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# **Synonyms**

Fearless dominance; Fearless temperament; Threat sensitivity; Trait fear

### **Definition**

Boldness is a biobehavioral trait that relates to the developmental concept of fearless temperament. It encompasses tendencies toward social dominance, emotional stability/resilience, and adventurousness.

#### Introduction

Boldness is a dispositional construct reflecting characteristics of emotional resiliency, interpersonal dominance, and venturesomeness. Boldness is strongly linked to the developmental notion of fearless temperament. Importantly, boldness is a biobehavioral trait with clear referents in the brain's defensive motivational system; as such, it is a valuable target of investigation for linking neurobiological systems to psychological

characteristics of people. In this brief review, we consider historic referents for this trait construct in the psychological literature and discuss how it relates to normal and abnormal personality dispositions and what we know about its causal bases and neurobiological aspects.

# Historic Referents for the Boldness Construct

The idea of biologically based differences in fear reactivity has been emphasized in the child development literature for some time. Kagan (1994), for example, identified timidity in novel situations as a core facet of temperament, and posited that children extreme in this tendency are prone to develop anxiety-related problems in later life. Dispositional fearfulness has also been emphasized in the adult personality literature, for example, in constructs of "harm avoidance," conceptualized narrowly as avoidance of dangerous or unfamiliar situations (Tellegen and Waller 2008) or as a broad trait encompassing social shyness, fearful anticipation, intolerance for uncertainty, and low energy/resilience (Cloninger 1987). Referents in the general psychological literature for the opposing concept of fearlessness include research on characteristics of courageous individuals and psychological resilience (Rachman 1978).

Another major referent for the concept of boldness is the literature on psychopathic personality (psychopathy). In his classic 1941 book,

The Mask of Sanity, Cleckley characterized psychopathy as a disorder involving proneness to wild, unrestrained behavior disguised ("masked") by an outward appearance of "robust mental health." Along with features reflecting deviancy, his diagnostic criteria for the disorder included social charm, lack of anxiety or nervousness, and failure to learn from punishment. Inspired by Cleckley's description, early and later research on psychopathy in offender samples focused on deficient fear reactivity as a core element of constitutionally based ("primary") psychopathy.

More recent research with community non-offender samples has led to delineation of boldness as a specific facet of psychopathy, distinct from its impulsive-disinhibitory and callousexploitative facets. A major development in this regard was factor analytic work on the Psychopathic Personality Inventory (PPI; Lilienfeld and Widows 2005), a self-report inventory designed to index psychopathic traits in the general population, which revealed two distinct, orthogonal factors underlying its eight subscales. One of these factors, labeled "fearless dominance," is defined by the PPI's Social Potency, Stress Immunity, and Fearlessness subscales; the other, termed "selfcentered impulsivity," is marked by Carefree Nonplanfulness, Impulsive Nonconformity, Machiavellian Egocentricity, and Blame Externalization subscales. (The PPI's remaining subscale, coldheartedness, appears to index a separate dispositional tendency – interpretable as callousness or meanness; Patrick et al. 2009).

The correlates of these two PPI factors differ substantially: Fearless dominance relates to certain pathological tendencies such as narcissism, emotional insensitivity, and risk-taking but also - consistent with Cleckley's "mask" concept – has salient adaptive correlates including verbal proficiency, social confidence, lack of anxious-depressive symptomatology, increased achievement and educational attainment (Benning et al. 2005a). As an illustration of this adaptive aspect to fearless dominance, Lilienfeld et al. (2012) presented evidence that some of the most revered of the US presidents - Theodore and Franklin Roosevelt and John F. Kennedy – were notably high on this

dispositional dimension. Self-centered impulsivity, by contrast, is associated mainly with pathological tendencies, including early behavior problems, boredom susceptibility, aggressiveness, affective dysregulation, proneness to abuse substances, and decreased educational/occupational function.

Drawing on these results for the PPI along with other conceptual and empirical sources, Patrick et al. (2009) formulated a triarchic model that conceives of psychopathy as externalizing proneness (disinhibition) accompanied by emotional detachment in the form of boldness and/or callousness (meanness). In line with Cleckley's "mask" description and scales comprising the PPI's fearless dominance factor. Patrick et al. defined boldness as a broad trait encompassing social dominance, emotional resiliency, and venturesomeness. They suggested that Cleckley's concept of psychopathy as masked pathology reflects disinhibition accompanied by boldness, whereas the criminalistic notion of psychopathy as predatory-aggressive offending reflects disinhibition combined with meanness. Of note, recent research by Crego and Widiger (2016) corroborates the idea that boldness is strongly represented in Cleckley's description.

