TRIARCHIC TRAITS WITHIN LAW ENFORCEMENT: AN INVESTIGATION OF THE INTERACTIVE EFFECT OF BOLDNESS

A Dissertation

by

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ABSTRACT

Psychopathic personality disorder (psychopathy) is generally construed as a constellation of affective/interpersonal deficits and externalizing behaviors/deviance; these characteristics are often considered maladaptive and perceived as highly socially undesirable. However, perceptions of psychopathy are not uniformly negative and ostensibly psychopathic traits are not uniformly predictive of adverse outcomes. Recent conceptualizations of the disorder have captured putatively adaptive traits (i.e., boldness) as central features of their nomological network, which is consistent with some historical conceptualizations of the disorder. One such model, the Triarchic Model of psychopathy, is comprised of three distinct dispositional variables: disinhibition, meanness, boldness. Recent criticisms regarding the inclusion of boldness in conceptual models of psychopathy have tended to focus on the fact that this construct appears to be a socially desirable personality trait that also tends to be associated with adaptive functioning and outcomes. But is it truly desirable/adaptive to be bold?

The current project addressed this question in two separate but related domains. Study 1 examined the extent to which a police officer perceived as bold is judged positively or negatively across contexts. Building on recent mock juror research demonstrating that perceived boldness among criminals is judged negatively by jurors, a 3x2 research design was employed to manipulate a fictitious police officer's personality (high boldness, low boldness, none) and the "context" (positive versus negative outcome) using a simulation approach. Counter to the hypotheses, an interactive effect

of outcome by boldness on perceptions of the officer, such that the main effect of outcome (i.e., positive outcome associated with more positive perceptions) was amplified by high boldness and attenuated by low boldness, did not consistently emerge.

Study 2 more directly investigated whether traits of psychopathy (particularly boldness) are endorsed by police officers, and if so, the relation to *actual* performance among police. Specifically, this study used archival data from extant personality measures (i.e., MMPI-2 and PAI) as a preliminary investigation into Triarchic trait endorsement and the impact of boldness on supervisor judgments of police officers. Although not predictive of supervisor judgments, officer candidates tended to portray themselves as highly bold and low in meanness and disinhibition—a pattern that was amplified by defensive responding.

DEDICATION

First, this dissertation is dedicated to my family and all those who have become like family, but especially: my mom, whose love and support has been instrumental to every step of this journey; my dad, who has always had my back and encouraged my curiosity in the world from day one; and my incredibly supportive husband, whose mere presence often held me up and calmed me down.

Second, heartfelt gratitude is extended to my advisor, mentors, supervisors, and all those who have otherwise provided guidance throughout my education. Your commitment has been invaluable and provided me with a blueprint to emulate.

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INTRODUCTION

Traditional Conceptualizations of Psychopathy

Psychopathic personality disorder (psychopathy) is a widely studied construct that has been of interest across centuries and cultures (see Murphy, 1976) and, despite ongoing debate regarding its conceptualization, is consistently viewed with derision.

Cavadino (1998) exemplified this view by suggesting that scientists "strip away the mask completely, and for the term 'psychopath' substitute the word 'bastard'...the honest expression of the essentially moral judgement and dehumanizing contempt with which we view 'the psychopath'" (p. 6). Similarly, survey data indicate that laypeople tend to perceive psychopaths as monstrous and socially undesirable (Helfgott, 1997; Rauthmann & Kolar, 2012); dangerous, violent, and aggressive (Edens, Colwell, Desforges, & Fernandez, 2005; Furnham, Daoud, & Swami, 2009); and even evil (Edens, Clark, Smith, Cox, & Kelley, 2013). Community members indicate that thinking of the "typical psychopath" often brings to mind infamous serial killers such as Ted Bundy and Charles Manson (Smith, Edens, Clark, & Rulseh, 2014; Edens et al., 2013; Helfgott, 1997).

Despite this, characterizations of psychopathic traits are not uniformly contemptuous and socially undesirable, including some seminal conceptual models of the disorder. Pioneering psychopathy researchers, such as Cleckley (1941) and Lykken, (1957), associated the disorder with both dysfunctional and adaptive features, such that a psychopath could demonstrate at least short-term success and present as "affable and impressive" (p. 22; Cleckley, 1941). Lykken (1996) suggested the prototypic

psychopathic may even have a disposition similar to a "hero." This multifaceted perception of psychopaths as individuals who possess both socially desirable and undesirable traits appears to extend to laypeople as well. Surveys of community members suggest that, in addition to violence and evil, psychopathy is associated with ostensibly positive and socially desirable traits such as being relatively intelligent and socially adept (Furnham et al., 2009; Edens et al., 2013).

Despite extensive research and theorizing, social scientists continue to debate the fundamental conceptualization of psychopathy. A primary reason for this lack of consensus centers on disagreement regarding the relevance of boldness (i.e., social dominance, fearlessness, venturesomeness) to the nomological network of this construct. Cronbach and Meehl (1955) asserted that to "make clear what something is," one must establish a nomological network of the latent construct, which establishes an "interlocking system of laws which constitute a theory" regarding that construct (p. 290). Therefore, construct validation cannot establish that an assessment or diagnosis is a valid measure of the *construct* per se but rather of the *nomological network* utilized for the construct. This slight but critical difference restricts researchers to validating a measure only with respect to a specified nomological network. As such, researchers studying the same construct (i.e., psychopathy) but utilizing different nomological networks cannot assume the validity of the same measures or diagnostic criteria derived from different nomological networks (p. 291). The multiplicity of psychopathy assessment measures reflects these various nomological networks.

Beginning with the third edition, the Diagnostic and Statistical Manual of Mental Disorders (*DSM-III*; APA, 1980) has operationalized psychopathy through the diagnosis of antisocial personality disorder (ASPD). ASPD diagnostic criteria emphasize antisocial acts and the presence of operationalized behaviors (e.g., "three or more non-traffic arrests") in an effort to improve diagnostic reliability. Since its inception, however, scholars have asserted that the behaviorally-specific ASPD criteria provide an inadequate operationalization of psychopathy (Crego & Widiger, 2015; Hare, 1991; Wall, Wygant, & Sellbom, 2015), as it is simultaneously under- and over-inclusive, failing to capture relevant personality indicators and instead tapping deviant acts that may not be relevant to characterological traits germane to the disorder.

Psychopathy Measures

Independent from the ASPD criteria, a contemporaneous clinical assessment of psychopathy was developed and soon became the predominant measure for the assessment of psychopathic traits. The Psychopathy Checklist – Revised (PCL-R; Hare, 2003) is based largely on the conceptualization expounded by Hervey Cleckley (1941, 1976; Hare, 1991). To establish the original PCL, Hare (1980) rated inmates on each of the 16 criteria proposed by Cleckley. Items were retained, removed, or amended based on the results of "a series of statistical analyses" (p. 114) to form a 22-item checklist and eventually the current 20-item revised version. The PCL-R reliably yields two factors: interpersonal/affective deficits and social deviance (Hare, 1991), only the latter of which is strongly associated with ASPD criteria. Hare (2003) suggested that an ASPD diagnosis identifies a nonspecific variant of social deviance as it taps the social deviance

factor of the PCL-R but fails to capture "much of the personality component" (p. 92). This interpretation is consonant with discordant prevalence rates of ASPD (50-80% of inmates) compared to PCL-R-based psychopathy (15-30%) (see Conti, 2016). However, the same criticism (i.e., an over-emphasis on antisocial acts and exclusion of relevant personality characteristics) has also been levied against the PCL-R (Patrick, 2006; Salekin, 2002; Skeem & Cooke, 2010).

Unlike the historical accounts of the disorder from which it emanated (i.e., Cleckley, 1941), the PCL-R includes several additional items related to antisocial/criminal acts while simultaneously excluding certain personality characteristics (e.g., absence of anxiety, "fearlessness"). Hare and Neumann (2010) argue that these conceptual differences between "Cleckleyan" and PCL-R-defined psychopathy are not only exaggerated, but the differences that do exist represent empirically-driven improvements. However, the item-selection procedures for the PCL as detailed by Hare (1980) reveal a dismissal of findings that suggest the relevance of putatively adaptive traits (e.g., absences of nervousness). Specifically, factor analysis revealed that items regarding ostensibly adaptive traits (i.e., the absence of anxiety, superficial charm, and absence of deluded or irrational thinking) loaded onto a factor that explained a significant portion of total variance. Further, that factor significantly predicted global psychopathy ratings based upon clinical judgement. Despite these generally supportive findings, this factor was not represented in the retained items. No additional analyses were reported to clarify this absence. Rather, Hare (1980) reported that "without going into detail, we found that our clinical judgments of psychopathy

could be represented effectively by 22 items" (p. 114). Reported elsewhere (Hare & Neumann, 2008), ostensibly adaptive traits had been removed to improve internal consistency (e.g., the item-total correlation for "absence of nervousness" was only 0.05). Therefore, support for removing adaptive traits from the conceptualization of psychopathy, as defined by the PCL-R, appears to be rooted in prioritizing the measurement of psychopathy as a unitary construct rather than other, potentially equally important considerations including theoretical fidelity and variance explained.

More recently, researchers have asserted that "the focus on psychopathy as a unitary construct leads to a picture of the psychopath as more aggressive and psychologically maladjusted than...Cleckley's portrayal of the prototypical psychopath" (p. 614; Patrick, 2006). Cluster analytic findings provide further empirical support for a more multifaceted conceptualization of psychopathy than described by the PCL-R, as an "emotionally stable" subtype of psychopathy emerged when examining PCL-R-defined psychopathy within inmate samples. Hicks, Markon, Patrick, Krueger, and Newman (2004) used the Multidimensional Personality Questionnaire (MPQ-BF; Patrick, Curtin, & Tellegen, 2002) to determine subtypes within a sample of PCL-R-defined psychopathic inmates. The best-fitting model was comprised of two clusters. One, albeit smaller, cluster of "emotionally stable psychopaths" demonstrated social dominance, immunity to negative events, and an ability to engage in strategic action. This cluster was also characterized by proneness to risk-taking and sensation-seeking. Hicks and colleagues described individuals in this subtype as someone "who might appear well adjusted in many contexts (e.g., occupations requiring independence, authority, and the

ability to cope with stressful circumstances;" p. 285). The ability to be (or at least ostensibly appear) well-adjusted is consistent with Cleckley's model. The second cluster was entitled "aggressive psychopaths" and was more consistent with the PCL-R and DSM ASPD conceptualizations of "unsuccessful" psychopaths. The personality of individuals in the second cluster "epitomize psychological maladjustment of the undercontrolled or externalizing variety" (p. 285).

Of note, whereas the DSM is designed for use primarily within clinical settings, the PCL-R was designed to assess psychopathy among incarcerated individuals and likewise validated primarily with inmate samples. Hare and Neumann (2010) reject claims that this forensic setting contributed to an over-emphasis on forensic-related items and contend that the PCL-R items were specifically selected to discriminate psychopathic inmates from other criminals. This differentiation is supported by a considerable body of research demonstrating PCL-R-defined psychopathy is predictive of important criminal justice outcomes within forensic samples (Guy, Edens, Anthony, & Douglas, 2005; Yang, Wong, & Coid, 2010). Nonetheless, this restricted development and validation setting could have resulted in a myopic conceptualization of only "unsuccessful" psychopaths (Skeem & Cooke, 2010; Lilienfeld et al., 2016)—effectively altering the nomological network of PCL-R-defined psychopathy to one that emphasizes criminal and other antisocial behavior (Cooke, Michie, Hart, & Clark, 2004) and is largely devoid of putatively adaptive traits (e.g., boldness). As a result, the PCL-R may effectively assess "unsuccessful" psychopaths but provide an inadequate framework to identify the "successful" or nonforensic variant of psychopathy. In 2002, Hare

acknowledged the existence of this variant, stating (as cited in Babiak, Neumann, & Hare, 2010; p. 174) "...not all psychopaths are in prison. Some are in the boardroom." Further, as evidenced by the ongoing development of a new measure of corporate psychopathy for use in business settings (i.e., the B-Scan), Hare appears to have at least tacitly acknowledged the PCL-R's limited utility for measuring "successful" psychopathy.

Alternative Measures of Psychopathy

More recent models of psychopathy have sought to extend the construct validity of psychopathy assessments to nonincarcerated samples and address the potentially "emotionally stable" component of psychopathy that is mostly absent from the PCL-R and ASPD items. These models and their corresponding measures reflect the ongoing attempt to demonstrate construct validity amidst disparate, although often overlapping, nomological networks of "psychopathy." The Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996; Lilienfeld & Widows, 2005), for example, is a self-report measure of psychopathy that was developed for use within nonforensic populations using an iterative approach. The PPI yields two essentially orthogonal factors: Fearless Dominance and Impulsive Antisociality. Meta-analytic findings indicate the PPI's Impulsive Antisociality scale is moderately correlated with the PCL-R's Social Deviance factor. Conversely, the PPI's Fearless Dominance scale was not highly correlated with either PCL-R factor (Marcus, Fulton, & Edens, 2013). Further, Fearless Dominance was associated with positive traits and negatively correlated with negative traits. Although the inclusion of positive traits is consistent with previous conceptualizations of the

disorder (e.g., Cleckley, 1941; Lykken, 1995), some have argued (e.g., Miller & Lynam, 2012) that these findings call the relevance of the Fearless Dominance factor into question.

In an attempt to reconcile and integrate the various conceptualizations and contradictory findings, Patrick, Fowles, and Krueger (2009) proposed the Triarchic Model of psychopathy and corresponding assessment, the Triarchic Psychopathy Measure (TriPM; Patrick, 2010). The Triarchic Model is comprised of three distinct dispositional variables: disinhibition, meanness, and boldness. Conceptually, the model is highly similar to the PPI, as it captures externalizing psychopathology, callousaggression, and fearlessness. "Disinhibition" encompasses poor impulse control and limited behavioral restraint, which relates closely to both PPI Antisocial Impulsivity and PCL-R Social Deviance. "Meanness" represents cruelty and lack of empathy, which taps a similar latent construct as the Affective/Interpersonal deficit items assessed within the PCL-R factor structure and Coldheartedness within the PPI framework (which is a subscale that does not load onto either of the higher order factors) and correlates positively with ASPD. The "Boldness" factor is similar to PPI Fearless Dominance and, as with Fearless Dominance, is not well represented by ASPD or PCL-R-based conceptualizations of psychopathy. Thus, while Disinhibition and Meanness are largely represented in most conceptual and empirical models of psychopathy, the conceptual significance of Boldness within the Triarchic model diverges from the nomological network underlying most other models of the disorder (e.g., Hare, 2003, Cooke, Hart, Logan, & Michie, 2004; Levenson, Kiehl, & Fitzpatrick, 1995).

Psychopathy Measurement in General Personality Assessments

In addition to specific psychopathy assessment tools (e.g., PCL-R, PPI, TriPM), psychopathic traits have also been assessed via more general measures of personality and psychopathology. Self-report measures of personality and psychopathology often assess "psychopathic-like" personality features. However, these "psychopathic" profiles generally index the disinhibited and, to a somewhat lesser extent, meanness features of psychopathy without capturing boldness. For example, the ANT scale on the Personality Assessment Inventory (PAI; Morey, 1991) is moderately correlated with the PCL-R, but the association is mostly limited to the social deviance (i.e., disinhibition) factor of the PCL-R (Morey, 2007). The correlation between ANT and interpersonal/affective deficits (i.e., meanness) of the PCL-R is modest at best (see Douglas, Guy, Edens, Boer, & Hamilton, 2007). Examining the relation between the PCL-R and other theoretically relevant scales of the PAI in addition to ANT, Douglas et al. provided some evidence that DOM predicts PCL-R interpersonal/affective deficits (i.e., meanness). Similarly, the association between psychopathy and Clinical Scale 4 (Psychopathic Deviance) on the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher et al., 2001) has shown to be limited to characteristics of nonspecific social deviance and is not indicative of other important personality characteristics (see Sellbom, Ben-Porath, & Stafford, 2007). An examination of the Restructured Clinical Scale 4 (RC4) (Antisocial Behavior) of the MMPI-2-RF (Ben-Porath & Tellegen, 2008) has been shown to capture more features of psychopathy as demonstrated by greater convergent validity in predicting PCL-R-defined psychopathy; however, as previously discussed, the nomological

network of PCL-R-defined psychopathy is also limited (Skeem & Cooke, 2010; Lilienfeld et al., 2016) compared to more recent models of psychopathy (e.g., Lilienfeld & Widows, 2005; Patrick, 2010).

Due to the limitations of the aforementioned scales, researchers have successfully identified additional PAI and MMPI-2-RF scales that capture key features of alternative conceptualizations of psychopathy that are not indexed by the PCL-R, such as Fearless Dominance of the PPI. Notably, some scales predicted Fearless Dominance when indicating the *absence* of psychopathology or maladjustment. Correlational data (Patrick, Edens, Poythress, Lilienfeld, & Benning, 2006) suggested that Fearless Dominance was associated with PAI scales indicating the absence of internalizing symptoms (low ANX, ARD, and SOM) and externalizing behavior (low ALC) with an assertive/domineering interpersonal style (DOM). Likewise, Sellbom and colleagues (2012) demonstrated that Fearless Dominance was best captured within the MMPI-2-RF by a constellation of fearlessness (low MSF), stress immunity (low RC7), and well-being (low RC2) with a grandiose and aggressive (RC9) and assertive/domineering, glib, and gregarious (low SHY, SAV, and IPP) interpersonal style.

