# 20 The bright and dark sides of personality: implications for personnel selection in individual and team contexts

Timothy A. Judge and Jeffery A. LePine

That personality has shown itself relevant to individual attitudes and behavior, and to team and organizational functioning, seems an incontrovertible statement. Barrick and Mount (2005: 361) flatly state: 'Personality traits do matter at work' and indeed the data appear to support their conclusion (Hogan, 2005). Barrick et al. (2001) analyzed extant meta-analyses on relationship between the 'big five' personality traits and job performance, finding a multiple correlation of R=0.47 when the five traits were used to predict overall job performance. Other large-scale reviews have linked personality to job satisfaction (Judge et al., 2002a), leadership (Judge et al., 2002b), workplace deviance (Salgado, 2002), well-being (DeNeve and Cooper, 1998), and organizational commitment (Erdheim et al., 2006).

However, skeptics remain. One line of criticism argues that whilst personality has non-zero associations with important criteria, the effect sizes are small. In arguing that little has changed since Guion and Gottier's (1965) influential (and pessimistic) review, Schmitt (2004: 348) observed, 'The observed validity of personality measures, then and now, is quite low even though they can account for incrementally useful levels of variance in work-related criteria beyond that afforded by cognitive ability measures because personality and cognitive ability measures are usually minimally correlated'. Hogan (2005) takes issue with overall assessment, while also arguing that the validity of personality measures is often underestimated by failing to account for poor measures, the source of personality ratings (self versus observer), and the situationally specific nature of performance. He concludes, 'The bottom line is, personality measures work pretty well, especially when compared with all the other measures' (p. 340).

Our own view is that whereas it is true that the validities for personality variables cannot be labeled as strong using the Cohen (1977) effect size conventions, the same is true of virtually any meaningful predictor of broad, complex criteria such as job performance. For example, there is perhaps no theory in organizational behavior more respected for its validity than goal-setting theory. Locke and Latham (2002: 714) concluded, 'Goal-setting theory is among the most valid and practical theories of employee motivation in organizational psychology' and Miner (2003) found that organizational behavior scholars ranked goal-setting theory as the most important of all (73 were rated) management theories. Yet meta-analyses have revealed that the overall validity of goal difficulty in predicting job performance is  $d_c = 0.577$  (Wood et al., 1987), which translates into a correlation of  $R_c = 0.277$ . This differs little from the overall validity of conscientiousness ( $R_c = 0.23$ ) or core self-evaluations ( $R_c = 0.23$ ) in predicting job performance. When one considers the constellation of traits, the validity is much higher ( $R_c = 0.47$ , as noted above).

Whatever one's position on whether the extant effects are meaningful, one apparent way to reframe this debate is to ask what factors might increase our understanding of the validity of personality variables (however one might characterize their 'main effects'). Although there are many factors that affect the validity of personality traits (Hogan, 2005), one relatively neglected factor is recognition that all traits may have both upsides and downsides. As Nettle (2006: 625) noted, 'Behavioral alternatives can be considered as trade-offs, with a particular trait producing not unalloyed advantage but a mixture of costs and benefits such that the optimal value for fitness may depend on very specific local circumstances'. Thus a more nuanced view of the importance of personality to behavior would recognize that even generally desirable traits (i.e. traits associated with fitness in a general or even evolutionary sense) likely involve trade-offs associated with particular criteria.

As just noted, the likelihood of trade-offs for particular criteria does not mean that some traits are not more generally desirable (whether desirability be defined individually [what is good for one's survival] or collectively [what society deems valuable]) than others. Indeed, the 'big five' traits are socially desirable (Ellingson et al., 2001). Thus, one way to consider the 'fitness' implications of traits is to contrast their social desirability – how the traits are generally viewed – with their actual result in particular contexts. A generally desirable trait (one that is viewed positively by most individuals in society) may lead to poor fitness in a very particular context. For example, the assets in terms of longevity conferred by conscientiousness (Friedman et al., 1995) may be reversed by a catastrophic event (conscientious individuals might be predisposed to make the 'wrong' choices in the wake of a tsunami) or by trait-induced behavior in a particular context (a conscientious bystander may be harmed in seeking to help a victim of crime).

Thus our organizing framework for this section, as shown in Table 20.1, reflects general fitness tendencies as measured by whether the traits are generally seen as socially desirable, and the implications of a trait for fitness in a particular situation or context. We do acknowledge that social desirability is not necessarily isomorphic with generalized fitness. It is possible that society values a particular trait that has no association with fitness. By equating the two, however, we wish to avoid a certain tautological inference whereby generalized fitness is judged by whether traits 'work' since that, we assume, depends on the context.

From Table 20.1 we discuss four possible fitness implications of traits: (a) socially desirable traits that, in certain situations, have positive implications; (b) socially desirable traits that, in certain situations, have negative implications; (c) socially undesirable traits that, in certain situations, have positive implications; and (d) socially undesirable traits that, in certain situations, have negative implications. Below we discuss these categories in more detail. We should note, in keeping with the theme of the book, that our shortest discussion concerns the bright side of bright traits. Our goal here is not to provide an in-depth review of the many positive implications of the 'big five' traits. Such reviews have appeared elsewhere (e.g. Barrick and Mount, 2005; Hogan and Roberts, 2001; Hough and Oswald, 2005). What is often missing from reviews, however, is discussion of the other categories in Table 20.1. Accordingly, that is where we devote the bulk of our attention.

