.

**FUTURE DIRECTIONS**

To address the immediate limitations of this study, future research should implement several important changes. Primarily, research should explore these research questions using the full versions of the Big 5 personality scales and ICAR as they will have better reliabilities. Additionally, research should capture dyadic data that encompasses employees’ levels of these predictors and their supervisors’ ratings of performance – especially in the case of task performance as this is more generalizable to the performance appraisal process that occurs within the workplace. Future research should look at these relationships in a time-lagged study to make stronger inferences of causality. Lastly, this study should be replicated, not only with more
reliable measures, but also with a different sample as a large number of respondents needed to be removed for problematic responding across multiple measures.

Beyond addressing these pertinent limitations, these findings could inspire several interesting research avenues. Although contextual and task performance is a popular conceptualization of job performance (Borman & Motowidlo, 1997; Christian et al., 2011; Motowidlo et al., 2014; Sverke et al., 2019), there are other performance conceptualizations that may be interesting to analyze (i.e. adaptive performance). Adaptive performance is considered a metric for how well one adapts to new conditions in the workplace or new job requirements (Campbell, 1999). Dimensions of adaptive performance include: handling emergencies, handling work stress, solving problems creatively, dealing with uncertain situations, learning, interpersonal adaptability, cultural adaptability, physically oriented adaptability (Pulakos et al., 2000). Since those with a high feedback orientation view feedback as valuable (London & Smither, 2002), it seems reasonable that those with high feedback orientations may be better at understanding new information from a changing environment and/or role, and thus have a strong adaptive performance relationship. Adaptive performance may be especially important to examine in the near future given the impending changes AI could bring to the workplace. Qualitative research suggests that employees have negative perceptions of virtual assistants (Hornung & Smolnik, 2022). It may be pivotal for organizations to have employees who are ready and able to adapt to the changes AI may bring. Thus, examining the strong predictors of adaptive performance and seeing if they differ from predictors of task and contextual performance could be useful to practitioners.

Additionally, this study is cross-sectional, and levels of feedback orientation are captured at one-time point. However, feedback orientation is theorized to be influenced by the feedback
environment over time (Linderbaum & Levy, 2010; London & Smither, 2002). Future research should use a longitudinal design to assess changes in feedback orientation over multiple time points in response to changes in supervisors, the work environment, or companies (Linderbaum & Levy, 2010). It may be interesting to assess supervisor ratings of performance (task, contextual, and adaptive) after these critical change events in conjunction with the other predictors of this study (i.e. individual levels of FO, g, and conscientiousness). This method would be better to capture the theorized self-regulatory processes occurring over time in response to stimulus from the environment and overall lend better insight into how feedback orientation is strongly related to performance beyond g and conscientiousness.

CONCLUSION

This study aimed to examine feedback orientation in a selection context. Specifically, the purpose of this study was to assess feedback orientation’s incremental validity in predicting contextual and task performance above and beyond conscientiousness and g. Also, the study sought to test if feedback orientation would be effective at reducing adverse impact on task performance when coupled with g compared to g alone. Hypotheses were partially supported as feedback orientation displayed incremental ability to predict both task and contextual performance beyond conscientiousness and g. However, feedback orientation did not effectively reduce adverse impact compared to g alone. Results suggest that feedback orientation could be a useful tool for practitioners to add to their selection batteries, but additional care must be taken to ensure adverse impact is not produced from selection assessments.
REFERENCES


https://doi.org/10.1207/s15327043hup1002_3


https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jmlr=10855300&AN=49314586&h=bb3MxaN%2FkPf%2BKV3brzb1w7ezHtWTNis%2B889a112Jh367SNi4FZRsksm4JpXauIFkskkIu%2FvQhM2bIx7iTC0A%3D%3D&crl=c&casa_token=96H2qL87X9IAAAAAA:2UCF682UALL70bcWKFWaH4C2ukvHN7L1ya2UA18XxtChHw aSciNiFKEnW8GR2oneNWSRw8bUXoM


VITA

Elissa Liguori

EDUCATION

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree Program</th>
<th>Location</th>
<th>Dates</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Dominion University</td>
<td>College of Sciences: I/O Psychology, Masters</td>
<td>5115 Hampton Blvd Norfolk, VA 23529</td>
<td></td>
<td>Degree expected, May 2024</td>
</tr>
<tr>
<td></td>
<td>College of Sciences: I/O Psychology, Ph.D.</td>
<td></td>
<td></td>
<td>Degree expected, May 2026</td>
</tr>
<tr>
<td>The Pennsylvania State University</td>
<td>College of Communications: Media Studies, Bachelor of Arts</td>
<td>University Park, PA</td>
<td></td>
<td>Class of May 2019</td>
</tr>
<tr>
<td></td>
<td>College of Liberal Arts: Psychology, Minor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>College of Liberal Arts: Business and Liberal Arts, Minor</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RESEARCH EXPERIENCE

<table>
<thead>
<tr>
<th>Organization</th>
<th>Position</th>
<th>Dates</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Experienced through Appraisals &amp; Feedback (LEAF) Lab</td>
<td>Graduate Research Assistant</td>
<td>August 2021-Present</td>
<td>Assisted with coding data in preparation for meta-analysis on COVID-19 distress</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Qualitatively coded articles for paper on allyship</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Collected and analyzed data for master’s thesis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Defended master’s thesis on feedback orientation as an individual difference in the context of selection</td>
</tr>
<tr>
<td>VCU Emergency Department &amp; ODU Project</td>
<td>Member of Research Team</td>
<td>January 2024-May 2024</td>
<td>Will work to identify gaps in communication between teams within the organization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Will collect and analyze survey data of ED team</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Will provide a technical report with concise recommendations to improve communication between teams</td>
</tr>
<tr>
<td>Group Identity and Social Processes Lab</td>
<td>Research Assistant</td>
<td>Sep 2018-May 2019</td>
<td>Transcribed written interventions into organized files for analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Performed literature searches &amp; provided insight for survey creation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assisted research lab by performing necessary data upkeep: updating &amp; reviewing surveys, cleaning &amp; entering data etc.</td>
</tr>
</tbody>
</table>

RESEARCH CONTRIBUTIONS

Publication

Poster Presentation