Recent efforts by Sellbom et al. (2016) and Smith, Drislane, Edens, and Patrick (2016) have allowed the constructs of the Triarchic Model to be extracted from the MMPI-2-RF and PAI resulting in the MMPI-2-RF-Tri and PAI-Tri scales, respectively. Sellbom and colleagues first selected candidate items through a consensus approach. Knowledgeable raters assessed each MMPI-2-RF item for theoretical consistency with each of the three Triarchic Model of psychopathy constructs. Items that were strongly

related to high or low levels of one of the Triarchic constructs were retained. Items that were relevant to more than one Triarchic construct were empirically assessed for inclusion during a refinement phase. In this refinement phase, items were assessed to ensure sufficient internal consistency. The provisional scales were refined, for example, by removing items that demonstrated weak item-total correlations with the other candidate items of the target construct or strong correlations with candidate items on scales for either of the other two Triarchic constructs. Additional items that had been rated as somewhat relevant to a Triarchic construct were conceptually and empirically evaluated. These additional items were retained if deemed to be theoretically appropriate and if they increased internal consistency without introducing multicollinearity. Finally, the provisional scales were evaluated in correctional and university samples and further validated on archival participant samples from institutional and noninstitutional settings for which TriPM data was also available. Preliminary data examining the MMPI-2-RF-Tri scales demonstrated expected convergent and discriminant validity. For example, the MMPI-2-RF-Tri Boldness scale was correlated with TriPM Boldness as well as a boldness scale extracted from the PPI (Hall et al., 2014). Further, the MMPI-2-RF-Tri scales demonstrated incremental validity over standard MMPI-2-RF scales in predicting TriPM scales both in samples of inmates and university students.

Using the same consensus approach, Smith and colleagues (2016) selected candidate items for the PAI-Tri scales. After each PAI item was rated for its conceptual relevance to each of the Triarchic Model of psychopathy constructs, scales were refined to maximize internal consistency. Due to its nascence, findings regarding the validity of

PAI-Tri scales have not yet been published. The items used in this study are draft PAI-Tri scales, as finalized scales were not yet available at the time of the current study (S.T. Smith, personal communication, 2018).

The extracted Triarchic scales from the MMPI-2-RF and PAI enable researchers and clinicians to compute scores for Boldness, Meanness, and Disinhibition for examinees who were not administered a specific psychopathy instrument. This added flexibility may facilitate the investigation of psychopathy, and particularly boldness, within nonforensic populations, which is important as the inclusion (or absence) of boldness from various nomological networks of the disorder continues to spark controversy.

Controversies Regarding Boldness and Psychopathy

The inclusion of boldness as a central component of psychopathy has been the subject of much debate. Some (e.g., Miller & Lynam, 2012; Crego & Widiger, 2015) maintain that boldness is irrelevant and merely coincidental to the conceptualization of the disorder whereas others (e.g., Patrick et al., 2009; Lilienfeld, Patrick, et al., 2012; Wall et al., 2015) assert that boldness is a conceptually necessary component of psychopathy. As previously elucidated, boldness is largely absent from the nomological network underlying most measures of psychopathy, although the PPI, the TriPM, and their derivatives (e.g., MMPI-2-RF-Tri) are notable exceptions. This dispute is further exemplified by changes proposed for the ASPD diagnosis in DSM-5. In addition to other overarching changes for the assessment of personality disorders in general, the newly proposed diagnostic criteria included a Psychopathy Features Specifier with three

additional traits designed to reflect boldness: low anxiousness, low social withdrawal, and attention seeking. The proposed "alternative model" was ultimately not retained in the main text and instead relegated to Section III, indicating a need for further research (APA, 2013).

Some who oppose the inclusion of boldness/"fearlessness" as a central component of psychopathy have reasoned that it is inappropriate to include as a fundamental feature of psychopathology because it is an ostensibly adaptive and socially desirable trait (Miller & Lynam, 2012; Crego & Widiger, 2015; although see Lilienfeld, Patrick, et al., 2012). For example, boldness has been associated with heroism and altruism (S.F. Smith, Lilienfeld, Coffey, & Dabbs, 2013; Kelley, Edens, Donnellan, Mowle, & Sörman, 2017) and is correlated with presumably effective workplace behaviors including self-reported use of soft tactics of influence (e.g., compliments), predisposition to engage in teamwork, and adaptive leadership styles (Neo, Sellbom, Smith, & Lilienfeld, 2018). Possessing bold personality features also has been predictive of success among corporate professionals, with the authors surmising that perhaps "in the presence of charm and charisma a failure to adhere to rules can impress others" (Babiak et al., 2010, p. 189). Interestingly, historians' ratings of boldness of former U.S. presidents were predictive of overall political success, as well as ratings of leadership, public persuasiveness, Congressional relations, crisis management, willingness to take risks, and objective measures such as initiating new legislation (Lilienfeld, Waldman, et al., 2012).

However, boldness is not *uniformly* associated with positive attributes (Drislane, Patrick, & Arsal, 2014). Boldness in combination with other traits, such as disinhibition, has been predictive of proactive aggression (i.e., goal-oriented violence), even beyond the individual traits and PCL-R ratings (S.T. Smith, Edens, & McDermott, 2013). Specific components of boldness, such as "fearlessness," have also been shown to correlate with both proactive and reactive aggression (Cima & Raine, 2009). There is some evidence that boldness correlates with narcissistic features even when controlling for disinhibition and meanness (Sellbom & Phillips, 2013; Blagov, Patrick, Oost, Goodman, & Pugh, 2016). Further, boldness can be associated with negative perceptions from others. In addition to political success, boldness ratings of U.S. presidents were marginally associated with the presence of an assassination attempt made against them, perhaps a proxy for at least one individual's negative perception, small sample size notwithstanding (Lilienfeld, Waldman, et al., 2012). Self-reported boldness has been associated with other-reported (i.e., roommate) aggression (Kelley et al., 2017). Additionally, mock jurors' perceptions of a criminal defendant's boldness were positively correlated with more punitive judgments (Cox, Edens, Rulseh, & Clark, 2016). The results reported by Kelley et al. and Cox et al. cannot establish that boldness caused negative opinions, but it suggests that perceiving someone as bold is not exclusively associated with positive or socially-desirable perceptions of the individual.

Context-Dependent Perceptions of Boldness

Rulseh, Edens, and Cox (2017) further demonstrated via an experimental design that perceptions of boldness can indeed elicit negative reactions. Participants read a

fictitious vignette of a white-collar criminal defendant who was found guilty of embezzlement. The defendant's degree of boldness was manipulated, such that the defendant was portrayed as possessing high boldness (i.e., persuasive, thrill-seeking, optimistic, courageous in the face of adversity) or low boldness (i.e., timid, anxious, apprehensive, concerned for the future). When the defendant was described as highly bold, participants viewed him more negatively (i.e., more "evil" and more psychopathic, including higher levels of meanness, affective/interpersonal deficits, and irresponsible/antisocial tendencies). Building on previous research demonstrating links between boldness and socially desirable perceptions (e.g., Lilienfeld, Waldman, et al., 2012; S. F. Smith et al., 2013), Rulseh et al. explained their findings by positing that boldness can elicit (or intensify) positive perceptions or elicit (or exacerbate) negative perceptions depending on the contextual factors. Thus the white-collar defendant, who was perceived negatively overall, was perceived most negatively when possessing high boldness. This implies that boldness has an interactive effect, such that it amplifies perceptions of adaptability and/or social desirability (or lack thereof). As such, one could expect that if the participants had not known of the defendant's criminal behavior (i.e., embezzlement scheme), it is likely that the investor's "bold" interpersonal style would have been viewed as socially desirable and associated with positive perceptions (as illustrated by Babiak et al., 2010); however, this potential interactive effect of boldness has not been investigated directly.

Rulseh and colleagues (2017) also included an additional condition in which overt descriptions about the defendant's personality were omitted. Participants who read

this "baseline condition" rated the defendant as equally bold as when he was explicitly described as highly bold; in other words, the defendant was presumed to be highly bold and psychopathic unless additional information was provided to suggest otherwise. It is unclear how much information about the defendant's personality was telegraphed solely via the description of his criminal behavior and if extraneous information resulted in assumptions about his personality beyond the experimental manipulations.

One aim of the current project is to address this gap in the extant literature by replicating (i.e., assess if undesirable outcomes result in stronger negative perceptions of a highly bold compared to low bold individual) and extending (i.e., experimentally investigate the potentially *interactive* effect of boldness and context on perceptions) previous findings by Rulseh et al. (2017) within a noncriminal setting, specifically among law enforcement.

Boldness and Law Enforcement

Police work is a unique occupation, requiring an incredible amount of bravery. In fact, Kappeler, Sluder, and Alpert (1994) assert that among the "distinguishing character, sentiments, and guiding beliefs" of the police subculture, bravery is most salient (p. 97). Notably, policing is also distinctive due to the overarching subculture, which is often portrayed "as an entirely negative phenomenon" (p. 47); although, given the dangerousness of policing, it may instead be highly adaptive (Steverson, 2008).

Reming (1988) reported that the most successful police officers, so-called "supercops" who performed in the top 90th percentile on the job, demonstrated personality characteristics that are resonant with mean or disinhibited features (e.g.,

aggressiveness, rebelliousness, jealousy, tendencies not to change opinions easily, philandering, and tendencies to avoid blame) as well as more positively valenced characteristics related to boldness (e.g., extraversion, sociability, vigilance, high energy, frankness in expression, high self-esteem, feelings of uniqueness). Overall, the degree of social (un)desirability and perceived (mal)adaptiveness of specific traits is a value judgment and likely integrally dependent on other contextual factors.

There is a rich history of personality assessment among law enforcement, including the systematic administration of standardized self-report measures. Presently, pre-employment psychological testing of law enforcement is nearly ubiquitous. A national survey of municipal police agencies (Cochrane, Tett, & Vandecreeck, 2003) indicated that nearly all (92%) departments required a psychological assessment. This represents a stark increase from a similar survey in 1988 when about half (52%) of responding agencies reported using a psychological assessment (Delprino & Bahn, 1988), which was already approximately double the rate (about 25%) estimated by the President's Commission on Law Enforcement and Administration of Justice in 1967. This notable increase was largely driven by the National Advisory Commission on Criminal Justice Standards and Goals (1973) mandating that all police officer candidates be formally assessed for psychological fitness to perform the duties of a law enforcement officer. The authority (McKenna v. Fargo, 1978/1979) and obligation (e.g., Hild v. Bruner, 1980; Bonsignore v. City of New York, 1981/1982) of law enforcement agencies to utilize psychological testing to screen candidates was challenged and subsequently affirmed in federal court. The financial repercussions (e.g., settlements, attorney fees) of

police misconduct can be profound, extending upward of a million dollars (Kappeler, Kappeler, & del Carmen, 1993).

Objective personality tests (e.g., PAI, MMPI-2) have been used in law enforcement evaluations for many years (Matarazzo, Allen, Saslow, & Wiens, 1964). Results of the 2003 survey by Cochrane et al. indicated that the MMPI-2 was the most widely personality measure in pre-employment police officer psychological evaluations (over 70% of police reporting departments). In fact, the MMPI-2 was the sole standardized measure of personality or psychological functioning used consistently across agencies. However, most evaluations include at least two self-report measures that assess normal and abnormal behaviors (Cochrane et al., 2003; Tarescavage, Brewster, Corey, & Ben-Porath, 2015), and a variety of other personality measures are utilized. In addition to the MMPI, the PAI is increasing in popularity (Super, 2006). Hays (1997) investigated the concurrent validity of MMPI and PAI profiles within an incredibly small (N = 11) sample of law enforcement officer candidates. Despite the obvious limited generalizability, the findings suggested a sufficient degree of concurrent validity for utilizing the PAI for pre-employment evaluation of law enforcement officers and subsequent meta-analyses have supported this. Most existing literature and metaanalytic findings suggest that self-report personality measures provide modest to moderate predictive utility regarding officer job performance and success (see Tett, Jackson, Rothstein, & Reddon, 1994; Varela, Boccaccini, Scogin, Stump, & Caputo, 2004; Ones, Viswesvaran, Cullen, Drees, & Langkamp, 2003).

Police officers' tendency to demonstrate increased defensives as well as more positive adjustment when compared to the general population is well established (Ones et al., 2003; Lowmaster & Morey, 2012). Given the nature of a pre-employment evaluation, police candidates are sensitive to demand characteristics. They are often reticent to endorse items indicating serious psychopathology and may have a defensive response style (e.g., Weiss, Johnson, Serafino, & Serafino, 2001; Caillouet, Boccaccini, Varela, Davis, & Rostow, 2010). Furthermore, in compliance with EEOC requirements, all police candidates who undergo a pre-employment psychological assessment must already have received a conditional offer of employment. Therefore, candidates have already successfully completed all other steps of the application process (e.g., written exam, fitness, background check, polygraph) before completing the psychological evaluation and are likely to be free of significant psychological problems.

Interestingly, in addition to defensiveness, scales that do tend to show elevations among this sample (or scores comparable to community norms despite the defensive responding) include traits that are conceptually relevant to psychopathy, such as rule-breaking/questioning attitudes, distrust, impulsivity, dominance, and grandiosity (Hargrave, Hiatt, & Gaffney, 1988; Bartol, 1991; Lowmaster & Morey, 2012; Sellbom et al., 2007). These same traits have also demonstrated predictive utility regarding on-the-job performance problems.

Indices have been derived from MMPI scales to better account for some of these patterns. For example, Hargrave and colleagues (1988) derived the Aggressiveness Index (composed of F and Clinical Scales 4 and 9). As expected, the Aggressiveness

Index was associated with self-reported aggressiveness toward others and behavioral problems. In a longitudinal study following 600 officers over a 13-year period, Bartol (1991) developed the Immaturity Index (composed of L, Clinical Scales 4 and 9), which demonstrated predictive utility in distinguishing retained employees from those who were terminated. The Immaturity index also correlated with a number of other performance-based factors, including inappropriate use of firearms, frequent accidents with police vehicles, tardiness, and absenteeism. More recent findings have also demonstrated correlations between on-the-job performance problems and aggressiveness as well as having difficulty forming attachments (as indexed by BOR-N) (Lowmaster & Morey, 2012; Weiss, Hitchcock, Weiss, Rostow, & Davis, 2008).

Recent events and controversial police actions (see Moore et al., 2016, for an overview) have sparked calls for additional research regarding appropriate behavior and personality characteristics of law enforcement (President's Task Force on 21st Century Policing, 2015). These recent events harken back to the confluence of factors in the mid-1960s that originally underscored the need for new and innovative criminal justice policies. These factors included both crime-specific dynamics (e.g., increasing crime rates, rising public fear of crime, failed attempts to stymie crime, negative perceptions of the criminal justice system; Welsh & Farrington, 2012) and perceptions of police brutality/excessive force that exacerbated racial tensions and gave rise to violent riots across the country (e.g., Harlem Riots, 1964; Watts Riot, 1965; Detroit Riots, 1967).

Public *perceptions* of police actions are uniquely important, as violent demonstrations can result from negative perceptions, which further exacerbates negative perceptions. As

previously described, the specific duties (and corresponding subculture) of police officers appears to contribute to an environment that encourages particular traits and behaviors, many related to antisocial behaviors (e.g., aggressiveness, rebelliousness) and boldness (e.g., bravery, extraversion, sociability, vigilance). It is important to examine how the very personality traits (i.e., boldness) that are likely necessary for police work and encouraged via a specific subculture contribute to public perceptions of police officers in various situations.

Personality, Context, and Others' Perceptions

The importance of situational factors when evaluating personality traits is well established within social psychology (see Cognitive-Affective Processing System [CAPS], Mischel & Shoda, 1995; Funder, 1995). In 1951, the Gestalt social psychologist Kurt Lewin famously presented a formula for an individual's behavior as a function of the person (i.e., personality traits) and the environment. By 1968, Walter Mischel had sparked a "personality versus situation debate" by asserting the importance of considering context when assessing the relation between personality and behavior. After leading many to eventually conclude that any model that includes only global personality traits or only contextual/environmental factors is too simplistic, this "debate" has highlighted the importance of the interaction between individual trait variation and situation (Schmitt et al., 2013). "If...then" statements have been used to explain additional variation between personality traits and behavior by factoring in the personality trait elicited by a particular environment (e.g., a person may consistently display behaviors associated with extraversion in one situation but the reverse in another

situation). Therefore, instead of declaring that personality trait X leads to behavior I, a more complete account can predict that within situation A personality trait X will be demonstrated and elicit behavior I whereas within situation B personality trait Y will be demonstrated and elicit behavior I.

Less studied is the specific impact of the situation-to-situation trait variation (i.e., "personality") of an *observed* individual interacting with the situational context known to the *observer* in relation to perceptions about the observed individual's personality. Within the CAPS model (Mischel & Shoda, 1995), for example, an observer of the behavior is known to be uniquely influenced by situation variation (Mischel & Shoda, 2008), but this relates to the *observer's* own personality traits and their interaction with the situation, stopping short of addressing how situational factors during the observation may interact with the *target's* personality to influence perceptions. The Social Relations Model (Kenny, 1994) addresses this "dyadic" component of perception: the perception/relationship is dependent on both the general tendency of the observer/perceiver and the general tendency of the observed/target. To combine these models, one aim of the current study is to systematically manipulate the personality of the observed/target (i.e., a police officer who is either highly bold or not bold) and examine the effect of context/situation (i.e., good outcome or bad outcome) in a way that does not also alter the implicit information of the observed/target's personality (i.e., the outcome is contingent on an outside third party, a judge, rather than on any changes of the observed/target's personality or behavior). In other words, how is boldness judged

among law enforcement—is the perceived adaptiveness and social desirability of a highly bold police officer context-dependent?

Current Project

The current project consisted of two studies. Both sought to examine, using disparate methods, the impact of boldness on judgments of law enforcement officers.

Study 1

To directly assess the potential *interactive* effect of boldness and contextual factors on judgments, the first study experimentally manipulated the degree of boldness of a fictitious law enforcement officer and the "outcome" of his behavior. Participants provided on-the-job performance ratings and personality trait ratings of the officer after reading a file, which included supervisor observations of the officer and a description of a recent case in which the officer was involved. A 3 x 2 research design was employed to manipulate the officer's personality (high boldness, low boldness, no boldness information) and the "context" (positive outcome versus negative outcome). This design allowed for an examination of the role of boldness on perceptions of the police officer across context.