After the first section of the chapter, we shift our focus to a different unit of theory and analysis. Specifically, we discuss research demonstrating that, under certain circumstances, team members' socially desirable traits can have negative implications for team-level criteria. Although there is team-level research analogous to the other categories

Table 20.1 Framework for discussion of implications of personality traits for personnel selection and team composition

	Actual effects in specific context or situation	ontext or situation
Social desirability	Dark	Bright
Dark	Socially undesirable trait that has negative implications for organizations and/or individuals (example: narcissism negatively predicts prosocial behaviors on part of employees toward co-workers)	Socially undesirable trait that has positive implications for organizations and/or individuals (example: neurotic individuals make more accurate/realistic indements)
Bright	Socially desirable trait that has negative implications for organizations and/or individuals (example: conscientious employees adapt less well to organizational change)	Socially desirable trait that has positive implications for organizations and/or individuals (example: conscientiousness positively predicts individuals' sales performance)

Before moving on, we wish to disclose that our inspiration for this chapter came from several sources (Hogan, 2005; Moscoso and Salgado, 2004). We are certainly not the only researchers to conceptualize the possible 'downsides' of traits generally deemed positive. Moreover, we are mindful that some 'trait' differences exist because different scales purportedly measuring the same concept in fact measure something quite different (Hogan, 2005). Others argue that broad traits such as those housed within the five-factor model are too 'fat' and obscure offsetting relations among lower-level traits (Hough and Oswald, 2000). We do not consider these issues here, but that should not be construed as a dismissal of them.

# Bright and dark effects of bright and dark traits

Bright side of bright traits

Judging from the empirical literature (e.g. Dunn et al., 1995), one would argue that there is a constellation of five-factor model traits that is socially desirable: high emotional stability (or low neuroticism), high extraversion, high openness, high agreeableness and high conscientiousness. Naturally, there are other 'bright' traits, such as high self-esteem or core self-evaluations (Judge and Bono, 2001), and proactive personality (Seibert et al., 2001), but due to space limitations we focus here on the 'big five' traits.

The positive implications of the 'big five' traits are well documented, some more so than others. Of the 'big five' traits, conscientiousness is the best correlate of job performance  $(r_c = 0.23; Barrick and Mount, 1991)$ , followed by emotional stability  $(r_c = 0.19; Judge$ and Bono, 2001). Extraversion is the strongest correlate of leadership ( $r_c = 0.31$ ; Judge et al., 2002b), followed by conscientiousness ( $r_c = 0.28$ ), openness ( $r_c = 0.24$ ), and emotional stability ( $r_c = 0.24$ ). Openness to experience is related to artistic and scientific creativity (Feist, 1998), as well as to coping with organizational change (Judge et al., 1999), and to adaptability (LePine, 2003). Emotional stability has the highest correlation with subjective well-being (r = 0.22; DeNeve and Cooper, 1998), followed by extraversion (r =0.17) and agreeableness (r = 0.17). Emotional stability is the best correlate of job satisfaction ( $r_c = 0.29$ ; Judge et al., 2002a), followed by conscientiousness ( $r_c = 0.26$ ) and extraversion ( $r_c = 0.25$ ). Conscientiousness ( $r_c = 0.26$ ) and agreeableness ( $r_c = 0.20$ ) are the strongest correlates of (lack of) workplace deviant behaviors (Salgado, 2002). Emotional stability ( $r_c = 0.35$ ), conscientiousness ( $r_c = 0.31$ ) and agreeableness ( $r_c = 0.22$ ) are the strongest correlates of (lack of) turnover (Salgado, 2002). Agreeableness is related to helping behaviors (e.g. interpersonal facilitation,  $r_c = 0.20$ ; Hurtz and Donovan, 2000) and performance in jobs involving significant interpersonal interactions ( $r_c = 0.21$ ; Mount et al., 1998). Agreeable individuals are motivated to avoid conflict with others, and appear more able to do so (see Graziano and Tobin, 2002).

In sum, the 'big five' traits are 'bright traits' in that each has positive implications for important criteria, and there is direct evidence attesting to the social desirability of these traits (Dunn et al., 1995; Ellingson et al., 2001). Emotionally stable individuals are

happier in their jobs, happier in life and are better job performers. Extraverted individuals are more likely to emerge and excel as leaders, and have higher levels of subjective well-being. Open individuals are more creative, adapt better to change and also are more effective leaders. Agreeableness is associated with higher performance in interpersonally oriented jobs. Conscientiousness is linked to job performance, job satisfaction, subjective well-being and leadership. It would appear that an individual who scored highly on all five traits would have enormous advantages at work and in life.

#### Dark side of bright traits

Having established the bright side of the 'big five' traits, we now turn to their possible dark sides – situations in which or criteria for which high scores on the traits may in fact be harmful.

Extraversion Judge et al. (1997) found that extraversion was significantly correlated (r = 0.26, p < 0.01) with absenteeism in a sample of university employees. This is likely heightened by sensation and excitement seeking on the part of extraverted individuals. Other research indicates that extraverts are predisposed to accidents, including one study that linked extraversion to traffic fatalities (Lajunen, 2001). Although extraversion may be an advantage in certain jobs such as sales (Vinchur et al., 1998), it appears to be a disadvantage in others where isolated work is performed, where long attention spans are required, or where the work is routine (Beauducel et al., 2006).

Agreeableness Despite being a highly socially desirable trait, agreeableness appears to have some drawbacks, too. First, evidence consistently indicates that agreeable individuals fare less well in their careers in terms of extrinsic career success in the form of pay and promotions (Ng et al., 2005). One of the reasons agreeable individuals may be more motivated to avoid conflict is because they find it very distressing (i.e. are less able to cope with conflict; Suls et al., 1998). Finally, Bernardin et al. (2000) found that individuals scoring high on agreeableness are particularly prone to giving lenient performance ratings, which of course could cause organizational performance management problems.