# Measurement and Associations with Other Personality Traits

Two major operationalizations of boldness have been the fearless dominance factor of the PPI and the boldness scale of the Triarchic Psychopathy Measure (TriPM), an inventory designed specifically to assess the constructs of the triarchic model (Drislane et al. 2014). These boldness measures correlate strongly with each other ( $\sim$ .8) and show robust associations with normal-range traits and pathological personality dispositions. For example, they each show positive and negative relations, respectively, with five-factor model dimensions of extraversion and neuroticism and with counterpart dimensions of the Multidimensional Personality Questionnaire. Boldness has also shown reliable associations with certain clinical scales of the Minnesota Multiphasic

Personality Inventory-2 (MMPI-2) and the Personality Inventory for DSM-5, which assesses pathological personality traits as described in Sect. III of the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*. These associations have made it possible to create scale measures of boldness using items from these and other preexisting inventories. The ability to create scale measures of this construct from different established inventories creates opportunities to study boldness in unique ways using specialized existing datasets — including prospective-longitudinal, twin, and biological-assessment datasets.

A question that arises from research on the personality correlates of boldness is why this construct cuts across trait dimensions that are viewed as separate from one another in well-established personality models. A potential explanation for this, considered in the next section, is that boldness reflects an underlying biobehavioral disposition that is expressed in different psychological-experiential domains.

# **Neurobiology of Boldness**

The construct of boldness has clear referents in neurobiology: It has been linked conceptually and empirically to under-reactivity of the brain's defensive motivational system, a neural network that governs detection and response to potential threats. The defensive system includes limbic structures such as the amygdala, whose activation in the face of aversive cues can be indexed in humans and animals by increased startle reactivity to abrupt noise probes. In line with the idea that primary psychopathy involves deficient fear, a well-documented finding in studies with offenders is that those high in affectiveinterpersonal features of psychopathy show deficient startle-blink potentiation during aversive cuing. Benning et al. (2005b) likewise found that high-bold community participants showed a lack of aversive startle potentiation.

Kramer et al. (2012) extended this work by confirming, through use of structural equation modeling, that the various scale measures of fear

and fearlessness operate as common indicators of coherent bipolar trait dimension, PPI – fearless dominance anchoring the fearless pole of this continuum. These authors further demonstrated that (a) scales tapping distinct modes of fear expression (i.e., in domains of social interaction, perceived experience, and activity seeking) covaried together even after accounting for their common relations with the general fear/boldness trait factor and (b) the general factor, but not the domain-specific factors, covaried with aversive startle potentiation. The implication is that biologically based differences in reactivity of the brain's defensive system are expressed in differing domains function including social-interpersonal, affective-experiential, and exploratorybehavioral. Another notable feature of the Kramer et al. study is that participants consisted of twins, enabling the authors to demonstrate a sizable contribution of genetic influences to score on the general fear/boldness dimension.

Extending further from the foregoing work, recent research by Yancey et al. (2016) has demonstrated that scores on this scale-assessed boldness/fear dimension can be combined with physiological measures of aversive response (including startle potentiation) to quantify variations in fear/boldness "psychoneurometrically," i.e., at the interface of reported fearfulness and biological defensive reactivity. Fear/boldness quantified in this manner correlates robustly with both diagnostic and neurophysiological criterion measures (i.e., fear-disorder symptoms and brain indicators of fear response). Work of this type demonstrates the utility of boldness as an individual difference construct that can help to elucidate the role that neurobiological processes play in clinical problems ranging from psychopathic personality to phobic fear.

#### Conclusion

Boldness is an individual difference characteristic involving social dominance, emotional resiliency, and venturesomeness that can be quantified using items from various self-report inventories. It has

clear neurobiological referents in the brain's defensive motivational system and thus can be operationalized as well using physiological indicators combined with trait-scale measures. As such, boldness represents a promising individual difference construct for elucidating the interplay between neurobiological systems and clinically relevant psychological characteristics of individuals.

### **Cross-References**

- ▶ DSM-5
- ► EASI-Temperament
- ► International Affective Picture System
- ► Multidimensional Personality Questionnaire
- ► Narcissistic Personality Inventory
- ► Youth Psychopathic Traits Inventory

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