The current project was designed to build on Rulseh et al. (2017), seeking to replicate (i.e., assess if, within the context of an undesirable outcome, a highly bold presentation elicits even stronger negative perceptions compared to a low bold presentation) and extend (i.e., experimentally investigate the potentially *interactive* effect of boldness and context on perceptions) the previous findings within a noncriminal setting. The effect of perceived boldness on perceptions may be integrally

dependent on other contextual factors. Importantly, the "bad outcome" in the current study is highly distinct from the context of the previous study. Given that the subject used in the previous stimulus materials (e.g., Rulseh et al. 2017; Cox et al. 2016) was a convicted white-collar criminal, it is likely that the material contained implicit information about his personality. Consistent with previous literature, the subject of the vignette in the current study is in an occupation that is associated with boldness; however, the officer in the current vignette does not commit a crime. Additionally, his behaviors are identical across both the "bad" and "good" outcome conditions. Thus, in this study, boldness may be disentangled from other, more potentially-negative traits and behaviors.

Specifically, it was hypothesized that (1) main effects of outcome would be observed such that a positive (versus negative) outcome would be associated with better perceptions of the officer (i.e., higher performance ratings, lower evilness and psychopathy), and (2) an interactive effect of boldness would result in high boldness exacerbating the effect of outcome, such that (a) within negative outcome conditions, high boldness (versus low boldness) would yield more negative attitudes (replicating the previous findings of Rulseh et al., 2017), and (b) in positive outcome conditions, high boldness (versus low boldness) would yield more positive attitudes of the officer, which would align with extant literature demonstrating boldness as a positive attribute (see Lilienfeld, Waldman, et al., 2012; S.F. Smith et al., 2013) and support the inferences drawn by Rulseh et al.

Study 2

Although the results of Study 1 will be informative regarding layperson perceptions of the adaptability/social desirability of an officer's boldness as it relates to extraneous contextual factors, such results do not directly bear on the extent to which psychopathic traits in general, and boldness in particular, are endorsed by police officers nor their impact on judgments of real-life officer conduct. Accordingly, Study 2 of this dissertation is a preliminary investigation into the self-reported presence and predictive utility of Triarchic traits among police officers.

Utilizing real-world data from pre-employment police candidate evaluations, boldness, meanness, and disinhibition scales were extracted from both the MMPI-2 and PAI, resulting in the MMPI-2-RF-Tri and PAI-Tri scales, respectively. The central aim of Study 2 was to examine the degree to which police officer candidates endorsed the Triarchic traits as measured by scales extracted from instruments that are already commonly completed by police officer candidates. Of particular interest was the extent to which law enforcement officers endorsed boldness. Given the demonstrated advantage of boldness within other fields, such as politics (Lilienfeld, Waldman et al., 2012) and corporate executive work (Babiak et al., 2010), as well as the demands inherent to police work (e.g., ability to speak with the public, act as an authority, approach potentially risky or dangerous situations), it was expected that boldness would typically be endorsed by officer candidates. Conversely, it was anticipated that meanness and disinhibition would not be endorsed. Specifically, it was hypothesized that the scale statistics would reveal average or above average endorsement of the "boldness" items, somewhat low levels of

meanness and disinhibition endorsement, and paired scales (e.g., MMPI-2-RF-Tri Boldness and PAI-Tri Boldness) would be positively correlated whereas non-paired scales would not be correlated.

The secondary aim of Study 2 was to assess (a) the role of a defensive response style and (b) the utility of the derived Triarchic scales in predicting judgments of on-thejob performance. A possible limitation of using the MMPI-2-RF-Tri and PAI-Tri scales within a law enforcement sample is the presence of demand characteristics, which may contribute to a restricted range among the extracted scales. However, if the candidates in the current study responded in a defensive manner to portray themselves in an ostensibly positive light, their responses could help inform how police officer candidates themselves judge boldness. Specifically, a positive judgment of boldness could be inferred if defensive responding elicits self-reports of bolder interpersonal styles. Further, to the extent that variance does exist among the candidates' endorsement of boldness, it was hypothesized that boldness would correlate with demonstrated success on-the-job (i.e., positive supervisor ratings), although defensive responding would likely attenuate that predictive utility. Therefore, the extracted Triarchic scales and supervisor ratings can build on Study 1 by indirectly informing whether perceptions of boldness are judged to be desirable in a real-world setting by (a) officer candidates, depending on the impact of defensive responding on their endorsement of boldness items, and (b) officer supervisors, depending on the relation between endorsement of boldness and supervisor performance ratings of the officer.

METHOD

Study 1

Participants

Participants were 500 (77% female) undergraduate students recruited from the Texas A&M University (TAMU) psychology subject pool. Participants received course credit. There were not any other inclusion/exclusion criteria. Of the 454 participants retained for analyses (criteria for removal discussed in the Procedure section below), ages ranged from 18 to 29 years old (M = 19.53, SD = 1.28). A large portion of the sample self-identified as White or Caucasian (68.1%), followed by Hispanic (19.4%), Asian (6.8%), and Black or African American (2.6%) with an additional 3.1% identifying as "Other."

Stimulus Materials and Measures

Case File

The case file included (1) "file information" with supervisor reports for a fictitious law enforcement officer and (2) a narrative of a "critical incident/major case." The file information was used to manipulate the officer's level of boldness (high boldness, low boldness, no boldness information) and was loosely modeled on the vignette used in Rulseh et al. (2017). The reports from the law enforcement officer's supervisors included testimonials about the officer describing traits associated with high or low boldness. For example, the High Boldness condition included characterological descriptors such as "He's a brave guy," "Compared to other new officers, his self-

confidence stood out to me," and "He'd still be completely fearless – maybe even reckless." In comparison, the Low Boldness descriptions included: "He's a quiet guy," "Compared to other new officers, his cautiousness stood out to me," and "He'd be keenly aware of the threat – maybe even fearful." The No Boldness Information condition did not include any testimonials from the supervisors or characterological information. To help bolster consistency across conditions, numerical scores for various pre-employment assessments were included (e.g., qualifying written exam score: 85/100, 75th percentile) and an "overall rating" of the officer was attributed to each supervisor's report (e.g., "Overall rating: 8/10"). The ratings were all relatively high or positive and, more importantly, the ratings were consistent across all conditions.

The second part of the file included a narrative of a "critical incident/major case," which served to manipulate outcome (positive outcome versus negative outcome). The narrative was loosely modeled on case law regarding the (un)lawfulness of an arrest stemming from a traffic stop, which led to an arrest for DUI but did not ultimately involve a driver who was under the influence (see *Green v. Throckmorton*, 2012). In the Positive Outcome condition, a judge ruled that pertinent evidence seized by the officer is admissible whereas in the Negative Outcome condition, it is ruled inadmissible. The courts have not ruled consistently on similar cases, so it is reasonable that the circumstances could result in either of the outcomes. This design allows for the context to be manipulated without introducing implicit information about the officer's personality or actions.

Finally, a short summary paragraph was included to reinforce the manipulations. See Appendix A for all case file materials (i.e., file information, narrative of the critical incident/major case, and summary paragraph) across all conditions.

Officer Performance Evaluation Ratings

Relevant items from a standardized Officer Evaluation Form (Benner, Johnson, & Roberts, 2000) served to assess participants' perceptions of the officer's performance and attitudes toward the officer. Additional items (e.g., rate Officer Branch's performance and behavior exhibited during the critical incident/major case) further assessed perceptions of officer performance, yielding a total of four items assessing officer performance. The scales for three of these items (i.e., the officer's performance and behavior exhibited during the critical incident/current major case; overall performance and behavior; competence) were accompanied by an 11-point Likert scale from 0 ("much below standards") to 10 ("much above standards") with the mid-point of 5 indicating "meets standards." The scale accompanying the fourth item (i.e., officer's likelihood of success over the next year) ranged from 1 ("bottom 20%") to 5 ("top 20") with the mid-point of 3 indicating "middle 20%." See Appendix B.

Officer Personality Trait Ratings

Seven personality items were accompanied by an 11-point Likert scale. The rating scales ranged from 0 ("not at all") to 10 ("extremely") with the mid-point of 5 indicating "moderately." An item tapped each construct of the Triarchic model (i.e., bold, disinhibited, mean) and four additional items assessed other relevant constructs (i.e., warmth, dominance, psychopathy, evilness). Most of the constructs were

accompanied by several descriptor words to assist participants in understanding the item. The Boldness item primarily served as a manipulation check to ensure, for example, that the description of the defendant as 'bold' resulted in participants perceiving these characteristics as being indicative of his personality. The Meanness and Disinhibition items were included to obtain another indicator of the participants' negative views toward the officer and assess if the Boldness manipulation altered perceptions of other Triarchic constructs. The Warmth and Dominance items were included as both are likely important for a successful law enforcement officer. The final two items served to assess the perceived level of global psychopathy and "evilness" of the officer as additional measure of negative perceptions. See Appendix C.

Participant Attitudes

Ten items tapped participants' perception of police and authoritarianism. Most of the items were first developed by Kirkham, Levy, and Crotty (1970) who factor analyzed statements about violence and identified three items that loaded on "police violence" and five items that loaded on "anomic authoritarianism." Hadar and Snortum (1975) revised those clusters to form a 5-item Anomic Authoritarianism scale and 5-item Police

Violence scale, which could be combined to form a 10-item Perception of Police scale.

All items were scored on a 5-point scale ranging from "strongly agree" to "strongly disagree." Hadar and Snortum did not specify the internal consistency for the individual scales but indicated acceptable item intercorrelations ranging from .55 to .71. These scales were included to ensure that relevant participant factors were evenly distributed across the conditions and to facilitate supplemental analyses pertaining to potentially

concomitant factors. To maintain consistency with extant literature, the current study used the same 10 items accompanied by a 5-point scale. See Appendix D.

Participant Demographic Information

A standard demographic questionnaire queried participant age, race, gender, and political attitudes. Political attitudes were assessed on a 10-point Likert scale (1-10) with higher scores representing a more liberal orientation.

Procedure

The study was completed entirely online. Students participating in the TAMU psychology subject pool had the opportunity to access the study information. If they elected to learn more about the study, they could follow an electronic link to a survey hosted by Qualtrics Survey Software. Participants who chose to participate were randomly assigned to one of the six conditions (between-subjects design). Participants read the vignette, then completed the officer evaluation items. On the next page of the survey, they completed the officer trait ratings questionnaires. Finally, participants completed the participant factors scale items, which assessed participants' perception of police and authoritarianism, and demographics questionnaire.

Time to complete the protocol varied substantially (M = 13.62, SD = 57.75) as five participants had the survey open for longer than 120 minutes, but the median time to complete the protocol was 6 minutes and 13 seconds. Time spent viewing the vignette was also recorded to ensure that participants had sufficient time to read the material. The median time spent on the vignette was 2 minutes and 29 seconds (M = 3.91, SD = 10.51). Approximately 10% of participants (N = 46) viewed the vignette for fewer than

25 seconds (M = 7.25, SD = 5.73), suggesting they did not adequately review the material. Therefore, those participants were removed from the analyses, yielding a final sample of 454.

Study 2

Participants

Participants in this archival study consisted of 83 law enforcement officer candidates (87% male) who were referred for an employment-eligibility evaluation to determine if they were in satisfactory psychological and emotional health to perform the tasks required of a police officer. The evaluations were conducted at an outpatient psychology training clinic. At the time of the evaluation, participants ranged from 20 to 44 years of age (M = 26.70, SD = 4.36). Due to EEOC requirements precluding psychological testing of potential employees until a conditional offer of employment is extended, all participants had already successfully completed all other steps of the application process (e.g., written exam, fitness, background check, polygraph) and received a conditional offer of employment prior to the evaluation.

Stimulus Materials and Measures

Extracted Triarchic Scales

MMPI-2-RF-Tri (Sellbom et al., 2016)

The Minnesota Multiphasic Personality Inventory-2 Restructured Form (MMPI-2-RF; Ben-Porath & Tellegan, 2008) is a 338-item comprehensive self-report measure in which participants indicate whether each item is characteristically true (1) or false (0). Sellbom and others constructed Triarchic scales from MMPI-2-RF items. Candidate

items were selected through a consensus approach. Knowledgeable raters assessed each MMPI-2-RF item for theoretical consistency with the conceptualization of each of the three Triarchic Model of psychopathy constructs. Items that were strongly related to high or low levels of one of the Triarchic constructs were retained. The provisional scales were refined by, for example, removing items that demonstrated weak item-total correlations with the other candidate items of the target construct or strong correlations with candidate items on scales for either of the other two Triarchic constructs. Finally, the provisional scales were evaluated in correctional and university samples and further validated on archival participant samples from institutional and noninstitutional settings. The resulting MMPI-2-RF-extracted Boldness, Meanness, and Disinhibition scales consist of 21, 26, and 13 items, respectively; thus, possible raw scores range from 0 to 21, 26, and 13, respectively.

<u>PAI-Tri</u> (Smith, Drislane, Edens, & Patrick, 2016)

The Personality Assessment Inventory (PAI; Morey, 1991) is a broad-based self-report measure of personality and psychopathology. The PAI is comprised of 344 items for which examinees select if it is false, not at all true (0), slightly true (1), mainly true (2), or very true (3) for them. Smith and others similarly constructed Triarchic scales from PAI items. Candidate items were selected for the PAI-Tri scales through the same consensus approach used by Sellbom and colleagues (2016) for the MMPI-2-RF-Tri scales. After each PAI item was rated for its relevance to each Triarchic construct, scales were refined to maximize internal consistency. The items used in this study are draft PAI-Tri scales, because finalized scales were not yet available at the time of the current

study. The PAI-extracted Boldness, Meanness, and Disinhibition scales consists of 13, 8, and 10 items, respectively; thus, possible raw scores range from 0 to 39, 24, and 30, respectively.

Measures of Defensive Responding or Underreporting

MMPI L-r and K-r Scales

The L-r scale consists of 14 items (possible raw scores range from 0 to 14) with higher scores denoting that the examinee denies minor faults and shortcomings that most individuals acknowledge. The mean L-r scale score in the MMPI-2-RF normative sample was 2.61 (SD = 2.07; Ben-Porath & Tellegen, 2008).

The K-r scale consists of 14 items (possible raw scores range from 0 to 14) with higher scores denoting the examinee presented him or herself as well adjusted, and therefore, can be considered a measure of defensive responding. The mean K-r scale score in the normative sample was M = 7.45 (SD = 2.91; Ben-Porath & Tellegen, 2008).

PAI Positive Impression Management (PIM) Scale

The PIM scale consists of nine items (possible raw scores range from 0 to 27) with higher scores indicating a response style in which the examinee described him or herself in an overly positive manner and free of shortcomings. The typical cut-off score denoting at least some level of positive distortion is 18, which corresponds to 57t (see Morey, 1996).

Officer Evaluation Form (Benner, Johnson, & Roberts, 2000)

The Officer Evaluation Form was a 25-item rating form designed to obtain standardized supervisor ratings of job performance and problematic behaviors. Job

performance is assessed across 13 items, including: job knowledge, communication (written and verbal), problem-solving/decision-making, patrol responsibility, driving skill, officer safety, control of conflict, reliability, general appearance, and relations (with co-workers and citizens). Each item was rated on a 5-point Likert scale with higher scores indicating more positive performance. In the current study, the 13 items appeared to represent a unitary construct (Cronbach's alpha = .94), so all items were summed to create a Total Positive Job Performance score for each participant.

Problematic behaviors were assessed across 13 items: excessive/unnecessary force, substance abuse (alcohol and illegal drugs), firearm misuse, sexual behavior, excessive disability use, sick leave abuse, theft, unethical behavior, dishonesty, personal/family relationship problems, favoritism/discrimination, as well as "other problems." Problematic behaviors were rated on a 3-point scale: 0 (No Indications), 1 (Minor Indications), or 2 (Serious Indications). Similar to the positive job performance items, the problematic behavior items demonstrated acceptable internal consistency (Cronbach's alpha = .75) and were summed to create a Total Problematic Behaviors score for each participant

Two additional items queried the supervisors' opinion of the officer's performance/behavior. An Overall Performance Item assessed the officer's performance on a scale of 0 to 10 (ranging from Much Below Standards to Much Above Standards). A Comparative Performance Item evaluated the officer's performance in comparison to other officer's performance and behavior on a 1-5 scale (ranging from Bottom 20% to Top 20%).

Procedure

Item-level data was recorded from the examinees' original MMPI-2 and PAI response forms. From the item-level data, MMPI-2-RF-Tri (boldness, meanness, and disinhibition), L-r, and K-r scales were extracted from the MMPI-2 items and the PAI-Tri (boldness, meanness, and disinhibition) and PIM scales were extracted from the PAI items.

The Officer Evaluation responses were previously coded for a separate study (Lowmaster & Morey, 2012). The majority (68%) of participants had supervisor evaluation data from two supervisors whereas the remaining participants were evaluated by one supervisor. When two performance evaluations were available, averages were computed at the item level and used in subsequent analysis.

RESULTS

Study 1

Manipulation Check

Before examining outcome measures for this research, it is important to assess the extent to which the experimental manipulations were successful in altering participant perceptions of the officer. Analysis of the participants' ratings of the officer's level of boldness and performance during the current case revealed that the manipulations had the intended effect. On average, participants rated the officer as quite bold (M = 6.60, SD = 2.56). The Boldness manipulation impacted participants' ratings of the officer's level of boldness, F(2, 448) = 430.37, p < .001. As expected, participants in a High Bold condition (M = 8.65, SD = 1.25) rated the officer as substantially bolder than participants a Low Bold condition (M = 3.78, SD = 1.78), p < .001; d = 3.17. Further, participants in a No Boldness Information condition (M = 7.32, SD = 1.53) rated the officer as bolder than participants in a Low Bold condition (p < .001; p = 0.001; p = 0.0

Ratings of Boldness also differed by the manipulation of outcome, such that those in a Positive Outcome condition (M = 6.85, SD = 2.57) rated the officer as significantly bolder than participants in a Negative Outcome condition (M = 6.35, SD = 2.53), F(1, 448) = 20.16, p < .001; d = .20. There was no significant Boldness by Outcome on ratings of Boldness interaction, F(2, 448) = 2.20, p = .11. See Table 1.

Table 1 Descriptive Information of Boldness Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	8.87 (1.06)	8.44 (1.38)	8.65 (1.25)
	76	78	154
Low Bold	3.97 (1.79)	3.56 (1.75)	3.78 (1.78)
	79	71	150
No Boldness	7.85 (1.37)	6.80 (1.50)	7.32 (1.53)
Information	74	76	150
	6.85 (2.57)	6.35 (2.53)	6.60 (2.56)
	229	225	454

Note: Each cell contains *M* (*SD*) and *N*. Marginal means and total are bolded.