Conscientiousness Despite the widespread benefits of conscientiousness, there are three dark sides relevant to organizational behavior. First, there is evidence that conscientious individuals may learn less in the early stages of skill acquisition. Martocchio and Judge (1997) hypothesized that this was because conscientious individuals were more prone to self-deception, and a realistic appraisal of one's skills is important in training contexts. Another possible explanation is that conscientious individuals are more likely to have a performance (versus learning) orientation, which detracts from learning, especially during complex skill acquisition (although evidence suggests that conscientiousness is more strongly associated with learning than performance orientation; Colquitt and Simmering, 1998; Yeo and Neal, 2004). Second, perhaps due to greater rigidity, there is evidence that conscientious individuals are less adaptable. Specifically, LePine et al. (2000) found that when conditions of a task were changed, conscientious individuals had difficulty adapting to the change, and their performance declined. Finally, conscientiousness may interact with other traits such that in the presence of other characteristics it has a downside. Witt et al. (2002) found that agreeableness moderated the relationship

between conscientiousness and job performance such that highly conscientiousness but disagreeable individuals (those who scored high on conscientiousness but low on agreeableness) were lower performers, perhaps because they were technically competent but interpersonally abrasive.

Emotional stability Evidence indicates individuals who score low on emotional stability (high on neuroticism) are better at identifying threats in the environment (Tamir et al., 2006). As Nettle (2006) notes, the anxiety aspect of neuroticism may be useful in anticipating (and thereby better avoiding the danger from) threats in the environment. Indeed, individuals who are anxious are able to identify threats and signs of impending danger more quickly (Mathews et al., 1997). Moreover, perhaps due to their vigilance, neurotic individuals may be less likely to take risks that many would see as foolhardy. One study revealed that Mount Everest climbers – the summit of which has been called a 'death zone' (the mortality rate is roughly 1:8) – had extremely high levels of emotional stability (Egan and Stelmack, 2003). (Egan himself died on Mount Everest in 2005.) Finally, individuals low on emotional stability, because they worry about meeting expectations, may actually exceed them. For example, one study found that neurotic students were significantly more likely to show up early for a psychological experiment (Back et al., 2006).

Openness Individuals who score high on openness may be less likely to confirm to organizations' or society's expectations, as evidenced by the somewhat greater tendency of those who score high on openness to engage in counterproductive work behaviors (Hough, 1992; Salgado, 2002). Open individuals are nonconformists and pride themselves on their anti-authoritarian and anti-establishment attitudess (McCrae, 1996), which means they may have difficulty working in hierarchical or traditional work settings. Related, high scores on openness were associated with lower continuance commitment (r = -0.23, p < 0.01; Erdheim et al., 2006), suggesting that open individuals may have less commitment to remain with their employer. Finally, a meta-analysis (Clarke and Robertson, 2005) of ten studies suggests that individuals who score high on openness to experience are more likely to be involved in accidents ( $r_c = 0.32$ ).

#### Dark side of dark traits

Interestingly, whereas scholars have argued that organizational behavior researchers have focused more on negative phenomena than positive, in personality research that does not appear to be the case. With the exception of neuroticism – which is often studied from its positive pole, emotional stability – one is hard pressed to identify traits that are socially undesirable. In our consideration of 'dark traits' we focus on four that are prominent in personality psychology: (a) narcissism; (b) impulsivity; (c) trait hostility; and (d) Type A personality.

Narcissism Judge et al. (2006) argued that narcissism, reflecting a grandiose sense of self-importance, has been infrequently studied in organizational behaviour (OB) research, despite its prominent place in psychological research (e.g. a search of PsycINFO turns up 1245 entries with the word 'narcissism' in the title). Judge et al. (2006) found that individuals who scored high on neuroticism overestimated their leadership effectiveness, task performance and contextual performance, and underestimated their workplace deviance

(overestimation being defined as the discrepancy between self and other ratings). There were cases in which these differences were profound. For example, in one sample in their study, narcissistic managers rated themselves as significantly *higher* on leadership effectiveness, whereas their peers rated them as significantly *lower* on leadership effectiveness.

Impulsivity Impulsivity – defined as the tendency to act with little prior thought, to be prone to sensation and novelty seeking, and to be behaviorally disinhibited – has been linked to myriad 'negative' outcomes, including drug use, unsafe sexual behaviors, aggressive driving, various psychological disorders, suicide attempts, binge eating and obesity, problem gambling, criminal behavior and violent actions. One of the challenges of this research area is that there are many definitions of impulsivity, numerous measures that may be non-equivalent, and separations of impulsivity into dimensions such as functional versus dysfunctional (e.g. Brunas-Wagstaff et al., 1997). Like narcissism, despite a wealth of research in psychology, there is a dearth of research on impulsivity in OB. However, it is not difficult to speculate on work criteria that impulsivity may predict, such as work-place deviance, job and work withdrawal, and accidents. Moreover, because impulsivity is associated with diminished reasoning ability (Schweizer, 2002), one may find that impulsive employees are less able to use reasoning in work decisions. Finally, research in non-work settings suggests that impulsive individuals have greater performance variability (Lawrence and Stanford, 1999), a finding that might be extended to work situations.