Primary Analyses

To evaluate the hypotheses, a series of factorial ANOVAs was conducted to obtain the main and interactive effects of Boldness and Outcome on participants' perception of the officer. Perception of the officer was operationalized by the four Officer Performance ratings and the seven Officer Trait ratings. To fully examine each component of Hypothesis 2, independent samples *t*-tests were also conducted on each of the Officer Performance ratings to test the main effect of High versus Low Boldness within both the Positive and Negative Outcome conditions.

Officer Performance Ratings

Officer Performance ratings included the officer's performance in the current case, overall performance, competence, and likelihood of being successful. All performance ratings were highly positively correlated (all r's \geq .57, p < .001). See Table 2 for intercorrelation matrix. Descriptive information and the impact of the experimental manipulations on each of the Officer Performance ratings is reported below.

Table 2 Correlation Coefficients among Officer Evaluation Ratings

	Current Case	Overall	Competence	Success
Current Case	-			
Overall	.66***	-		
Competence	.76***	.67***	-	
Success	.61***	.57***	.62***	-

Note: ***p < .001. N = 454.

<u>Performance in the Current Case</u>

Participants generally viewed the officer as meeting standards in the current case (M=6.31, SD=2.32). Despite the officer engaging in identical behavior across all conditions, the Outcome manipulation impacted the participants' judgement of the officer's behavior in the current case, F(1, 448) = 230.02, p < .001. As expected, participants who read about a positive outcome (M=7.65, SD=1.57) rated the officer's performance during the case more positively than participants who read about a negative outcome (M=4.94, SD=2.17), p < .001; d=1.43. Boldness did not impact participants' ratings of his performance in the current case, F(2, 448) = .72, p=.49.

Counter to the hypothesis, there was no Boldness by Outcome interaction on ratings of the officer's performance, F(2, 448) = .34, p = .71. Independent samples t-tests revealed that within the Positive Outcome conditions, participants did not rate his current case performance higher when described as highly bold (M = 7.54, SD = 1.53) compared to low bold (M = 7.89, SD = 1.52), t(153) = 1.42, p = .16. Similarly, within the Negative Outcome conditions, participants did not rate the officer's current case performance lower when described as highly bold (M = 4.86, SD = 1.94) compared to low bold (M = 5.00, SD = 2.11), t(147) = .43, p = .67. See Table 3.

Table 3 Descriptive Information of Case Performance Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	7.54 (1.53)	4.86 (1.94)	6.18 (2.20)
	76	78	154
Low Bold	7.89 (1.52)	5.00 (2.11)	6.52 (2.32)
	79	71	150
No Boldness	7.50 (1.65)	4.97 (2.45)	6.22 (2.44)
Information	74	76	150
	7.65 (1.57)	4.94 (2.17)	6.31 (2.32)
	229	225	454

Note: Each cell contains M (SD) and N. Marginal means and total are bolded.

Overall Performance

As with ratings of performance in the current case, participants generally viewed the officer as meeting standards for overall performance (M = 6.97, SD = 1.70). The Outcome manipulation impacted participants' ratings of the officer's level of overall performance, F(1, 448) = 80.90, p < .001. As hypothesized, participants who read a positive outcome (M = 7.62, SD = 1.40) rated the officer's overall performance better than participants who read a negative outcome condition (M = 6.30, SD = 1.73); d = .84. Participants' ratings of the officer's overall performance in the case was not impacted by the Boldness manipulation, F(2, 448) = .16, p = .85.

Counter to the hypothesis, there was no Boldness by Outcome interaction on ratings of Overall Performance, F(2, 448) = 1.74, p = .18. Independent samples t-tests revealed that within the Positive Outcome conditions, participants did not rate the officer's overall performance higher when he was described as highly bold (M = 7.71, SD = 1.41) compared to low bold (M = 7.43, SD = 1.31), t(153) = 1.28 p = .20. Similarly, within the Negative Outcome conditions, participants did not rate the officer's overall

performance lower when described as highly bold (M = 6.33, SD = 1.69) compared to low bold (M = 6.46, SD = 1.58), t(147) = .49, p = .63. See Table 4.

A paired samples t-test revealed that the smaller effect of Outcome on ratings of overall performance (d = .84) compared to the effect of Outcome on ratings of performance in the current case (d = 1.43) was driven by participants in Negative Outcome conditions rating the officer's performance in the current case (M = 4.94, SD = 2.17) lower than they rated his overall performance (M = 6.30, SD = 1.73), t(224) = 10.33, p < .001; d = .69. In contrast, participants in Positive Outcome conditions rated the officer's performance in the current case (M = 7.65, SD = 1.57) equally high as his overall performance (M = 7.62, SD = 1.40), t(228) = .29, p = .77; d = .02.

Table 4 Descriptive Information of Overall Performance Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	7.71 (1.41)	6.33 (1.69)	7.01 (1.70)
	76	78	154
Low Bold	7.43 (1.31)	6.46 (1.58)	6.97 (1.51)
	79	71	150
No Boldness	7.74 (1.48)	6.10 (1.89)	6.91 (1.89)
Information	74	76	150
	7.62 (1.40)	6.30 (1.73)	6.97 (1.70)
	229	225	454

Note: Each cell contains *M* (*SD*) and *N*. Marginal means and total are bolded.

<u>Competence</u>

On average, participants viewed the officer as quite competent (M = 6.98, SD = 2.02). The Outcome manipulation impacted participants' ratings of the officer's competence, F(1, 448) = 111.25, p < .001. As expected, participants who read a Positive

Outcome (M = 7.86, SD = 1.55) rated the officer as more competent than participants who read a Negative Outcome (M = 6.08, SD = 2.04); d = .98. Participants' ratings of the officer's competence in the case was not impacted by the officer's level of boldness, F(2, 448) = .60, p = .55.

Counter to the hypothesis, there was no Boldness by Outcome interaction on ratings of competence, F(2, 448) = 1.49, p = .23. Independent samples t-tests revealed that within the Positive Outcome conditions, participants did not rate the officer's competence higher when described as highly bold (M = 7.82, SD = 1.54) compared to low bold (M = 7.84, SD = 1.49), t(153) = .08 p = .94. Similarly, within the Negative Outcome conditions, participants did not rate the officer as less competent when described as highly bold (M = 6.36, SD = 1.76) compared to low bold (M = 6.08, SD = 1.92), t(147) = .91, p = .36. See Table 5.

Table 5 Descriptive Information of Competence Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	7.82 (1.54)	6.36 (1.76)	7.08 (1.80)
	76	78	154
Low Bold	7.84 (1.49)	6.08 (1.92)	7.01 (1.91)
	79	71	150
No Boldness	7.95 (1.65)	5.78 (2.48)	6.85 (2.31)
Information	74	76	150
	7.86 (1.55)	6.08 (2.04)	6.98 (2.02)
	229	225	454

Note: Each cell contains *M* (*SD*) and *N*. Marginal means and total are bolded.

Likelihood of Success

Participants generally viewed the officer as likely to succeed in the next year (M = 3.91, SD = .90). The Outcome manipulation impacted participants' ratings of the officer's likelihood of success, F(1, 448) = 157.44, p < .001. As expected, participants in a Positive Outcome condition (M = 4.36, SD = .67) rated the officer as more likely to be successful than participants in a Negative Outcome condition (M = 3.45, SD = .87); d = 1.17. Unlike the other Officer Performance ratings, participants' ratings of the officer's likelihood of success in the next year was impacted by the Boldness manipulation, F(2, 448) = 3.48, p = .03. Participants rated the highly bold officer (M = 4.02, SD = .91) as more likely to be successful than an officer low in boldness (M = 3.81, SD = .83), p = .009; d = .24. Participants who did not receive overt information about the officer's level of boldness (M = 3.89, SD = .94) did not rate the officer as more or less likely to be successful than participants in a High Bold (p = .16; d = .14) or Low Bold condition, p = .22; d = .09.

Counter to the hypothesis, there was no Boldness by Outcome interaction on ratings of likelihood of success, F(2, 448) = .80, p = .45. Independent samples t-tests revealed that within the Positive Outcome conditions, consistent with the main effect of Boldness, participants rated the officer's likelihood of success higher when described as highly bold (M = 4.46, SD = .66) compared to low bold (M = 4.20, SD = .67), t(153) = 2.42, p = .02; d = .39. However, inconsistent with the hypothesis, within the Negative Outcome conditions, participants did not rate the officer's success lower when described as highly bold (M = 3.59, SD = .92) compared to low bold (M = 3.38, SD = .78), t(147) = .92

1.49, p = .14. See Table 6. Visual inspection of the data (see Figure 1) revealed that the effect of outcome varied only for participants who were provided no boldness information, wherein the positive outcome elicited ratings consistent with those in the High Bold condition and the negative outcome resulted in ratings equal to those in the Low Bold condition.

Table 6 Descriptive Information of Likelihood of Success Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	4.46 (.66)	3.59 (.92)	4.02 (.91)
	76	78	154
Low Bold	4.20 (.67)	3.38 (.78)	3.81 (.83)
	79	71	150
No Boldness	4.42 (.66)	3.38 (.89)	3.89 (.94)
Information	74	76	150
	4.36 (.67)	3.45 (.87)	3.91 (.90)
	229	225	454

Note: Each cell contains M (SD) and N. Marginal means and total are bolded.

Figure 1 Likelihood of Success Ratings across Condition

4.5

4

3.5

Positive Outcome

High Bold

Low Bold

No Boldness Information

Officer Trait Ratings

Officer Trait ratings included psychopathy, evilness, boldness, meanness, disinhibition, warmth, and dominance. Most traits were positively correlated with the

other traits, except warmth, which was generally negatively correlated with other traits. Particularly large correlations were observed between psychopathy and evilness (r(452) = .67, p < .001) and boldness and dominance, r(452) = .89, p < .001. Each of the three Triarchic traits also demonstrated large correlations (all r's $\geq .45$, p < .001). See Table 7 for the intercorrelation matrix.

To assess the Officer Trait correlations without the influence of the Boldness manipulation, the officer trait relationships were also assessed separately within the No Boldness Information condition. As seen in Table 8, the traits again tended to be positively correlated except for warmth, which typically demonstrated negative correlations—although a positive relationship was observed between warmth and boldness, r(148) = .21, p = .009. The strong relationship between psychopathy and evilness (r(148) = .71, p < .001), boldness and dominance (r(148) = .66, p < .001), and meanness and disinhibition (r(148) = .54, p < .001) remained. The correlation between boldness and the other Triarchic traits weakened (i.e., meanness, r(148) = .21, p = .01) or was no longer significant (i.e., disinhibition, r(148) = -.05, p = .58).

Similarly, within both the High Boldness condition and Low Boldness condition, warmth and boldness were correlated (r = .19 and .26, respectively) and psychopathy and evilness demonstrated a strong relationship (r = .72 and .58) as did boldness and dominance (r = .59 and .79). Disinhibition correlated with boldness (r = .32 and .49) and meanness (r = .33 and .29). Boldness and meanness demonstrated a significant relationship within the Low Boldness condition (r(148) = .27, p < .001) but not the High Boldness condition, r(152) = -.09, p = .28.

Descriptive information and the impact of the experimental manipulations on the Officer Trait ratings is reported below (with the exception of Boldness ratings, which was reported above as part of the manipulation check).

 Table 7 Correlation Coefficients among Officer Trait Ratings

	Psychop	Evilness	Boldness	Meanness	Disinhib	Warmth	Dom
Psychop	-						
Evilness	.67***	-					
Boldness	.05	.11*	-				
Meanness	.36***	.49***	.45***	-			
Disinhib	.35***	.36***	.53***	.58***	-		
Warmth	27***	26***	.01	35***	27***	-	
Dom	.10*	.13**	.89***	.47***	.53***	01	-

Note: ***p < .001; **p < .01; *p < .05. N = 454. Psychop = psychopathy; Disinhib = disinhibition; Dom = dominance.

Table 8 Correlation Coefficients among Officer Trait Ratings within the No Boldness Condition

	Psychop	Evilness	Boldness	Meanness	Disinhib	Warmth	Dom
Psychop	-						
Evilness	.71***	-					
Boldness	15	10	-				
Meanness	.34***	.48***	.21**	-			
Disinhib	.28***	.40***	05	.54***	-		
Warmth	15	20*	.21**	36***	35***	-	
Dom	08	09	.66***	.23**	.03	.30***	-

Note: ***p < .001; **p < .01; *p < .05. N = 150. Psychop = psychopathy; Disinhib = disinhibition: Dom = dominance.

<u>Psychopathy</u>

On average, participants did not perceive the officer as highly psychopathic (M = .98, SD = 1.58). Most participants (59%) rated the officer a 0 on psychopathy and nearly all participants (92%) rated the officer between 0 and 3. Counter to the hypothesis, those

who read a positive outcome (M = .89, SD = 1.55) did not rate the officer as less psychopathic than those who read a negative outcome (M = 1.08, SD = 1.60), F(1, 448) = 1.50, p = .22; d = .12.

Participants' ratings of the officer's level of psychopathy was impacted by the Boldness manipulation, F(2, 448) = 13.94, p < .001. Participants rated the highly bold officer (M = 1.51, SD = 1.93) as more psychopathic than participants who read either about an officer low in boldness (M = .72, SD = 1.35; p < .001; d = .48) or received no overt information about boldness (M = .70, SD = 1.22), p < .001; d = .50. There was no difference in psychopathy ratings between those in a Low Bold condition and those in a No Boldness Information condition, p = .87; d = .01. See Table 9.

Counter to the hypothesis, there was no Boldness by Outcome interaction on ratings of psychopathy, F(2, 448) = 1.45, p = 24. Visual inspection of the plotted data revealed similar psychopathy ratings among those in the No Boldness Information and Low Bold conditions as well as a possible interactive effect as was predicted; see Figure 2. Post-hoc analyses were conducted combining the No Boldness Information and Low Bold conditions. However, a factorial ANOVA comparing the psychopathy ratings across Outcome (positive versus negative) and Boldness (high boldness versus not high boldness) did not reveal a significant interaction, F(1, 450) = 2.70, p = .10.

Table 9 Descriptive Information of Psychopathy Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	1.59 (1.99)	1.44 (1.88)	1.51 (1.93)
	76	78	154
Low Bold	.59 (1.20)	.86 (1.49)	.72 (1.35)
	79	71	150
No Boldness	.49 (1.06)	.91 (1.34)	.70 (1.22)
Information	74	76	150
	.89 (1.55)	1.08 (1.60)	.98 (1.58)
	229	225	454

Note: Each cell contains *M* (*SD*) and *N*. Marginal means and total are bolded.

Evilness

As with psychopathy, participants did not tend to perceive the officer as highly evil (M = 1.20, SD = 1.62). Nearly half (49%) of the participants rated the officer 0 on evilness and nearly all (91%) rated the officer between 0 and 3. Counter to the hypothesis, those who read a positive outcome (M = 1.07, SD = 1.43) did not rate the officer as less evil than those who read a negative outcome (M = 1.34, SD = 1.78), F(1, 448) = 2.89, p = .09.

Participants' ratings of the officer's evilness was impacted by the Boldness manipulation, F(2, 448) = 6.76, p = .001. Participants in a High Bold condition (M = .001)

1.49, SD = 1.71) rated the officer as more evil than participants in a Low Bold condition (M = .83, SD = 1.30; p < .001; d = .44), but not more evil than participants in a No Boldness Information condition (M = 1.27, SD = 1.74), p = .23; d = .13. Participants in a No Boldness Information condition rated the officer as more evil than participants in a Low Bold condition, p = .02; d = .29. See Table 10.

A Boldness by Outcome interaction on ratings of evilness approached significance, F(2, 448) = 2.51, p = .08. Similar to the Likelihood of Success ratings, post-hoc analyses revealed that the trending Boldness by Outcome interaction on evilness ratings was driven by the No Boldness Information condition; see Figure 3. Among those who read a Positive Outcome, those in the No Boldness Information condition (M = .91, SD = 1.26) rated the officer as less evil than those in the High Bold condition (M = 1.47, SD = 1.71, p = .03; d = .38) and equally evil as those in the Low Bold condition (M = .84, SD = 1.19), p = .79; d = .06. Among those who read a Negative Outcome, those in the No Boldness Information condition (M = 1.63, SD = 2.05) rated the officer equally evil as those in the High Bold condition (M = 1.51, SD = 1.72, p = .64; d = .06) and more evil than those in the Low Bold condition (M = .83, SD = 1.41), p = .002; d = .45.

Table 10 Descriptive Information of Evilness Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	1.47 (1.71)	1.51 (1.72)	1.49 (1.71)
	76	78	154
Low Bold	.84 (1.19)	.83 (1.41)	.83 (1.30)
	79	71	150
No Boldness	.91 (1.26)	1.63 (2.05)	1.27 (1.74)
Information	74	76	150
	1.07 (1.43)	1.34 (1.78)	1.20 (1.62)
	229	225	454

Note: Each cell contains *M* (*SD*) and *N*. Marginal means and total are bolded.

1.5 High Bold Low Bold 0.5 No Boldness Information Positive Outcome **Negative Outcome**

Figure 3 Evilness Ratings across Condition

Meanness

Participants did not perceive the officer as highly mean (M = 3.84, SD = 2.19). Counter to the hypothesis, participants in a Positive Outcome condition (M = 3.74, SD =2.17) did not rate the officer as less mean than participants in a Negative Outcome condition (M = 3.95, SD = 2.22), F(1, 448) = .71, p = .40; d = .05.

Participants' ratings of the officer's meanness was impacted by the Boldness manipulation, F(2, 448) = 61.31, p < .001. Participants in a High Bold condition (M =4.95, SD = 1.98) rated the officer as meaner than participants in Low Bold conditions (M = 2.49, SD = 1.77; p < .001; d = 1.31) and No Boldness Information conditions (M =

4.05, SD = 2.07), p < .001; d = .44. Participants in a No Boldness Information condition rated the officer as more mean than those in Low Bold conditions, p < .001; d = .81. Counter to the hypothesis, there was no Boldness by Outcome interaction on ratings of meanness, F(2, 448) = .26, p = .77. See Table 11.

Table 11 Descriptive Information of Meanness Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	4.88 (1.99)	5.03 (1.99)	4.95 (1.98)
	76	78	154
Low Bold	2.34 (1.66)	2.66 (1.89)	2.49 (1.77)
	79	71	150
No Boldness	4.05 (2.03)	4.05 (2.12)	4.05 (2.07)
Information	74	76	150
	3.74 (2.17)	3.95 (2.22)	3.84 (2.19)
	229	225	454

Note: Each cell contains *M* (*SD*) and *N*. Marginal means and total are bolded.

Disinhibition

Participants did not perceive the officer as highly disinhibited (M = 3.99, SD = 2.81). As expected, Outcome impacted disinhibition ratings, F(1, 448) = 17.87, p < .001. Participants in a Positive Outcome condition (M = 3.52, SD = 2.81) rated the officer as less disinhibited than participants in a Negative Outcome condition (M = 4.46, SD = 2.73; d = .34. Participants' ratings of the officer's disinhibition was also impacted by the Boldness manipulation, F(2, 448) = 138.79, p < .001. Participants in a High Bold condition (M = 6.21, SD = 2.37) rated the officer as more disinhibited than participants in Low Bold conditions (M = 2.08, SD = 1.92; p < .001; d = 1.91) and No Boldness Information conditions (M = 3.62, SD = 2.37), p < .001; d = 1.09. Those in a No

Boldness Information condition rated the officer as more disinhibited than those in a Low Bold condition, p < .001; d = .71. See Table 12.

There was a Boldness by Outcome interaction on perceived disinhibition, F(2, 448) = 5.03, p = .007. Although an interactive effect was predicted, the specific hypothesis that high boldness would exacerbate the effect of outcome was not demonstrated; see Figure 4. Participants viewed the highly bold officer as highly disinhibited regardless of outcome (p = .89; d = .02), which is contrary to the prediction that a highly bold officer in the Positive Outcome would be perceived more positively (i.e., less disinhibited) than the highly bold officer in the Negative Outcome condition. Among the Low Bold (p = .01; d = .48) and No Boldness Information (p < .001; d = .73) conditions, participants viewed the officer as less disinhibited in the Positive Outcome compared to the Negative Outcome conditions. Therefore, although it was predicted that Low Boldness would attenuate the effect of outcome, the Low Bold (and No Boldness Information) conditions were driving the main effect of outcome.

Table 12 Descriptive Information of Disinhibition Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	6.18 (2.59)	6.23 (2.16)	6.21 (2.37)
	76	78	154
Low Bold	1.65 (1.53)	2.56 (2.18)	2.08 (1.92)
	79	71	150
No Boldness	2.80 (1.89)	4.42 (2.53)	3.62 (2.37)
Information	74	76	150
	3.52 (2.81)	4.46 (2.73)	3.99 (2.81)
	229	225	454

Note: Each cell contains *M* (*SD*) and *N*. Marginal means and total are bolded.

8

6

— High Bold

Low Bold

No Boldness Information

Positive Outcome

Negative Outcome

Figure 4 Disinhibition Ratings across Condition

Warmth

On average, participants viewed the officer as fairly warm (M = 5.42, SD = 2.00). As expected, Outcome impacted warmth ratings, F(1, 448) = 7.24, p = .01. The officer was perceived warmer with a Positive (M = 5.67, SD = 1.90) versus Negative outcome (M = 5.16, SD = 2.07); d = .26.

Boldness also impacted perception of the officer's warmth, F(2, 448) = 5.91, p = .003. Participants who read about the highly bold officer perceived him as less warm (M = 4.98, SD = 2.17) than those who read about the low bold officer (M = 5.75, SD = 1.90, p = .001; d = .38) or received no boldness information (M = 5.53, SD = 1.85), p = .01; d = .27. Participants who read about the low bold officer viewed him as equally warm as those who received no boldness information, p = .40; d = .12. Counter to the hypothesis, there was no Boldness by Outcome interaction on ratings of warmth, F(2, 448) = .73, p = .48. See Table 13.

Table 13 Descriptive Information of Warmth Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	5.08 (2.02)	4.88 (2.31)	4.98 (2.17)
	76	78	154
Low Bold	6.09 (1.81)	5.37 (1.94)	5.75 (1.90)
	79	71	150
No Boldness	5.82 (1.72)	5.25 (1.93)	5.53 (1.85)
Information	74	76	150
	5.67 (1.90)	5.16 (2.07)	5.42 (2.00)
	229	225	454

Note: Each cell contains *M* (*SD*) and *N*. Marginal means and total are bolded.

Dominance

On average, participants viewed the officer as dominant (M = 6.38, SD = 2.62). As expected, Outcome impacted dominance ratings, F(1, 448) = 14.24, p < .001. The officer was perceived as more dominant with a Positive (M = 6.59, SD = 2.58) versus Negative outcome (M = 6.17, SD = 2.65); d = .16.

Boldness also impacted perception of dominance, F(2, 448) = 428.33, p < .001. Participants who read about the high bold officer perceived him as more dominant (M = 8.58, SD = 1.21) than those who read about the low bold officer (M = 3.54, SD = 1.75, p = .001; d = 3.35) or received no boldness information (M = 6.97, SD = 1.67), p = .01; d = 1.10. Participants who received no boldness information perceived him as more dominant than those who read about the low bold, p < .001; d = 2.01. There was no Boldness by Outcome interaction on ratings of dominance, F(2, 448) = 1.54, p = .22. See Table 14.

Table 14 Descriptive Information of Dominance Ratings by Condition

Sample	Positive Outcome	Negative Outcome	
High Bold	8.70 (1.21)	8.47 (1.21)	8.58 (1.21)
	76	78	154
Low Bold	3.81 (1.82)	3.24 (1.63)	3.54 (1.75)
	79	71	150
No Boldness	7.39 (1.44)	6.55 (1.78)	6.97 (1.67)
Information	74	76	150
	6.59 (2.58)	6.17 (2.65)	6.38 (2.62)
	229	225	454

Note: Each cell contains *M* (*SD*) and *N*. Marginal means and total are bolded.

Supplemental Analyses

Boldness and Meanness

Another series of ANOVAs was conducted to further assess the potential interactive effect of boldness and context, wherein "context" was operationalized by the participants' perception of the officer (i.e., higher ratings of meanness indicating a negative context; lower ratings of meanness indicating a positive context). To avoid contamination from the boldness manipulation, analyses were conducted within the No Boldness Information condition.

The boldness ratings midpoint (7) was used to split participants into those who rated the officer as more (8-10) versus less bold (4-7). Similarly, the midpoint of the meanness ratings (4) served to split participants into those who rated the officer as more (5-10) versus less mean (0-4). See Table 15 for descriptive information. For each of the four measures of officer performance, there was a main effect of Boldness ratings, such that those who rated the officer bolder rated him more positively: Performance in the Current Case, F(1, 146) = 14.72, p < .001; Overall Performance, F(1, 146) = 18.47, p < .001

.001; Competence, F(1, 146) = 21.59, p < .001; Likelihood of Success, F(1, 146) = 22.21, p < .001. Similarly, there was a main effect of Meanness ratings, such that those who rated the officer meaner rated him less positively: Performance in the Current Case, F(1, 146) = 7.37, p = .007; Overall Performance, F(1, 146) = 5.33, p = .02; Competence, F(1, 146) = 8.66, p = .004; Likelihood of Success, F(1, 146) = 12.99, p < .001. However, there was no interaction of High/Low Boldness ratings by High/Low Meanness ratings of any of the four measures of officer performance: Performance in the Current Case, F(1, 146) = .48, p = .49; Overall Performance, F(1, 146) = .01, p = .93; Competence, F(1, 146) = .41, p = .52; Likelihood of Success, F(1, 146) = .03, p = .86.

Table 15 Descriptive Information of Performance Ratings within the No Boldness Information Condition

	Higher Meanness (5-10) N = 60; 40%	Lower Meanness (0-4) N = 90; 60%
Higher Boldness (8-10) N = 75; 50%	Current: 7.45 (2.66) Overall: 8.15 (1.92) Competence: 8.15 (2.68) Success: 3.91 (.91)	Current: 8.24 (2.22) Overall: 8.81 (1.52) Competence: 8.98 (1.81) Success: 4.45 (.77)
	N = 33	N=42
Lower Boldness (4-7) N = 75; 50%	Current: 5.70 (2.40) Overall: 6.85 (2.28) Competence: 6.26 (2.14) Success: 3.26 (.98)	Current: 7.02 (2.08) Overall: 7.56 (1.53) Competence: 7.54 (1.98) Success: 3.57 (.90)
	N=27	N = 48

Note: Includes only those participants in the No Boldness Information condition. Each cell contains M (SD) for each of the officer performance measures and N.

Participant Factors

<u>Descriptive Information</u>

Participant factors included self-reported political orientation, the

Authoritarianism scale, Police Violence scale, and Perceptions of Police scale. The

descriptive information for each participant factor is reported below.

Political Orientation

Participants' self-reported political orientation ranged from the extremely conservative (1) to extremely liberal (10), but participants rated themselves as more conservative on average (M = 4.80, SD = 2.35). The modal response was 3 and most (52%) rated themselves "extremely conservative" to "somewhat conservative" (1-4) whereas only 18% rated themselves "extremely liberal" to "somewhat liberal" (7-10). Visual inspection of these data suggested a somewhat non-normal distribution, which was further supported by a significant negative kurtosis (-1.01, SE = .23) and marginally positive skew (.23, SE = .12). Political Orientation ratings did not vary by condition, F(5, 448) = .45, p = .82.

Anomic Authoritarianism Scale

Higher scores represent feelings in favor of authoritarianism. The five items of the Anomic Authoritarianism Scale demonstrated marginal internal consistency (Cronbach's $\alpha = .64$), so a total scale score was computed for each participant by summing the five ratings. Although the average item rating on the Anomic Authoritarianism Scale items was moderate (M = 2.85, SD = .73), there was appropriate variability among participants' total scale scores (M = 14.23, SD = 3.63) with scores

ranging from the lowest (5) to highest (25) possible score. Visual inspection of these data suggested a normal distribution, which was further supported by measures of skew (.02, SE = .12) and kurtosis (-.04, SE = .23). Authoritarianism scale scores did not vary by condition, F(5, 448) = 1.72, p = .13.

Police Violence Scale

Higher scores on the Police Violence scale are associated with a belief that the police are not unnecessarily violent. Two items were reverse coded. The five items of the Police Violence Scale demonstrated acceptable internal consistency (Cronbach's α = .73), so a total scale score was computed for each participant by summing the five ratings. Similar to the Authoritarianism scale, the average rating on the Police Violence Scale items was moderate (M = 2.79, SD = .81) but there was appropriate variability among participants with total scale scores (M = 13.93, SD = 4.03) ranging from the lowest (5) to highest (25) possible score. Visual inspection of these data suggested a normal distribution, which was further supported by measures of skew (.07, SE = .12) and kurtosis (-.36, SE = .23). Police Violence scale scores did not vary by condition, F (5, 448) = 1.00, p = .42.

Perceptions of Police Scale

This scale was computed by summing the Anomic Authoritarianism and Police Violence Scales. The 10 items demonstrated acceptable internal consistency (Cronbach's $\alpha = .77$). The combined Perceptions of Police scale scores (M = 28.16, SD = 6.52) ranged from 12 to 44. Visual inspection of these data again suggested a normal distribution, which was further supported by measures of skew (.04, SE = .12) and

kurtosis (-.26, SE = .23). Perceptions of Police scale scores did not vary by condition, F(5, 448) = 1.51, p = .18.

Correlations

All participant factors were highly correlated (absolute value r's \geq .40, p < .001). See Table 16 for intercorrelation matrix. Of note, given that the Perceptions of Police scale was computed by combining the Authoritarianism and Police Violence scale scores, the inflated correlations (r's \geq .83, p < .001) provide limited information.

All participant factors correlated with the Officer Performance ratings. As anticipated, higher Authoritarianism, Police Violence, and Perceptions of Police scale scores correlated with more positive evaluations of the officer whereas political orientation was negatively correlated (i.e., self-reported liberal orientation correlated with less positive evaluations of the officer). See Table 17 for intercorrelation matrix.

Most Officer Trait ratings were not correlated with the Participant Factors, but several small correlations did emerge. Self-reporting a more liberal political orientation was modestly correlated to higher ratings of the officer's level of psychopathy and evilness. Conversely, more conservative self-reports related to rating the officer as warmer. Perceiving the officer as warmer also correlated with higher Police Violence and Perceptions of Police scale scores. See Table 18 for intercorrelation matrix.

Table 16 Correlation Coefficients among Participant Factors

	Political Orientation	Authoritarian- ism	Police Violence	Perceptions of Police
Political Orientation	-			
Authoritarianism	40***	-		
Police Violence	64***	.45***	-	
Perceptions of Police	62***	.83***	.87***	-

Note: *** p < .001. N = 454.

Table 17 Correlation Coefficients between Performance Ratings and Participant Factors

	Political	Authoritarianism	Police Violence	Perceptions of
	Orientation			Police
Current Case	13**	.17***	.27***	.26***
Overall	12*	.16***	.26***	.25***
Competence	16**	.22***	.28***	.29***
Success	13**	.16***	.22***	.23***

Note: ***p < .001; **p < .01; *p < .05. N = 454.

Table 18 Correlation Coefficients between Trait Ratings and Participant Factors

	Political	Authoritarianism	Police Violence	Perceptions of
	Orientation			Police
Psychopathy	.16**	.03	09	04
Evilness	.14**	.02	11*	06
Boldness	04	.08	.06	.08
Meanness	.05	.07	08	01
Disinhibition	.07	.03	07	03
Warmth	14**	.05	.19***	.14**
Dominance	04	.11*	.04	.09

Note: ***p < .001; **p < .01; *p < .05. N = 454.

Covariates

Given the relation between Participant Factors and Officer Performance

Evaluation ratings, a series of factorial ANCOVAs was computed to assess whether the

Participant Factors meaningfully covaried with the Officer Performance Evaluation

ratings with respect to the experimental manipulations. Due to the strong correlations

among the individual participant factors, each Participant Factor variable was assessed as a covariate separately to avoid the presence of multicollinearity. Therefore, 16 factorial ANCOVAs were computed to assess each of the four participant factors (i.e., political orientation, authoritarianism, police violence scale, police attitudes scale) on each of the four officer performance evaluation ratings (i.e., performance in the current case, overall performance, competence, likelihood of success).

Factorial ANCOVAs revealed that Political Orientation was a significant covariate with respect to the impact of the experimental manipulations on each of four measures of Officer Performance: Performance in the Current Case, F(1, 446) = 9.96, p = .002; Overall Performance, F(1, 446) = 6.50, p = .01; Competence, F(1, 446) = 13.16, p < .001; Likelihood of Success, F(1, 446) = 8.49, p = .004. However, accounting for Political Orientation did not meaningfully alter the impact of the manipulations on any of the Officer Performance ratings.

Factorial ANCOVAs revealed that Authoritarianism was a significant covariate with respect to the impact of the experimental manipulations on each of four measures of Officer Performance: Performance in the Current Case, F(1, 447) = 12.28, p = .001; Overall Performance, F(1, 447) = 9.71, p = .002; Competence, F(1, 447) = 22.07, p < .001; Likelihood of Success, F(1, 447) = 8.87, p = .003. Again, however, accounting for Authoritarianism did not meaningfully alter the impact of the manipulations on any of the Officer Performance ratings.

Factorial ANCOVAs revealed that Police Violence was a significant covariate with respect to the impact of the experimental manipulations on each of four measures of

Officer Performance: Performance in the Current Case, F(1, 447) = 44.48, p < .001; Overall Performance, F(1, 447) = 32.11, p < .001; Competence, F(1, 447) = 40.07, p < .001; Likelihood of Success, F(1, 447) = 23.26, p < .001. However, accounting for Police Violence did not meaningfully alter the impact of the manipulations on any of the Officer Performance ratings.

Factorial ANCOVAs revealed that Perceptions of Police was a significant covariate with respect to the impact of the experimental manipulations on each of four measures of Officer Performance: Performance in the Current Case, F(1, 447) = 37.25, p < .001; Overall Performance, F(1, 447) = 27.69, p < .001; Competence, F(1, 447) = 43.69, p < .001; Likelihood of Success, F(1, 447) = 21.74, p < .001. When accounting for participants' scores on the Perceptions of Police scale, there was no longer a main effect of Boldness on Likelihood of Success (p = .056). However, accounting for Perceptions of Police did not meaningfully alter the impact of the manipulations on any other Officer Performance ratings.

Demographic Factors

<u>Gender</u>

Independent samples t-tests investigated the effect of gender on participant ratings. None of the study variables, including Participant Factors, Officer Performance ratings, and Officer Trait ratings, varied by gender (p's \geq .16). See Table 19 for full model results.

Table 19 Participant Factors and Ratings across Gender

•	Women	Men	t	p
Participant Factors				
Political Orientation	4.88 (2.36)	4.51 (2.31)	-1.39	.17
Authoritarianism	14.22 (3.60)	14.29 (3.80)	.19	.86
Police Violence	13.82 (3.94)	14.30 (4.34)	1.07	.29
Perceptions of Police	28.04 (6.35)	28.60 (7.11)	.76	.45
Officer Performance Ratings				
Current Case	6.38 (2.30)	6.07 (2.42)	-1.19	.24
Overall	6.99 (1.63)	6.90 (1.94)	47	.64
Competence	6.99 (1.96)	6.95 (2.20)	18	.86
Likelihood of Success	3.89 (.90)	3.98 (.98)	.88	.38
Trait Ratings				
Evilness	1.14 (1.56)	1.39 (1.76)	1.39	.16
Psychopathy	.92 (1.59)	1.17 (1.50)	1.39	.16
Boldness	6.67 (2.57)	6.38 (2.53)	-1.00	.32
Meanness	3.82 (2.17)	3.90 (2.26)	.33	.74
Disinhibition	3.97 (2.82)	4.02 (2.77)	.143	.89
Warmth	5.46 (1.97)	5.28 (2.10)	77	.44
Dominance	6.40 (2.61)	6.33 (2.67)	22	.82

Note: Cell contains M (SD), t-value, or p-value. Women N = 351; Men N = 102.