Trait hostility Ruiz et al. (2001: 540) define trait hostility as 'a set of negative attitudes, beliefs, and appraisal of the worth, intent, and motives of others and often includes a desire to preemptively harm or see harm inflicted on others'. Ruiz et al. (2001) note that trait hostility can be conceptualized broadly to include, as with our definition of state hostility above, trait anger. In addition to the well-documented link between trait hostility and coronary heart disease (Miller et al., 1996), evidence indicates that individuals who score high on trait hostility gauge the reactions of others as less friendly (Smith et al., 1990), experience more conflict in relationships (Newton and Kiecolt-Glaser, 1995), and are more likely to engage in aggressive behaviors toward others (Archer and Webb, 2006). In the workplace, trait-hostile individuals are more likely to engage in workplace deviance (r = 0.29, p < 0.05; Judge et al., 2006; r = 0.27, p < 0.01; Lee and Allen, 2002). McCannet al. (1997) found that while individuals scoring high on trait hostility were not significantly more dissatisfied with their jobs, they were significantly less likely to perceive their workplace as collegial (r = -0.28, p < 0.01) and to see social support as available in their environment (r = -0.37, p < 0.01). Other research has shown similar results – that hostile individuals may not like their job or work less, but have more negative attitudes toward interpersonal relationships at work (e.g. Smith et al., 1988).

Type A personality Although the trait often has been loosely defined, most consider the Type A personality to be characterized by: (a) a drive to accomplish many things; (b) desire for competition and orientation toward competitiveness; (c) striving for recognition and advancement; (d) habitual time-urgent behavior; (e) acceleration of physical and mental activity; and (f) intense concentration and alertness (Ganster et al., 1991; Rosenman, 1986). The best-known implication of Type A personality is its association with increased risk for coronary disease (Booth-Kewley and Friedman, 1987; Matthews

and Haynes, 1986). The likely reason for this is thought to be the result of the heightened sensitivity of Type As to stress (Heilbrun and Friedberg, 1988). Some research also suggests that Type A individuals are more likely to be dissatisfied with their jobs (Jiang et al., 2004), experience higher levels of job burnout (Alotaibi, 2003), and are more likely to suffer from poor mental and physical health (Kirkcaldy et al., 2002).

#### Bright side of dark traits

Narcissism Of all the possible combinations of bright and dark traits with positive and negative outcomes, one is perhaps the most pressed to fill in the upsides of narcissism. However, there may be bright aspects to even this dark trait. In competitive situations, such as distributive negotiation or game-theoretic exercises, it appears that narcissists fare better than those who score low on narcissism, though this appears to come at the cost of lower joint outcomes (Campbell et al., 2005). Moreover, evidence indicates that individuals who score high on measures of narcissism report higher levels of life satisfaction, lower levels of stress and anxiety, and are less likely to be depressed (Campbell, 2001). Thus, while it is clear that other individuals suffer from associations with narcissists, and narcissists tend to have negative views toward others (particularly those whom they see themselves in competition with), it is far from clear that narcissists themselves suffer from these processes. Because narcissism is so rarely studied in a work context, whether this (bad for others, good for oneself) view on narcissism extends to workplace criteria is unclear. Paunonen et al. (2006) argued, with some support, for the view that the best leaders are those who have the bright sides of narcissism (high egoism and self-confidence) without the dark sides (manipulativeness). One might argue that this is artificially dividing narcissism, and does not comport with the dimensional structure of most conceptions of narcissism. Still, it may be that for certain criteria, certain aspects of narcissism are 'good' and others are 'bad'.

Impulsivity Although impulsivity is impressively related to many behaviors organizations and society would deem undesirable, here again there are possible bright spots. Gray (1987) argued that impulsivity reflects individual differences in reward sensitivity whereby individuals who score high on measures of impulsivity are thought to find reward stimuli more pleasurable than those who score low on such measures. Evidence indicates that impulsivity is linked to heightened reward sensitivity (Torrubia et al., 2001). That suggests that impulsive individuals may be relatively more malleable by organizational rewards. Second, there is some evidence that impulsive individuals may perform better at complex tasks, because performing difficult tasks may place impulsive individuals in an optimal range of arousal (Anderson, 1994). Moreover, individuals who score high on impulsivity are inclined toward novelty-seeking behavior (Franken and Muris, 2006), which one might find a desirable trait in certain situations (e.g. a salesperson developing new territories, a marketing manager considering the latest fads in information technology).

Trait hostility Some research suggests that individuals who score high on trait hostility may have jobs of greater responsibility and wider scope. Dwyer and Fox (2000) found that trait hostility was significantly correlated with nurses' perceived skill utilization and with control on the job (both r = 0.22, p < 0.01), suggesting that hostile individuals may be more effective at defining and controlling their own work. Although there are few data on

the subject, some evidence indicates that hostile individuals exhibit lower levels of service performance (Doucet, 2004), they evince higher levels of task or technical performance (Sarason et al., 1965). Moreover, hostile people are prone to the expression of anger, which has been shown to lead to more favorable settlements in distributive bargaining (Sinaceur and Tiedens, 2006). More generally, Tiedens (2001) showed that individuals confer status on hostile individuals prone to the expression of anger, and these conferrals are made on the perception that hostile or angry individuals are more competent.

Type A personality There appear to be some salutary effects of Type A. Research has shown that Type A personality is associated with higher performance among management (Taylor et al., 1984) and experimental social psychology (Matthews et al., 1980) faculty, and better grades among college students (Waldron et al., 1980). As Robbins et al. (1991: 756) noted, 'the findings suggest that Type A individuals tend to achieve more than their more laid-back Type B counterparts'. Type A individuals may perform better because they have higher achievement motivation (Matthews et al., 1980), because they set more ambitious goals and are more confident in attaining them (Taylor et al., 1984), because they are more polychromic (able to balance multiple tasks simultaneously; Taylor et al., 1984), or some combination of these factors.

#### Summary

Table 20.2 provides a summary of our discussion of 'bright' (socially desirable) and 'dark' (socially undesirable) traits, organized by their costs and benefits. In the next section, we extend the line of thought by considering relationships between configurations of team member traits and team-level criteria. As we will discuss below, trying to account for the effects of team-level trait configurations increases the level of complexity of models linking personality to criteria; however, doing so illuminates implications to staffing teams.