Race/Ethnicity

Race did not impact Authoritarianism scores, F(4, 449) = .87, p = .48. The other three participant factors varied by race. See Table 20 for descriptive information.

Political Orientation varied by race, F(4, 448) = 15.48, p < .001. Caucasians were more conservative than African American (p < .001), Hispanic (p < .001), and Asian (p < .001) participants. Hispanic participants were more conservative than African American (p = .012) and Asian (p = .048) participants. African Americans and Asian participants did not significantly differ, p = .29.

Race impacted scores on the Police Violence scale, F(4, 449) = 8.98, p < .001. Caucasians had higher Police Violence scale scores than African American (p < .001), Asian (p = .008), and Hispanic (p = .009) participants. African Americans had lower Police Violence scale scores than Hispanic (p < .001) and Asian (p = .006) participants. Hispanic and Asian participants did not significantly differ from each other, p = .39.

Perceptions of Police scores varied by race, F(4, 449) = 3.41, p = .009. African Americans had lower Perceptions of Police scores than Caucasian (p = .001), Hispanic (p = .003), and Asian (p = .017) participants. There were no other significant differences.

Despite the differences in several Participant Factors, none of the Officer Performance ratings varied by race. There was no significant difference among ratings of performance in the current case (F(4, 449) = .61, p = .66), overall performance (F(4, 449) = 2.05, p = .09), competence (F(4, 449) = .46, p = .77), or likelihood of success (F(4, 449) = .54, p = .71). Similarly, none of the Officer Trait ratings varied by race. There was no significant difference among ratings of the officer's boldness (F(4, 449) = 1.21, p = .30), meanness (F(4, 449) = .26, p = .90), disinhibition (F(4, 449) = 1.42, p = .23), evilness (F(4, 449) = .83, p = .51), psychopathy (F(4, 449) = 1.34, p = .25), warmth (F(4, 449) = .19, p = .94), or dominance, F(4, 449) = 1.05, p = .38.

Table 20 Descriptive Information of Participant Factors by Racial Background

	Authoritarian-	Police	Perceptions of	Political
	ism	Violence	Police	Orientation
African American/Black	13.08 (3.20)	8.92 (3.00)	22.00 (3.62)	7.25 (1.60)
Asian	14.68 (3.09)	12.58 (3.77)	27.26 (5.83)	6.45 (1.55)
Caucasian/White	14.10 (3.65)	14.52 (3.79)	28.62 (6.57)	4.28 (2.26)
Hispanic	14.56 (3.83)	13.28 (4.34)	27.84 (6.58)	5.53 (2.23)
Other	15.07 (3.43)	12.21 (3.98)	27.29 (6.01)	5.86 (2.60)

Note: Each cell contains M (SD). African-American/Black N = 12; Asian N = 31; Caucasian/White N = 309; Hispanic N = 88; Other N = 14.

<u>Age</u>

Despite the restricted range of age (18 to 29 years; M = 19.53, SD = 1.28), there was a small positive correlation between age and Political Orientation, r(451) = .13, p = .005, indicating that (relatively) older participants tended to report being more liberal. No correlation emerged between age and Authoritarianism, r(451) = -.03, p = .56; Police Violence, r(451) = -.06, p = .23; or Perceptions of Police, r(451) = -.05, p = .29.

Study 2

Primary Analyses

To assess the endorsement of each Triarchic scale derived from the MMPI-2-RF and PAI, the descriptive information of the six respective scales was reviewed.

MMPI-2-RF-Tri Descriptive Information

Boldness Scale

The MMPI-2-RF Boldness scale scores ranged from 12 to the maximum of 21 (M = 17.52, SD = 2.12); see Figure 5 for frequency distribution of scale scores. Most items were endorsed by a majority of candidates. Two items were endorsed by all participants. See Table 21 for item-level descriptive information. The 19 items that varied demonstrated a Cronbach's alpha of .49.

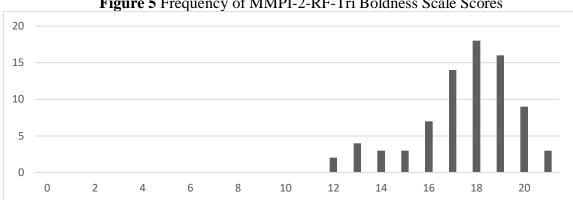


Figure 5 Frequency of MMPI-2-RF-Tri Boldness Scale Scores

Note: Skew = -.82 (SE = .27); Kurtosis = .33 (SE = .54). N = 79.

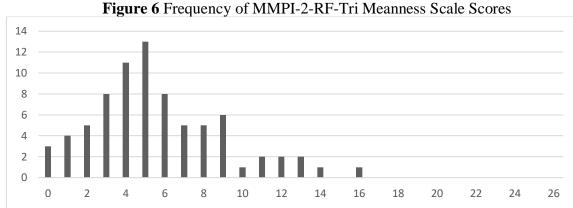
Table 21 Descriptive Information of MMPI-2-RF-Tri Boldness Scale Items

	MMPI-2-RF Item	M(SD)	Percent Endorsed	Item-Total Correlation
1	109	.75 (.44)	75	.18
2	114*	.81 (.39)	81	.17
3	147	.93 (.27)	93	.27
4	182	.76 (.43)	76	.04
5	226	.41 (.50)	41	.21
6	234	.75 (.44)	75	.14
7	239	.94 (.24)	94	.33
8	244	.80 (.40)	80	14
9	246	1.00 (.00)	100	-
10	249*	.74 (.44)	74	.15
11	24*	.98 (.16)	98	.16
12	276	.65 (.48)	65	.07
13	302	.84 (.37)	84	.31
14	322*	1.00 (.00)	100	-
15	37	.94 (.24)	94	.23
16	42	.50 (.50)	50	.22
17	48*	.99 (.11)	99	.03
18	64	.92 (.27)	92	.23
19	73	.93 (.27)	93	.35
20	91*	.95 (.22)	95	10
21	94	.95 (.22)	95	.32

Note: * indicates the item was reverse scored. Percent endorsed indicates the percent of candidates who answered the item in the high boldness direction.

Meanness Scale

The MMPI-2-RF Meanness scale scores ranged from 0 to 16 (M = 5.66, SD = 3.42). The median and modal score was 5. See Figure 6 for frequency distribution of scale scores. Three items were not endorsed by any participants. Only three items were endorsed by at least half of officer candidates. Those items related to strongly defending opinions (50%) and enjoying rough sports (75%) and hunting (58%). See Table 22 for item-level descriptive information. The 23 items that varied demonstrated a Cronbach's alpha of .73.



Note: Skew = .77 (SE = .27); Kurtosis = .49 (SE = .54). N = 77.

Table 22 Descriptive Information of MMPI-2-RF-Tri Meanness Scale Items

	MMPI-2-RF Item	M (SD)	Percent Endorsed	Item-Total
		,		Correlation
1	104	.50 (.50)	50	.09
2	142	.06 (.24)	6	.42
3	143	.14 (.35)	14	.04
4	148	.58 (.50)	58	.02
5	185	.14 (.35)	14	.35
6	213	.46 (.50)	46	.49
7	255	.00 (.00)	0	-
8	256	.29 (.46)	29	.39
9	292	.05 (.22)	5	.17
10	300	.75 (.44)	75	.16
11	305	.42 (.50)	42	.25
12	316	.20 (.40)	20	.39
13	321	.31 (.47)	31	.49
14	327	.21 (.41)	21	.45
15	329	.05 (.22)	5	03
16	36	.26 (.44)	26	.46
17	39	.38 (.49)	38	.25
18	55	.20 (.40)	20	.58
19	84	.03 (.16)	3	.29
20	87	.23 (.42)	23	.34
21	97	.16 (.37)	16	.34
22	99	.21 (.41)	21	.29
23	26	.03 (.16)	3	.19
24	41	.00 (.00)	0	-
25	231	.00 (.00)	0	-
26	236	.01 (.11)	1	02

Note: Percent endorsed indicates the percent of candidates who answered the item in the high meanness direction.

Disinhibition Scale

The MMPI-2-RF Disinhibition scale scores ranged from 0 to 8 (M = 2.00, SD = 1.80). Nearly a quarter (24%) of participants did not endorse any disinhibition items; see Figure 7 for frequency distribution of scale scores. Two items were not endorsed by any participants. The 9 items that varied demonstrated a Cronbach's alpha of .63. See Table 23 for item-level descriptive information.

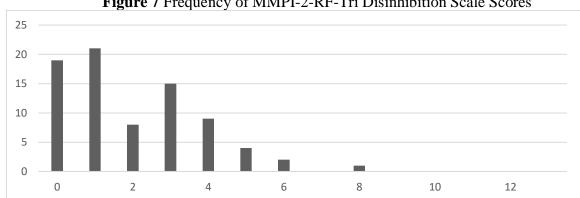


Figure 7 Frequency of MMPI-2-RF-Tri Disinhibition Scale Scores

Note: Skew = .83 (SE = .27); Kurtosis = .35 (SE = .54). N = 79.

Table 23 Descriptive Information of MMPI-2-RF-Tri Disinhibition Scale Items

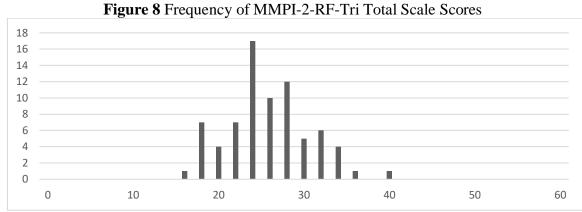
	MMPI-2-RF Item	M (SD)	Percent Endorsed	Item-Total
				Correlation
1	131	.32 (.47)	32	.22
2	156	.33 (.47)	33	.32
3	190*	.18 (.38)	18	.21
4	205	.00 (.00)	0	-
5	21	.39 (.49)	39	.49
6	212*	.03 (.16)	3	.28
7	218	.00 (.00)	0	-
8	221*	.00 (.00)	0	-
9	223	.13 (.33)	13	.26
10	253	.00 (.00)	0	-
11	45	.35 (.48)	35	.43
12	66	.24 (.43)	24	.37
13	96	.04 (.19)	4	.35

Note: * indicates the item was reverse scored. Percent endorsed indicates the percent of candidates who answered the item in the high disinhibition direction.

MMPI-2-RF-Tri Total

The 60 non-overlapping items comprising the three MMPI-2-RF-Tri scales were summed to create a total score. Obtained scores ranged from 16 to 39 (M = 25.25, SD =4.77); see Figure 8 for frequency distribution. Despite being comprised of three distinct

constructs, the 50 items that varied demonstrated acceptable internal consistency (Cronbach's $\alpha = .69$).



Note: Skew = .27 (SE = .28); Kurtosis = .55 (SE = .52). N = 75.

PAI-Tri Descriptive Information

Boldness Scale

Consistent with the MMPI-2-RF Boldness scale, participants tended to endorse the PAI Boldness scale items (M = 2.26; item mean range: .99 to 2.94). See Table 24 for item-level descriptive information. The total PAI Boldness scale scores ranged from 15 to the maximum possible of 39 (M = 29.34, SD = 4.26). See Figure 9 for frequency distribution. The scale demonstrated acceptable internal consistency (Cronbach's $\alpha = .70$).

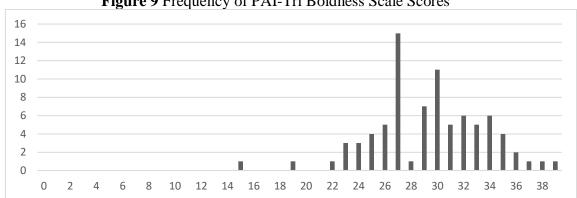


Figure 9 Frequency of PAI-Tri Boldness Scale Scores

Note: Skew = -.33 (SE = .26); Kurtosis = .71 (SE = .52). N = 83.

Table 24 Descriptive Information of PAI-Tri Boldness Scale Items

	PAI Item	M (SD)	Range	Item-Total
				Correlation
1	16	2.12 (.69)	0-3	.71
2	44*	2.94 (.24)	2-3	.27
3	56	2.02 (.76)	0-3	.61
4	68	.99 (.85)	0-3	.16
5	96	1.72 (.82)	0-3	.37
6	106*	2.46 (.63)	0-3	.53
7	124	2.63 (.71)	0-3	.33
8	136*	2.84 (.40)	1-3	.35
9	146	2.46 (.63)	1-3	.29
10	216*	2.45 (.59)	0-3	.47
11	226	2.12 (.89)	0-3	.22
12	284*	2.77 (.57)	0-3	.15
13	308*	1.82 (1.00)	0-3	.09

Note: * indicates the item was reverse scored.

Meanness Scale

On average, participants did not endorse PAI Meanness scale items (M = .51; item mean range: .01 - 1.01). See Table 25 for item-level descriptive information. The PAI Meanness scale scores were low (M = 4.05, SD = 1.97) and ranged from 0 to 9. See Figure 10 for frequency distribution. Internal consistency was low (Cronbach's $\alpha = .38$). Removing Item 3 or Item 4 would increase the scales internal consistency but only marginally ($\alpha = .47$ and .41, respectively).

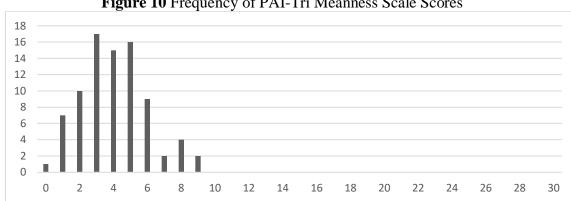


Figure 10 Frequency of PAI-Tri Meanness Scale Scores

Note: Skew = .41 (SE = .26); Kurtosis = -.06 (SE = .52). N = 83.

Table 25 Descriptive Information of PAI-Tri Meanness Scale Items

	PAI Item	M (SD)	Range	Item-Total
				Correlation
1	58	.54 (.57)	0-2	.33
2	71	.01 (.11)	0-1	.05
3	111	.23 (.61)	0-3	08
4	128*	1.01 (.63)	0-3	.05
5	138	.92 (.74)	0-3	.29
6	171	.07 (.26)	0-1	.33
7	271	.59 (.68)	0-3	.27
8	330*	.67 (.65)	0-3	.15

Note: * indicates the item was reverse scored.

Disinhibition Scale

On average, participants did not endorse PAI Disinhibition scale items (M = .51; item mean range: .05 - 1.48). See Table 26 for item-level descriptive information. The PAI Disinhibition scale scores (M = 5.14, SD = 3.36) ranged from 0 to 18, but the

significant majority (93%) scored between 0 and 9. See Figure 11 for frequency distribution. The scale demonstrated a Cronbach's alpha of .58.

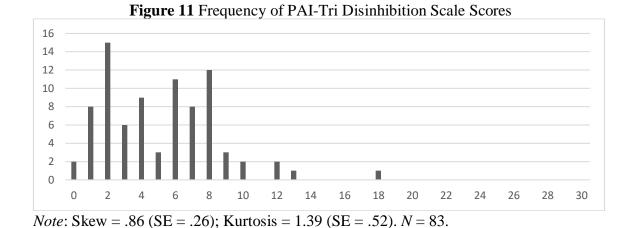


Table 26 Descriptive Information of PAI-Tri Disinhibition Scale Items

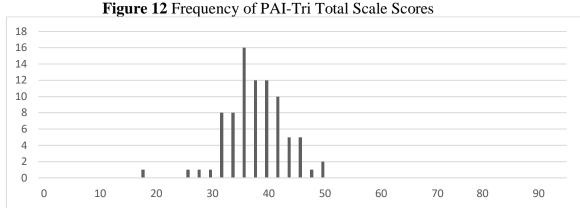
	PAI Item	M (SD)	Range	Item-Total
				Correlation
1	11*	.31 (.58)	0-3	.40
2	79	.25 (.58)	0-3	.45
3	91	1.02 (1.01)	0-3	.40
4	143	.08 (.39)	0-3	.40
5	159	.07 (.38)	0-3	.06
6	258	.07 (.26)	0-1	.06
7	291*	1.48 (1.37)	0-3	.43
8	298*	.40 (.71)	0-3	.20
9	303	.05 (.22)	0-1	.29
10	319*	1.40 (.94)	0-3	.17

Note: * indicates the item was reverse scored.

PAI-Tri Total

The 31 non-overlapping items composing the three PAI-Tri scales were summed to create a total score; thus, possible scores could range from 0 to 93. Obtained scores

ranged from 19 to 50 (M = 38.53, SD = 5.20); see Figure 12 for frequency distribution. Cronbach's alpha was .48.



Note: Skew = -.41 (SE = .26); Kurtosis = 1.62 (SE = .52). N = 83.

Expected convergent associations between the paired MMPI-2-RF-Tri and PAI-Tri scales (e.g., the two Boldness scales) emerged (r's \geq .46, p < .001). Furthermore, the scales generally demonstrated the expected discriminant associations as demonstrated by limited correlations among non-paired scales. However, the PAI-Disinhibition scale was moderately positively correlated with MMPI- and PAI-Meanness scales and negatively correlated with PAI-Boldness. See Table 27.

Table 27 Correlation Coefficients among Triarchic Scales

	N	MMPI-2-RF-Tri			PAI-Tri		
	Boldness	Meanness	Disinhib	Boldness	Meanness	Disinhib	
MMPI-Boldness	-						
MMPI-Meanness	.11	-					
MMPI-Disinhib	13	.18	-				
PAI-Boldness	.61***	.12	04	-			
PAI-Meanness	.07	.46***	.02	16	-		
PAI-Disinhib	14	.26*	.51***	27*	.29**	-	

Note: ***p < .001; **p < .01; *p < .05. Correlation coefficients of paired scales are bolded. Disinhib = disinhibition. N = 76 to 79.