# Dark side of bright traits for team configuration

In the previous section we discussed how bright and dark traits can have both bright and dark sides, at least in certain situations and for certain criteria. In this section, we consider the dark side of bright traits, but we do so in the context of teams. In contrast to the previous section, which was organized around specific personality traits and their effects, this section is organized around ways in which socially desirable personality traits of team members combine to have dark effects on criteria associated with team functioning and effectiveness. Briefly, we will consider effects, of trait combinations in terms of (a) parallel aggregate effects, (b) similarity and diversity effects and (c) reaction and interaction effects. Before we describe the meaning of these types of traits, we should note that relative to the amount of individual-level research on the dark side of bright personality traits, there has been less research on the dark side of configurations of these bright traits. Accordingly, the following section is much more speculative than the previous sections.

#### Parallel aggregate effects

One way that personality traits have a dark side in terms of team outcomes is through parallel aggregate effects. These types of effects occur when the team members' traits combine to impact team functioning in a manner that is more or less commensurate with how the

Table 20.2 Possible benefits and costs of 'bright' and 'dark' traits

	Benefits	Costs
Big five ('bright') traits		
Extraversion	Greater leadership emergence and effectiveness; higher job and life satisfaction	More impulsive (deviant) behaviors; more accidents; lower performance in certain jobs
Agreeableness	Higher subjective well-being; more positive interpersonal interactions and helping behavior; lower conflict; lower deviance and turnover	Lower career success; less able to cope with conflict; more lenient in giving ratings
Conscientiousness	Higher job performance; greater leadership effectiveness; higher job satisfaction; lower deviance and turnover	Reduced adaptability; lower learning in initial stages of skill acquisition; more interpersonally abrasive (when also low in agreeableness)
Emotional stability	High job and life satisfaction; better job performance; more effective leadership; lower turnover	Poorer ability to detect risks and danger; more risky behaviors; less likely to exceed expectations
Openness	Higher creativity; greater leadership effectiveness; greater adaptability	More accidents and counterproductive behaviors; greater rebelliousness; lower continuance commitment
Other ('dark') traits		
Narcissism	Better distributive bargainers; higher levels of life satisfaction	Inflated self-views in terms of leadership, performance, etc.; manipulative of others
Impulsivity	Greater reward-sensitivity; better performance at complex tasks	More counterproductive/dangerous behaviors; diminished reasoning; greater performance variability
Hostility	Jobs of greater responsibility and scope; higher levels of task performance; better distributive bargainers	Greater workplace deviance; poorer cardiovascular health; more negative views of others; higher conferral of status
Type A	Higher job performance; greater achievement	Increased cardiovascular disease; higher stress and job burnout; poor mental and physical health

Note: Obviously, if neuroticism is labeled 'Emotional stability', the benefits and costs would be reversed.

traits operate at the individual level. Although Moynihan and Peterson (2001) used 'the universal approach' as a descriptive label for this type of effect, we use an alternative label in recognition that there are dark sides to traits that many scholars assume are universally more socially desirable. Research on parallel aggregate effects has a long history, as is evidenced in reviews of the literature (Heslin, 1964) and is implied in the long standing tradition of research focused on effects of individual personality on individual behavior in group contexts (Mann, 1959). However, research with a focus on the dark side of bright personality traits in the context of teams is somewhat rare. Nevertheless, existing research suggests ways in which these types of effects could occur with conscientiousness and agreeableness.

Conscientiousness Similar to research indicating that conscientiousness tends to be positively related to individual effectiveness (Barrick and Mount, 1991), there is research indicating that conscientiousness tends to be positively related to individual effectiveness in team contexts (e.g. Hough, 1992; LePine and Van Dyne, 2001b; Mount et al., 1998; Stewart et al., 2005), and in the aggregate, team effectiveness itself (e.g. Barrick et al., 1998). In most circumstances, teams tend to be more effective when they are staffed with people who tend to be achievement-oriented, self-disciplined, perseverant, dutiful and orderly. However, also consistent with research on individual-level relationships, there are indications that at least in certain circumstances, conscientiousness of team members may be negatively related to team effectiveness.

As one example, LePine's (2003) laboratory study of 73 teams examined relationships between aggregate levels of team members' scores on two aspects of conscientiousness and team decision-making performance prior to and after an unforeseen change that necessitated the team members to adapt their roles. Whereas the achievement-striving and dependability components of conscientiousness did not predict team decision-making performance prior to the change, both predicted this criterion after the change. Importantly, whereas members' achievement-striving had a positive effect, dependability had a negative effect. Also, the offsetting effects for these two aspects of conscientiousness appeared to operate, in part, through a process variable reflecting adaptive behavior at the point the unforeseen change occurred. Teams composed of members possessing high dependability appeared to be unwilling and unable to adjust their normal work routine to meet the demands of the new situation.

As another example, Waung and Brice (1998) considered the role of team members' conscientiousness in predicting creative performance in a brainstorming task. They found that although conscientiousness of team members was positively associated with the feasibility of solutions, member conscientiousness was negatively associated with the number of solutions. To the extent that group effectiveness in creative tasks necessitates a large number of potential solutions, the tendency for groups composed of highly conscientiousness members to focus prematurely on the details and positioning of solutions may be deleterious.