Supplemental Analyses

Defensive Responding or Underreporting

Due to the tendency for employment-eligibility examinees to deny minor problems and present themselves as free of shortcomings, the effect of defensive responding was assessed. As expected, the examinees had elevated scores on defensive responding scales. The L-r scale score (M = 4.64, SD = 2.48) was approximately one standard deviation higher than the normative sample and ranged from 0 to 11 (Cronbach's $\alpha = .67$). As measured by the K-r scale, the police candidates also presented with a high level of adjustment (M = 11.99, SD = 2.16) with scores ranging from 3 to 14 (Cronbach's $\alpha = .72$). The PIM scale score (M = 19.59, SD = 3.53) was similarly elevated and ranged from 3 to 25 (Cronbach's $\alpha = .75$). Each of the three scales tapping defensiveness or underreporting were positively correlated with one another (all r's \geq .32, $p \leq .004$); see Table 28 for the intercorrelation matrix.

To serve as a single measure of defensive responding in subsequent analyses, a Combined Defensiveness score was computed by summing the L-r, K-r, and PIM scores,

yielding a possible raw score from 0 to 55. Despite containing items from different measures, the 37-item Combined Defensiveness scale demonstrated good internal consistency (Cronbach's $\alpha = .82$). Participants' scores (M = 36.39, SD = 6.18) ranged from 11 to 49. Given the demand characteristics inherent to employment-eligibility testing and extant literature demonstrating the limited predictive validity among highly defensive responding, including the preceding study examining these data (Lowmaster & Morey, 2012), participants with Combined Defensiveness scale scores at or below the Combined scale midpoint (37) versus those above the median were identified. Consistent with the high correlations among each measure of defensive responding, independent samples t-tests revealed that the mean was significantly higher across all measures of defensiveness in the \geq 38 Combined group compared to the \leq 37 group; see Table 29 for comparison of means information. Additionally, as demonstrated by the cross tabulated frequencies, a significant relationship was observed between the Combined Defensiveness classifications and those derived from the cut score used by Lowmaster & Morey (2012) to categorize participants as more (PIM scores \geq 20) or less defensive, X^2 (1, N = 79) = 17.18, p < .001. Specifically, the majority of participants (72.2%) were categorized the same (i.e., more or less defensive) by both the Combined and PIM cut scores.

Table 28 Correlation Coefficients among Defensiveness Scales

	MMPI-L-r	MMPI-K-r	PAI-PIM	Combined
MMPI-L-r	-			
MMPI-K-r	.32**	-		
PAI-PIM	.54***	.55***	-	
Combined	.77***	.74***	.89***	-

Note: ***p < .001; **p < .01. N = 80.

 Table 29 Defensiveness Scales Split by Combined Scale Score

	≤ 37 Combined	≥ 38 Combined	t	p
MMPI-Lr	3.00 (1.75)	6.64 (1.61)	9.59	<.001
MMPI-Kr	11.25 (2.43)	12.92 (1.25)	3.73	<.001
PAI-PIM	18.16 (2.74)	21.69 (2.01)	6.44	<.001
Combined	32.41 (5.28)	41.25 (2.79)	9.05	<.001

Note: Cells contain M (SD), t-value, or p-value. \leq 37 Combined N = 44; \geq 38 Combined N = 36.

In general, the extracted Meanness and Disinhibition scales were negatively correlated with measures of defensive responding whereas the Boldness scales demonstrated (inconsistent) positive correlations. Therefore, defensive responding generally corresponded with lower meanness and disinhibition scores and higher boldness scores, which is consistent with the average pattern of responding demonstrated by the candidates (i.e., higher than average defensiveness, low meanness and disinhibition scores, high boldness scores). See Table 30 for the intercorrelation matrix. Similarly, independent samples *t*-tests revealed that those who were more defensive had lower MMPI-2-RF-extracted Meanness and both Disinhibition scale scores and higher MMPI-2-RF-extracted Boldness scale scores. See Table 31 for comparison of means information.

Table 30 Correlation Coefficients between Defensiveness and Triarchic Scales

	MMPI-L-r	MMPI-K-r	PAI-PIM	Combined
MMPI-Boldness	.15	.18	.24*	.24*
MMPI-	31**	57***	51***	58***
Meanness				
MMPI-Disinhib	53***	24*	35**	47***
MMPI-Total	36**	42***	.40***	49***
PAI-Boldness	.05	.08	.34**	.16
PAI-Meanness	13	36**	45***	35**
PAI-Disinhib	59***	31**	59***	59***
PAI-Total	36**	26*	27*	36**

Note: ***p < .001; **p < .01; *p < .05, Disinhib = disinhibition. N = 75 to 83.

Table 31 Triarchic Scales Split by Defensiveness

	≤ 37 Combined	≥ 38 Combined	t	p	
MMPI-Boldness	17.02 (1.96)	18.14 (2.17)	-2.41	.02	
MMPI-	6.90 (3.68)	4.17 (2.36)	3.79	<.001	
Meanness					
MMPI-Disinhib	2.70 (1.95)	1.11 (1.08)	4.33	<.001	
MMPI-Total	26.69 (4.99)	23.42 (3.83)	3.11	.003	
PAI-Boldness	28.82 (3.44)	30.22 (4.79)	-1.52	.13	
PAI-Meanness	4.34 (1.87)	3.53 (1.90)	1.92	.06	
PAI-Disinhib	6.39 (2.88)	3.17 (2.30)	5.44	<.001	
PAI-Total	39.55 (4.92)	36.92 (5.17)	2.32	.023	

Note: Cells contain M (SD), t-value, or p-value. Disinhib = disinhibition. \leq 37 Combined N = 42 to 44; \geq 38 Combined N = 33 to 36.

Given the impact of defensive responding on endorsement of the Triarchic scales, the correlations among the extracted scales were reevaluated controlling for defensive responding to ensure that the expected convergence was not solely an artifact of defensiveness. Partial correlations revealed continued convergence across all three paired scales. However, differences emerged among the non-paired correlations. After controlling for defensiveness, the PAI-Disinhibition scale no longer correlated with the

MMPI- or PAI-Meanness scales. Indeed, only the MMPI-Meanness scale, which demonstrated partial correlations with both MMPI- and PAI-Boldness scales, correlated with non-paired scales. See Table 32 for intercorrelation matrix.

Table 32 Partial Correlation Coefficients among Triarchic Scales Controlling for Defensiveness

2CICHSI VEHESS						
	MMPI-2-RF-Tri			PAI-Tri		
	Boldness	Meanness	Disinhib	Boldness	Meanness	Disinhib
MMPI-Boldness	-					
MMPI-Meanness	.31**	-				
MMPI-Disinhib	01	12	-			
PAI-Boldness	.61***	.26**	.01	-		
PAI-Meanness	.17	.35**	18	01	-	
PAI-Disinhib	01	12	.38***	09	001	-

Note: ***p < .001; **p < .01; *p < .05. Partial correlation coefficients of paired scales are bolded. Disinhib = disinhibition. N = 76 to 83.

Supervisor Ratings

For participants who were rated by more than one supervisor, the two Total Positive Job Performance scores (M = 43.29, SD = 7.00; Range: 26 to 57) were highly correlated, r(51) = .80, p < .001. As expected, the Overall Performance Item (M = 5.28, SD = 2.22) and Comparative Performance Item (M = 3.11, SD = 1.14) correlated highly with the Total Positive Job Performance score, $r \ge .89$, p < .001.

When ratings from more than one supervisor were available, the two Total Problematic Behaviors scores (M = .79, SD = 1.48) were strongly correlated, r(52) = .50, p < .001. Total Problematic Behavior scores ranged from 0 to 7, but the majority (67%) scored 0 and fewer than 3% of officers scored above 4. Two problematic behavior items (i.e., illegal drug use and favoritism/discrimination) were not endorsed by any rater

for any officer. As expected, Problematic Behaviors scores were negatively correlated with the other performance ratings. See Table 33 for intercorrelation matrix.

Table 33 Correlation Coefficients among Performance Ratings

	Total Positive	Overall Perf	Comparative	Problematic
	Perf	Item	Perf Item	Behaviors
Total Positive Perf	-			
Overall Perf Item	.90***	-		
Comparative Perf	.89***	.94***	-	
Item				
Problematic	53***	62***	55***	-
Behaviors				

Note: ***p < .001. Perf = performance. N = 70 to 75.

Relationship Between Supervisor Ratings and Extracted Scales

Several significant correlations emerged between Officer Performance Ratings and Extracted Scales; however, no consistent pattern was evident. Specifically, higher scores on the MMPI-2-RF-extracted Meanness scale correlated with lower scores on the Overall Performance Item, r(75) = -.26, p = .02. However, despite the high correlations among Officer Performance ratings, scores on the MMPI-2-RF-extracted Meanness scale did not predict any other performance ratings nor did the PAI-extracted Meanness scale predict any Overall Performance ratings, including the Overall Performance Item. Additionally, higher scores on the PAI-extracted Disinhibition scale correlated with higher scores on both the Overall Performance Item (r(81) = .23, p = .04) and the Comparative Performance Item, r(75) = .26, p = .02. The MMPI-2-RF-extracted Disinhibition scale did not predict any performance ratings. See Table 34 for intercorrelation matrix.

 Table 34 Correlation Coefficients between Performance Ratings and Triarchic Scales

	Total Positive	Overall Perf	Comparative	Problematic
	Perf	Item	Perf Item	Behaviors
MMPI-Bold	13	03	06	.10
MMPI-Mean	18	26*	19	00
MMPI-Disinhib	.03	03	.05	.05
MMPI-Total	17	22	12	.06
PAI-Bold	04	.02	.11	.15
PAI-Mean	13	10	16	01
PAI-Disinhib	.22	.23*	.26*	12
PAI-Total	.08	.12	.20	.04

Note: **p < .01; *p < .05. Disinhib = disinhibition; perf = performance. N = 65 to 83.

Higher defensiveness scores did not directly equate to differences in Officer Performance ratings; see Table 35 for comparison of means information. Further, among those who were highly defensive (i.e., Combined score \geq 38), no relationships emerged between Officer Performance Ratings and the Extracted Scales; see Table 36 for intercorrelation matrix. Among those who had a less defensive response style (see Table 37), several significant correlations emerged between Officer Performance Ratings and Extracted Scales. These correlations were similar to, but somewhat larger than, the relationships that emerged when analyzing the entire sample. Specifically, higher scores on the MMPI-2-RF Total (r(40) = -.42, p = .006) and Meanness (r(39) = -.44, p = .003) scales correlated with lower scores on the Overall Performance Item. Additionally, higher scores on the PAI-extracted Disinhibition scale correlated with higher scores on both the Total Positive Performance (r(38) = .35, p = .03) and the Comparative Performance Item, r(37) = .36, p = .03.

Table 35 Performance Ratings Split by Defensiveness

	≤ 37 Combined	≥ 38 Combined	t	p
Total Positive Performance	45.74 (6.91)	44.98 (7.12)	.45	.65
Overall Performance Item	5.41 (2.27)	5.18 (2.20)	.46	.65
Comparative Performance Item	3.27 (1.18)	2.97 (1.08)	1.11	.27
Total Problematic Behaviors	.73 (1.29)	.79 (1.71)	16	.87

Note: Cells contain M (SD), t-value, or p-value. \leq 37 Combined N = 39 to 44; \geq 38 Combined N = 30 to 36.

 Table 36 Correlation Coefficients between Performance Ratings and Triarchic Scales

among More Defensive Responders

among word beten	BIT C ITCB POHGCIB			
	Total Positive	Overall Perf	Comparative	Problematic
	Perf	Item	Perf Item	Behaviors
MMPI-Bold	11	.21	.10	.15
MMPI-Mean	20	12	29	.08
MMPI-Disinhib	19	07	.02	07
MMPI-Total	28	.03	12	.13
PAI-Bold	18	.18	.21	.10
PAI-Mean	12	04	15	.06
PAI-Disinhib	.10	.20	.17	05
PAI-Total	14	.24	.22	.09

Note: Includes only those with a Combined Defensiveness Scale Score \geq 38. Disinhib = disinhibition; perf = performance. N = 27 to 36.

 Table 37 Correlation Coefficients between Performance Ratings and Triarchic Scales

among Less Defensive Responders

	Total Positive	Overall Perf	Comparative	Problematic
	Perf	Item	Perf Item	Behaviors
MMPI-Bold	12	21	12	.04
MMPI-Mean	24	44**	22	05
MMPI-Disinhib	.09	04	02	.15
MMPI-Total	17	42**	21	.04
PAI-Bold	.05	10	.00	.22
PAI-Mean	15	23	18	06
PAI-Disinhib	.35*	.25	.36*	22
PAI-Total	.19	01	.15	02

Note: **p < .01; *p < .05. Includes only those with a Combined Defensiveness Scale Score ≤ 37 . Disinhib = disinhibition; perf = performance. N = 37 to 44.

DISCUSSION

Study 1

Layperson perception of law enforcement has important real-world implications. Explicit attempts have been made throughout the decades to ameliorate less favorable public perception of police officers, but tensions remain high (Moore et al., 2016). Further, given the bold interpersonal style associated with law enforcement, policing provides a particularly valuable arena in which to investigate the role of boldness on layperson perception that can inform both empirical questions regarding judgments of boldness more generally and also contribute to important public policy issues surrounding police-public relations. This study was the first to evaluate the hypothesis that ostensibly contrary findings in extant literature, specifically that boldness elicits associations and judgments that are both positive (see Miller & Lynam, 2012; Crego & Widiger, 2015) and negative (see Cox et al., 2016; Rulseh et al., 2017), can be explained by an interactive effect of boldness and contextual factors.

As hypothesized, manipulating the outcome of the scenario impacted participants' appraisal of the officer such that the positive outcome elicited more positive evaluations. Despite the officers' identical behavior in the scenario across all conditions, participants viewed the officer more positively when the outcome (i.e., the judge's decision) happened to be positive (versus negative). This effect was consistent and robust, as it emerged across all performance ratings with effect sizes ranging from .84 to 1.43. The largest effect of outcome was for ratings of the officer's performance in the

current case whereas the smallest (albeit still large) effect was for ratings of his *overall* performance. Therefore, although participants' overall perception of the officer was impacted by the outcome of the current case, the negative outcome produced a larger reduction in participants' positive perceptions of his performance in the *current* case compared to perceptions of his *overall* performance. Given that all participants were provided information suggesting that the officer was generally high-achieving (e.g., "excellent" physical fitness assessment; "75th percentile" for qualifying written exam score), it perhaps reflects reasonable judgment that a single negative scenario would result in a larger differential for ratings of his performance in that specific scenario compared to overall performance. Indeed, the average rating for the officer's performance among those who read a negative scenario continued to "meet standards" (i.e., rating of 5 on 0-10 Likert scale) for overall performance (6.30) and competence (6.08) compared to performance in the current case (4.04).

Additionally, the positive outcome elicited perceptions of the officer as bolder, warmer, more dominant and less disinhibited. Given that boldness, warmth, and dominance are likely important traits for a successful law enforcement officer to possess, it is not surprising that participants who read a positive outcome, which elicited more positive officer performance ratings, also viewed the officer as bolder, warmer, and more dominant. Similarly, high levels of disinhibition would likely be a detriment to police officer performance; thus, the lower disinhibition ratings among the participants in the positive outcome condition are also consistent with the hypothesized effect of outcome with the positive outcome eliciting more positive perceptions. Contrary to the

hypothesis, the positive outcome was not associated with lower ratings of psychopathy, evilness, or meanness. Of note, participants did not tend to perceive the officer as psychopathic, evil, or mean, regardless of the condition. Therefore, a floor effect, particularly with psychopathy and evilness ratings, may have suppressed a main effect of outcome on those trait ratings.

Main effects of Boldness had not been predicted, despite boldness likely being vital for police work, because it was expected that the impact of boldness would be contingent upon the contextual factors (i.e., outcome). Indeed, boldness did not consistently impact most ratings of the officer's performance. However, boldness did elicit a small effect on likelihood of success. High boldness was associated with a higher perceived likelihood of success. It is unclear why that one officer performance rating metric was impacted by ratings of boldness whereas the others were not. Nonetheless, boldness is likely an integral characteristic for successful law enforcement officers, so perhaps the item querying the likelihood of success tapped that perceived importance. Additionally, it is possible the outcome manipulation was more salient related to the other three officer performance ratings. Future research could employ a control condition when manipulating outcome to evaluate whether manipulating boldness reveals a main effect for the other performance ratings in the absence of a salient "outcome." Compared to the officer described as low in boldness, participants who read about a highly bold officer perceived him as bolder, meaner, and more disinhibited, psychopathic, and dominant, as well as less warm. Notably, these were all significant as well as meaningful differences (Cohen's d ranged from .38 to 3.35), even among the

traits that may have been impacted by a floor effect as at least moderate effect sizes emerged for meanness, psychopathy, and evilness (Cohen's *d* ranged from .44 to 1.31). Despite the lack of *a priori* hypotheses regarding the main effect of Boldness, these findings are consistent with prior literature suggesting laypeople do not perceive boldness as an inherently and exclusively positive trait (e.g., Cox et al., 2016; Rulseh et al., 2017). Furthermore, given that the highly bold officer was considered more psychopathic as measured by (a) each individual Triarchic construct, (b) a global psychopathy item, and (c) related characteristics (i.e., more evil, more dominant, less warm), these findings provide indirect evidence to contradict the notion that laypeople view boldness as antithetical or even orthogonal to psychopathy. Instead, it seems as though laypeople associate the construct of boldness, at least to some extent, within a larger constellation of psychopathic traits.

Surprisingly, there was no interactive effect of boldness and context (i.e., outcome) on ratings of officer performance. Similarly, the interactive effect of boldness and context on ratings of the officer's traits did not emerge as expected. Therefore, despite a robust effect of outcome, it was not intensified by high boldness and attenuated by low boldness as hypothesized. The boldness manipulation was effective, so it remains unclear why a moderating effect of context on the relation between boldness and perceptions was not observed. There are several possible explanations. First, the inference put forth by Rulseh et al. (2017) may be inaccurate. Rulseh and colleagues demonstrated that boldness, an ostensibly adaptive and socially desirable trait, can elicit negative evaluations under certain conditions (i.e., white-collar criminal sentencing).