In sum, although the dependability aspect of conscientiousness should promote team performance in contexts that depend on an efficient and orderly flow of familiar task activities, this characteristic may be deleterious when the requirements of the task become uncertain, where the members have to work interdependently and coordinate in the context of disorder, and where creativity is a criterion. High-dependability team members

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may be prone to internalize goals that relate to timeliness and order, and in the context of a change that fundamentally alters the requirements of the team task or when the task itself requires a novel solution, these types of goals may be debilitating.

Agreeableness Although the evidence is a bit more tenuous, agreeableness may be a second trait where there are dark-side parallel aggregate effects. On the one hand, people who score high on agreeableness would seem to be perfectly suited to team contexts because they tend to be cooperative, helpful and trusting. Indeed, research has demonstrated that agreeableness is not only linked to cooperative performance in groups, teamwork and other aspects of individual performance that are logically related to effective team functioning (e.g. Hough, 1992; LePine and Van Dyne, 2001b; Mount et al., 1998; Stewart et al., 2005). Following this research, it is not surprising to learn that some research has shown that teams staffed with agreeable members tend to function and perform more effectively than teams staffed with less agreeable members (Barrick et al., 1998).

On other hand, agreeableness may have a dark side in team contexts that parallels the dark side in individual contexts. Because agreeable individuals value and strive for cooperation and harmony, they may avoid engaging in certain functional task-focused behaviors when these behaviors have the potential to upset other individuals with whom they work, and this may explain research that has reported negative relationships between team-level agreeableness and team effectiveness (e.g. McGrath, 1962). In one study, for example, group members' agreeableness was negatively related to voice behavior, which is defined as the extent to which an individual speaks up with constructive suggestions for change (LePine and Van Dyne, 2001a). Because team member voice may be strongly related to team effectiveness in contexts where there is any degree of decision latitude or the need for innovation or adaptability (Erez et al., 2002), staffing a team with highly agreeable members in these types of contexts may be detrimental.

In sum, because teams depend on the cooperativeness and trust of the members, the trait of agreeableness should be highly desirable. However, in many team contexts, there is a need for members to openly challenge the *status quo*, and agreeable individuals may choose not to engage in these sorts of behaviors. Thus, although staffing a team with people who possess high agreeableness may on the surface appear to be appropriate, agreeableness has a dark side that needs to be taken into account. In fact, just as with conscientiousness, the relevance of the dark side of the trait is dependent on the team context.

#### Diversity

Research aimed at understanding effects of group member diversity has a long tradition in social psychology and organizational behavior, as is evidenced in various reviews of the literature that have appeared over the last several decades (e.g. Haythorn, 1968; Mannix & Neale, 2005; Williams and O'Reilly, 1988). Although much of the research reported in these reviews has focused on member diversity with respect to observable demographic characteristics (e.g. Hoffman and Maier, 1961a; Kent and McGrath, 1969; Riordan and Shore, 1997), there has been research focused on diversity of deeper-level characteristics such as attitudes, interests and, most relevant to this chapter, personality (e.g. Altman and McGinnies, 1960; Fiedler, 1952; Hoffman, 1955, 1959; Hoffman and Maier, 1961a). As we will discuss next, the literature suggests at least two different ways in which diversity with respect to members' personality may have dark side effects.

The majority of scholars who have studied effects of personality diversity in small groups and teams have focused on effects of diversity in and of itself as the focal construct. In this research, diversity has been indicated often by the percentage of members who could be placed in a certain category, or alternatively some metric indicating the degree of variability on that characteristic. In some of this research, diversity in personality resulted in positive effects on group outcomes (e.g. Aamodt and Kimbrough, 1982; Ghiselli and Lodahl, 1958; Hoffman and Maier, 1961b), and as articulated clearly by Hoffman, the mechanism assumed to underlie these effects is that diversity increases the number of ideas and perspectives that can be applied to a problem. This line of thinking has been called the 'information-processing and problem-solving' perspective, and is credited for the belief among laypeople and scholars that diversity enhances team creativity and problem-solving ability (Mannix and Neale, 2005).

Findings from other research, however, have suggested that the degree of diversity among team members in their personality may have deleterious effects on the functioning and effectiveness of teams (e.g. Altman and McGinnies, 1960; Haythorn et al., 1956). Explanations for these negative effects, which are based on theories of social attraction (e.g. Byrne, 1971; Newcomb, 1968), self-categorization (Turner, 1985) and social identity (Tajfel, 1981), are that members of diverse teams tend to be less attracted to each other and the group, less likely to have accurate perceptions of other members and their opinions, and less likely to communicate effectively without dysfunctional conflict (Haythorn, 1968).

What conclusions can we draw from this research? First, consistent with the belief that there is value in diversity (Cox et al., 1991), diversity in team members' personality may have positive effects on team effectiveness. However, these positive effects may be limited to contexts where the team task requires members with diverse perspectives and outlooks. Second, diversity in team members' personality may have negative effects on team effectiveness in team contexts where effective interpersonal processes and social integration are important. Moreover, as research by Harrison and his colleagues suggests (Harrison et al., 2002; Harrison et al., 1998), the negative effects of personality diversity in teams may become more pronounced over time as opportunities to reveal deeply rooted differences accrue. The end result is that although there is a potential bright side of personality diversity, there is a dark side as well, and this dark side may become even darker over time. We should note, however, that the research that generated these conclusions has focused on diversity itself, and thus has ignored the possibility that effects of personality diversity may vary as a function of the personality trait under consideration. Indeed, in his review of the group composition literature almost 40 years ago, Haythorn (1968: 124) noted that 'the effect of homogeneity per se, however, cannot be divorced from the individual personality characteristic or value under consideration'.

Perhaps as a consequence of the popularity of the five-factor model beginning in the early 1990s, researchers began to develop and test theories regarding effects of team composition in terms of individual personality characteristics (Barrick et al., 1998; Barry and Stewart, 1997; LePine et al., 1997). Although some of this research may have been focused more on understanding the manner in which member traits should be combined in order to examine team-level relationships (LePine et al., 1997), the research nevertheless paved the way for more fine-grained understanding of effects of personality diversity in teams. In contrast to the research on the general concept of personality diversity, which suggested dark side effects on team functioning and performance in certain situations, this

research acknowledges the possibility that the effects of personality diversity vary as a function of the personality characteristic under consideration.

In one example of this research, Barrick and his colleagues (1998) conducted a field study of 51 work teams that considered relationships between the variance among members in their 'big five' characteristics and measures of team functioning (social cohesion, team conflict, flexibility, communication, workload sharing) and team outcomes (team viability and performance). The findings of this study suggested that although diversity in one of the 'big five' characteristics may be beneficial to teams, diversity in two other characteristics may be detrimental. First, variance on members' extraversion was positively related to social cohesion. To some degree this finding is consistent with previous research, which suggested that teams may have reduced cohesion and performance when there are too few or too many extroverted members (Barry and Stewart, 1997). Second, variance in members' agreeableness was positively associated with team conflict, and was negatively associated with social cohesion, communication and workload sharing. Although the mechanisms underlying all these effects were not examined, it seems reasonable that a mix of empathetic, trusting and warm members with unfeeling, distrustful and cold members is a recipe for trouble. Finally, variance in members' conscientiousness was negatively associated with team performance. Although the reasons for this effect were not clear in this particular study, the finding is consistent with research demonstrating that a team member with particularly low conscientiousness may upset other members, especially those with higher levels of achievement striving (e.g. LePine et al., 1997, Jackson and LePine, 2003; LePine and Van Dyne, 2001a).

In summary, the primacy given to specific traits in this stream of research has led to increased understanding of the impact that team members' personality has on important team-level outcomes. Most important, although the amount of research has been fairly limited, the findings reveal that understanding the effects of personality diversity necessitates consideration of specific traits. Specifically, the research suggests that although personality diversity may be beneficial in terms of members' extraversion, it may have a dark side in terms of members' agreeableness and conscientiousness. Clearly more research is needed, not only to assess generalizability of these findings, but also to better understand the mechanisms though which these effects occur.

# Reaction and interaction

The third way that bright side personality traits may have a dark side in team contexts is through the reactions of team members to other team members' personality and manifest behavior. Although research on this type of effect has been fairly recent, and is relatively limited, there is a strong possibility that these types of effects may play an important role in determining the effectiveness of groups and teams with respect to both task and social functioning.

In a theoretical paper, LePine and Van Dyne (2001a) used attributional theory (Weiner, 1986, 1995) as a basis for their prediction that the personality of a team's low performer would play an important role in determining how the other team members would react to the low performer. Specifically, when a poor performer has low ability, team members should tend to feel empathetic and should either compensate for the low performer, or help the low performer learn his or her role. When a poor performer has low conscientiousness, team members should tend to feel angry, and should either try to motivate the

low performer to work harder, or attempt to remove the low performer from the group. The propositions in the theory are consistent with results of previous empirical research (e.g. LePine et al., 1997; Tagger et al., 1999), and have received direct support in a vignette study where findings suggested that low performer personality may be as important as the group members' own personality in predicting the group members' behavioral intentions (Jackson and LePine, 2003). Tagger and Neubert (2004) reported the results of research conducted in a more naturalistic context which further supported the theory.

As an example of how the theory can be applied to understand dark side personality effects, consider how team members would likely respond to a low-performing peer with high conscientiousness and high agreeableness. According to the theory, the most likely response would be for team members to exert effort focused on helping the low performer do his or her part of the team task effectively. This is because the low performer would be viewed as willing to invest energy in improving. In many team contexts, however, members are specialized along functional lines and are stretched just to accomplish their own tasks. Accordingly, this sort of help may be impossible. The next most likely response would be for team members to exert effort intended to compensate for the low performer – perhaps by taking on some of the low performer's responsibilities. Again, however, because of functional specialization or high work loads, this type of compensating behavior may not be possible. In fact, because team members will be reluctant to do anything that would unduly hurt the high conscientiousness – high agreeableness low performer (e.g. trying to replace this person with someone with higher ability), a very likely response would be for the team to accept the limitation and subsequent performance consequences. In other words, it is quite likely that the team would be willing to trade off some task effectiveness in order to maintain social effectiveness. Of course, as LePine and Van Dyne suggest (2001a), if the team members who are responding to the low performer have high agreeableness, the situation may be exacerbated. High agreeableness team members will be more empathetic and will also believe that the low performer has good intentions and should be especially unlikely to respond with behavior that would be threatening to the low performer.

In summary, although the research from the attribution-based reaction and interaction perspective is somewhat limited, there are some clear implications for how the perspective can be used to understand dark side personality effects. For example, if the team members responding to the low performer in the previous example had high conscientiousness, perhaps the members would attempt to take on low performer tasks for which they were ill equipped to handle. As another example altogether, consider what could happen if the low performer exhibited low conscientiousness but otherwise possessed high ability, and an exaggerated self-concept. In this case, because the team members would likely attribute the cause of the low performance to something under the low performer's control, they would likely respond by trying to motivate this person or by rejecting him or her from the group. These types of behaviors would likely be completely unacceptable to this high self-concept low performer, who would be especially apt to attribute the low performance to external causes. The end result would likely be unproductive emotional conflict and lowered team effectiveness.