Thus, it was surmised that boldness, although often perceived as advantageous or socially desirable, is viewed as more dysfunctional when it occurs in a scenario when humility or remorsefulness may be expected. This interpretation infers an interaction between context and judgments of boldness. Therefore, it was expected that a highly bold officer would generally be perceived positively, especially in the context of a positive outcome, but that same depiction of high boldness would elicit harsh perceptions subsequent to a negative outcome. However, the null findings of Outcome by Boldness on Officer Performance ratings in the present study calls this inference into question. Despite this, other current findings (i.e., high boldness eliciting higher psychopathy ratings) provide additional support that perceptions of boldness are not uniformly positive and are, therefore, likely moderated in some way, although the specific mechanisms of that moderation remain unclear.

An alternative explanation for the null interactive effects is that the stimulus materials in the current study depicted the officer too positively overall; many ratings suggest the stimulus materials portrayed the officer in a positive light regardless of the manipulations (i.e., consistently high performance ratings; near-floor trait ratings for psychopathy and evilness). Regardless, significant and meaningful effects still emerged for many non-interactive effects, which suggests an overly positive portrayal may not sufficiently explain the null results. A third possible explanation relates to the nature of the Outcome manipulation. Extant literature that links boldness with negative perceptions involve highly negative circumstances (e.g., substantial white-collar offending). The current study aimed to create a "negative" outcome without introducing

aspects that elicit other assumptions about the individual. For example, a white-collar criminal may automatically be perceived as deceitful, manipulative, and antisocial, regardless of other information provided by the stimulus material. As such, the current study utilized an ostensibly non-controversial scenario that relied on a procedural ambiguity to manipulate outcome so as to not project additional personality traits onto the subject of the vignette. Unfortunately, this effort may have resulted in an "outcome" that, despite being strong enough to elicit robust main effects, was not meaningful enough to moderate the effect of the boldness. Future research should investigate the potentially interactive effect of boldness by manipulating the "outcome" in the context of a more profound critical incident (e.g., excessive use of force, officer involved shooting, abuse of power).

Regarding participant factors, the participants in the current study reported largely conservative views, which is consistent with other findings from this university student population. As expected, conservative views, authoritarianism, and an acceptance of the level of police violence were correlated with more positive views of the officer's performance. Furthermore, each of those participant factors was a significant covariate of ratings of officer performance. These findings affirm the importance of measuring these, or similar, constructs when conducting research involving evaluations of law enforcement. Fortunately, in the current study the random assignment of participants successfully prevented these factors from meaningfully impacting any of the primary analyses.

Several limitations of this study must be noted. One, participants did not constitute a representative sample. The participants were significantly younger compared to the general public and African Americans were underrepresented. Additionally, participants endorsed more conservative political ideation, which may have contributed to the generally positive view of the officer. Future studies should strive to have a more representative sample. Additionally, Study 1 was limited by the same issues inherent to all simulation studies. For example, although aiming to assess layperson perceptions of law enforcement, the data were derived from an undergraduate sample that read a fictitious vignette, which undoubtedly fails to replicate various complexities that would occur in a real-world setting. Therefore, in addition to a more representative sample, future studies should ideally utilize a real-world example to improve the generalizability of the current study.

Finally, this study was completed entirely online with compensation limited to partial credit toward a course requirement. Some participants may have lacked the motivation to adequately attend to the information and the online nature of the study did not allow for direct oversight of the conditions in which the participants completed the measures. Approximately 10% of participants did not read the material as demonstrated by their quickly clicking beyond the study vignette page and were subsequently removed from analyses as it would have been virtually impossible to comprehend the material in such a limited time. Future simulation research would benefit from incorporating comprehension checks to more directly detect participants who completed the protocol carelessly or failed to adequately comprehend the material.

Study 2

Whereas Study 1, prioritizing internal validity, utilized controlled conditions (i.e., true experimental design; use of fictitious vignette) to directly investigate the extent to which contextual factors moderate judgments of boldness, Study 2 enabled an indirect investigation of judgments of boldness and the other Triarchic constructs within a real-world sample. Although the interactive effect did not emerge in the preceding study, Study 2 still provided additional insight into judgments of boldness and is the first study to investigate and compare the endorsement of MMPI-2-RF- and PAI-extracted Triarchic scales in a law enforcement sample.

Despite variable internal consistencies, the extracted scales demonstrated the expected convergent and discriminant associations within and across the scales extracted from the two instruments. Overall, police officer candidates portrayed themselves as highly bold and low in meanness and disinhibition. Perhaps most interestingly, defensive response styles amplified this pattern. Therefore, officer candidates who attempted to portray themselves in an ostensibly positive light were particularly likely to endorse items tapping boldness and deny characteristics of meanness and disinhibition. This suggests that boldness is judged positively among the officer candidates whereas meanness and disinhibition items are largely considered to be negative.

Judgments among officer candidates notwithstanding, endorsement of the

Triarchic scale items did not consistently predict supervisor ratings of officer

performance. Some correlations with the extracted scales emerged; however, these

effects were not consistent across the different officer performance ratings or measures

(i.e., MMPI-2-RF- and PAI-extracted scales). Therefore, it will be important to replicate these findings before any firm conclusions can be drawn. Notably, higher defensiveness did not correlate directly with supervisor performance or problem ratings, but it did correspond with the absence of any correlations between extracted scales and performance, which is consistent with prior findings (Lowmaster & Morey, 2012).

As with the first study, there are several limitations of the current study. First, the degree to which supervisors were familiar with the officers they were rating was not taken into consideration, which may impact rating quality. Furthermore, some sets of supervisor ratings contained missing data, which may have been due to limited knowledge and concomitant inability to provide certain ratings. Future studies involving supervisor ratings should seek to operationalize and account for the familiarity of the supervisee to the supervisor. Additionally, although beyond the scope of the current study, many of the scales could have been corrected for range restriction (see Cohen, Cohen, West, & Aiken, 2003; Raju & Brand, 2003) to better evaluate potential correlations. Further investigation could address this.

Finally, future work in this area could evaluate the impact of individual subtypes of boldness on job performance. For example, a degree of fearlessness and coolheadedness is likely necessary for a successful law enforcement officer but the presence of cool insouciance or nonchalance may be less desirable. Therefore, to better understand judgments associated with boldness among law enforcement, it will be vital for future work in this area to address the distinct components of boldness in addition to the concurrent contextual factors.

SUMMARY AND CONCLUSIONS

Taken together, these two studies provide insights into how boldness among police is perceived. Boldness, at least to some extent, was associated with putatively negative characteristics, such as higher levels of psychopathy, evilness, and lower interpersonal warmth in Study 1. These findings do not address whether boldness should be a component of psychopathy's nomological network, but they do suggest that laypeople associate the presentation of boldness with psychopathy and related constructs. Interestingly, despite this demonstrated association, results from Study 2 suggest that police officer candidates perceive boldness positively, at least in the context of an employment-eligibility evaluation, given their endorsement of the construct particularly when responding defensively. Both sets of findings (i.e., demonstrating both seemingly negative and positive associations with the trait) are consistent with the explanation that judgments of boldness are dependent on contextual factors. However, directly testing that inference (i.e., the second hypothesis in Study 1) produced null results. Furthermore, varying degrees of boldness did not impact performance ratings of the fictitious officer among laypeople in Study 1 nor did self-reported boldness, as measured by extracted Triarchic scales, consistently impact supervisor performance ratings of actual officers in Study 2.

Although additional research is necessary to further elucidate the unique impact of boldness on perceptions and judgements, collectively, these studies demonstrated the mutable nature of judgements and associations elicited by boldness and served as the

first studies to directly investigate the potentially interactive effect of boldness and context as well as the endorsement of the MMPI-2-RF-Tri and PAI-Tri scales among police.

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APPENDIX A

[ALL CONDITIONS]

You are on the Training and Supervision team for the local police department. One of your responsibilities is to conduct a review after all critical incidents or major cases. These reviews are filed along with officers' annual performance reviews and are occasionally used to recommended disciplinary actions or commendations/promotions.

To conduct the review, you have access to the **officer's file information**, including preemployment evaluation scores, reports from supervisors, and previous annual performance reviews, as well as a **description of the current critical incident or major case** that prompted the review.

Please carefully read the following information. You will then be asked to complete the review.

File information

Name: Officer John Branch Position: Patrol Officer

Length of time employed: 10 months

Qualifying written exam score: 85/100 (75th percentile)

Physical fitness assessment: Excellent

Pre-employment psychological evaluation: Mr. Branch is an acceptable candidate for the position of a patrol officer. Results of a personality measure indicate an 82% chance that he will avoid serious problems during his first year as a police officer.

[HIGH BOLDNESS]

Report from his field training officer

Overall rating: 8/10

Described him as: "He likes to take the lead in groups. Even when apprehension might be expected, he's immediately comfortable in new situations. Sometimes he lacks cautiousness, but I appreciate that he is daring. Compared to other new officers, his self-confidence stood out to me."

Report from his peer officer supervisor

Overall rating: 7/10

Described him as: "He's a brave guy. We've gone on patrol together, and he'd be less concerned about the risks. He controlled situations by being assertive and unintimidated. When we'd be in a really dangerous situation, he'd still be completely fearless – maybe even reckless. My only concerns about him were his ego and thrill-seeking."

Report from his direct supervisor

Overall rating: 8/10

Described him as: "I've noticed that he's usually the center of attention and doesn't need time to open up. He's incredibly confident in his own abilities. If things go badly, you can tell he's unaffected by it and has a sense of invulnerability. I don't have to worry about him being hesitant or timid."

[LOW BOLDNESS]

Report from his field training officer

Overall rating: 8/10

Described him as: "He doesn't like to take the lead in groups. Even when assertiveness might be expected, he's not immediately comfortable in new situations. Sometimes he lacks confidence, but I appreciate that his ego stays in check. Compared to other new officers, his cautiousness stood out to me."

Report from his peer officer supervisor

Overall rating: 7/10

Described him as: "He's a quiet guy. We've gone on patrol together, and he'd be sure to minimize risks. He de-escalated situations by being careful and giving people space. When we'd be in a really dangerous situation, he'd be keenly aware of the threat – maybe even fearful. My only concerns about him were his timidness and hesitance."

Report from his direct supervisor

Overall rating: 8/10

Described him as: "I've noticed that he doesn't have a lot to say but he's slowly opened up. He's careful not to overestimate his own abilities. If things go badly, you can tell he's affected by it and has a sense of what is at stake. I don't have to worry about him being a risk-taker.

[NO BOLDNESS INFORMATION]

Report from his field training officer

Overall rating: 8/10

Report from his peer officer supervisor

Overall rating: 7/10

Report from his direct supervisor

Overall rating: 8/10

[ALL CONDITIONS]

Description of critical incident/major case

At approximately 8pm, Officer Branch observed a driver briefly cross onto the center line while going approximately 10mph over the speed limit. Officer Branch did a U-turn and pulled over the motorist. During the stop, he observed that the driver's eyes were red and glassy and thought "something was off." Officer Branch placed the driver under arrest under suspicion of driving while impaired. He searched the vehicle incident to the arrest. During the commission of the search, Officer Branch found a mask, gloves, a firearm, and a variety of valuables. The mask and gloves matched the description provided by the victims of a string of armed robberies that had plagued the community as well as the surrounding area. The valuables were identified as stolen goods matching the items reported stolen during those robberies.

Two tests were conducted to determine his drug and alcohol use. The driver's urinalysis **did not detect any drugs** in his system at the time of his arrest. His bloodalcohol level was **0.02**, **indicating the presence of alcohol but well below the legal limit.** So, the prosecutor was forced to drop the driving while impaired charge, and the defense team petitioned the judge to get the evidence from the search suppressed.

[POSITIVE OUTCOME]

The judge ruled that any evidence uncovered during the search of the vehicle was admissible. Officer Branch possessed the probable cause necessary to place the driver under arrest. With the authority to place the driver under arrest, the search of the vehicle was lawful and all of the evidence stemming from the search could be used against him. The driver pled guilty to several felonies, including multiple counts of armed robbery and possession of stolen property. Several additional charges pending in nearby counties due to the evidence found in his car will also be litigated soon. A dangerous man is off the streets and community members are relieved. Officer Branch was commended at a brief celebration held by the department. Numerous open cases are now successfully closed.

[NEGATIVE OUTCOME]

The judge ruled that any evidence uncovered during the search of the vehicle was inadmissible. Officer Branch lacked the probable cause necessary to place the driver under arrest. Without the authority to place the driver under arrest, the search of the vehicle was unlawful and none of the evidence stemming from the search could be used against him. All of the charges had to be dropped, including multiple counts of armed robbery and possession of stolen property. Several additional charges pending in nearby counties due to the evidence found in his car will also need to be dropped soon. A dangerous man is back on the streets and community members are outraged. A lawsuit against the department is pending from the driver for wrongful arrest and illegal search and seizure. Officer Branch was told to review department policy and proper procedures for potential DUI stops and evidence collection. Numerous open cases will not be successfully closed.

[ALL CONDITIONS]

Summary:

Officer Branch has been at the department for 10 months. His supervisor ratings were all generally positive.

[HIGH BOLDNESS & POSITIVE OUTCOME]

He is known for being a leader, incredibly confident, and a thrill-seeker. In the critical incident, Officer Branch's search led to the discovery of important evidence. Therefore, the driver was convicted of several felonies and additional charges are pending. Officer Branch was commended at a brief celebration.

[HIGH BOLDNESS & NEGATIVE OUTCOME]

He is known for being a leader, incredibly confident, and a thrill-seeker. In the critical incident, Officer Branch's search was ruled to be unlawful and important evidence was inadmissible. Therefore, all charges needed to be dropped and a lawsuit is pending. Officer Branch was told to review department policy and proper procedures.

[LOW BOLDNESS & POSITIVE OUTCOME]

He became known for his timidness and hesitance. In the critical incident, Officer Branch's search led to the discovery of important evidence. Therefore, the driver was convicted of several felonies and additional charges are pending. Officer Branch was commended at a brief celebration.

[LOW BOLDNESS & NEGATIVE OUTCOME]

He became known for his timidness and hesitance. In the critical incident, Officer Branch's search was ruled to be unlawful and important evidence was inadmissible. Therefore, all charges needed to be dropped and a lawsuit is pending. Officer Branch was told to review department policy and proper procedures.

[NO BOLDNESS INFORMATION & POSITIVE OUTCOME]

In the critical incident, Officer Branch's search led to the discovery of important evidence. Therefore, the driver was convicted of several felonies and additional charges are pending. Officer Branch was commended at a brief celebration.

[NO BOLDNESS INFORMATION & NEGATIVE OUTCOME]

In the critical incident, Officer Branch's search was ruled to be unlawful and important evidence was inadmissible. Therefore, all charges needed to be dropped and a lawsuit is pending. Officer Branch was told to review department policy and proper procedures.

APPENDIX B

Rate Officer Branch's overall performance and behavior.

Much I	ch Below Meets Standards									Above
Standar	rds								Sta	andards
0	1	2	3	4	5	6	7	8	9	10

Rate Officer Branch's performance and behavior exhibited during the critical incident/major case.

Much I	Below			Much	Above					
Standar	ds								Sta	andards
0	1	2	3	4	5	6	7	8	9	10

Rate Officer Branch's competence as a police officer.

Much l	Below				Much	Above				
Standa	rds								Sta	andards
0	1	2	3	4	5	6	7	8	9	10

Considering all aspects of Officer Branch's performance and behavior, rate the likelihood of his success as a law enforcement over the next year.

Bottom 20%	Next 20%	Middle 20%	Next 20%	Top 20%
1	2	3	4	5

APPENDIX C

In general, how *warm* (i.e., kind, empathic, engaging in social situations) do you think Officer Branch is?

Not at a	ıll			Mod	erately V	Varm	Extremely			
Warm										Warm
0	1	2	3	4	5	6	7	8	9	10

In general, how *dominant* (i.e., dominant, assertive, in control in social situations) do you think Officer Branch is?

Not at a	all		Moderately Dominant									
Domina	ant								Do	minant		
0	1	2	3	4	5	6	7	8	9	10		

In general, how *bold* (e.g., socially dominant, confident, fearless) do you think Officer Branch is?

Not at a	all			Mod	lerately 1	Bold			Ex	tremely
Bold										Bold
0	1	2	3	4	5	6	7	8	9	10

In general, how mean (e.g., disregard for others, callous) do you think Officer Branch is?

Not at a	ıll	Moderately Mean							Ex	tremely
Mean										Mean
0	1	2	3	4	5	6	7	8	9	10

In general, how *disinhibited* (e.g., spontaneous, poor impulse control) do you think Officer Branch is?

Not at a	all			N	Ex	tremely				
Disinhi	bited			D	isinhibit	ed			Disir	hibited
0	1	2	3	4	5	6	7	8	9	10

In general, how evil do you think Officer Branch is?

Not at	all			Mod	lerately	Evil			Ex	tremely
Evil										Evil
0	1	2	3	4	5	6	7	8	9	10

In general, how *psychopathic* (i.e. how much of a psychopath) do you think Officer Branch is?

Not at a	all			N	Ex	tremely				
Psycho	pathic		Psychopathic							opathic
0	1	2	3	4	5	6	7	8	9	10

APPENDIX D

Anomic Authoritarianism Scale

People were better off in the old days when everyone knew just how they were expected to act.

Strongly				Strongly
Disagree				Agree
1	2	3	4	5

Everything changes so quickly these days that I often have trouble deciding which are the right rules to follow.

Strongly				Strongly
Disagree				Agree
1	2	3	4	5

A few strong leaders could make this country better than all the laws and talk.

Strongly				Strongly
Disagree				Agree
1	2	3	4	5

What young people need most of all is strong discipline by their parents.

Strongly				Strongly
Disagree				Agree
1	2	3	4	5

Justice may have been a little rough and ready in the days of the Old West, but things worked better than they do today with all the legal red tape.

Strongly				Strongly
Disagree				Agree
1	2	3	4	5

Police Violence Scale

People blow police brutality way out of proportion.	
Strongly	Strongly

Disagree Agree
1 2 3 4 5

Some people don't understand anything but force.

Strongly
Disagree
1 2 3 4 5

Any man who insults a policeman has no complaint if he gets roughed up in return.

Strongly
Disagree
1 2 3 4 5

The police frequently use more force than they need to when carrying out their duties. (-)

Strongly
Disagree
1 2 3 4 5

The police are wrong to beat up unarmed protesters, even when these people are rude and call them names. (-)

Strongly
Disagree
1 2 3 4 5