#### Summary

In this section we overviewed various ways in which generally desirable personality traits of team members could have dark side effects on team functioning and effectiveness. This

discussion is summarized in Table 20.3. It is important to note that although the parallel aggregate effects of team members' personality operate in a manner that is mostly consistent with what we know about how individual-level personality functions, diversity and reaction—interaction effects are much more complex. Moreover, because diversity and reaction—interaction effects appear to be at least as powerful as parallel aggregate effects, the additional complexity may need to be considered in staffing models for team-based organizations. In the next section, we discuss specific implications of the two previous sections of this chapter.

# Selection system implications of the dark sides of personality

Practical issues in designing selection systems that consider personality

As we described earlier, personality traits have non-trivial relationships with job-related criteria. Evidently, this has not been lost to practitioners given the tremendous popularity of personality-based selection practices. Indeed, personality testing is a \$400 million industry, and at least 30 per cent of all US organizations use personality tests for hiring or related practices (Daniel, 2005). As we noted, however, there are a number of ways that traits may impact criteria, and this complicates staffing decisions. Organizations are perhaps well advised to select those who score high on bright traits and low on dark traits. However, as we have argued, even bright traits have dark effects in certain circumstances (and dark traits bright effects in certain circumstances). Thus the staffing model becomes more complicated in that the 'side effects' of bright and dark traits need to be taken into account. There are at least three ways in which this more subtle view of personality traits can be implemented.

The first and perhaps most obvious way that a staffing model could address countervailing effects of bright and dark traits would be to exclude some or all personality traits from assessment decisions. Although such an approach would certainly simplify the staffing model and subsequent decisions, it is akin to throwing the baby out with the bath water. If inclusion of a trait significantly improves the predictive power with respect to any important criteria, it should be considered in staffing. Most important decisions carry with them benefits and costs, but it hardly makes sense to use this knowledge by declaring that one will refrain from making decisions. With that said, however, the manner in which it is considered may have to be modified from traditional staffing practice.

One way that a staffing model could address the side effects of bright and dark traits would be to consider scores on narrower traits. Such an approach may be especially appropriate in situations where offsetting effects manifest from different facets of a broader trait. As discussed earlier, for example, whereas the achievement-striving aspects of conscientiousness may be positively related to routine and adaptive performance, the dependability aspect of conscientiousness may be negatively related to adaptive performance. Accordingly, instead of staffing using scores on overall conscientiousness, scores on achievement striving and dependability could be considered – and this might be especially important in contexts when performance occurs in novel or changing contexts. Although this approach would require research that considered relationships among the narrow facets and various performance criteria, current understanding of the structure of broad personality traits and known costs and benefits of the traits such as those listed in Table 20.2 points to several possibilities.

A third approach to address dark side effects would be to use the socially desirable traits in staffing, but also include training to address the issues that pose potential problems.

Table 20.3 Potential bright and dark sides of bright traits in team contexts

T of officer		Danast	24000
type of effect	Irait	Denem	Costs
Parallel aggregate	Overall level of members'	Increased reliability and	Reduced performance in changing contexts
effect	conscientiousness (dependability)	performance in routine	
		contexts	Reduced effectiveness in contexts requiring
	Overall level of members'	Higher-quality	constructive debate and conflict
	agreeableness	interpersonal functioning	
Diversity	Variance in extraversion	Higher-quality team	
		Imicuoming	
	Variance in agreeableness and conscientiousness		Lower-quality team functioning and effectiveness
Interaction and	Low performer with low		Poor-quality team functioning and
	other members who are high in		member is not helped and may be
	conscientiousness and low in		rejected from the group in terms of both
	agreeableness		the task and socially)

Such an approach would first require a solid understanding of the specific situations where dark sides manifest, as well as the knowledge, skills, attitudes and behaviors that the employee would need to exhibit in those situations. Although this 'supplemental development' approach to staffing would seem to be somewhat complicated and costly, it is not very different than what is already being done in organizations that use assessment centers and other instruments to identify weaknesses in need of 'development'. The advantage of using this approach in the context of staffing would be that potential weaknesses are identified and addressed earlier rather than later.

# Complicating factors based on team composition considerations

As noted earlier, staffing models that account for both bright and dark effects may be quite complicated. In team-based organizations, however, the complexity of staffing model that accounts for these types of effects reaches an even higher level. The primary reason for this added complexity is that staffing models in team-based organizations would need to consider validities of configurations of personality traits, rather than personality traits in isolation – and this would be true regardless of whether the staffing problem focused on the creation of new teams or staffing for existing teams. When staffing new teams using personality information, the issue becomes one of creating effective configurations of members with respect to their personality. When staffing existing teams, the issue becomes one of selecting new members with personalities that 'fit' with the personality of the existing members. Although the traditional staffing model would suggest selecting top down for teams based on traits of the prototypical team player – high in conscientiousness, extraversion and agreeableness - diversity and interaction-reaction effects in regards to dark sides of these bright traits make such an approach problematic. Although much more research needs to be done before specific recommendations can be made, the research discussed in this section of the chapter could provide the foundation for some of this future work.

# Expanding the Criterion

Much of our discussion regarding the staffing dilemma associated with bright and dark sides of personality centered on how traits have benefits and costs. Although in this discussion the traits were given primacy, benefits and costs are also a function of the criteria that are considered, some of which are not normally considered in staffing contexts. Thus, in order to fully appreciate the fitness consequences of bright and dark traits in staffing models, it may be necessary to explicitly consider an expanded set of criteria.

Stress, or perhaps more precisely the negative physiological and psychological strains that result from the stress process, is one potential criterion that could be included in staffing models that attempt to account more fully for bright and dark side effects. Stress is relevant to organizations today, not only because more and more employees (especially managers and professionals) feel that their jobs are extremely stressful, but also because stress is associated with higher health care costs and lower morale, retention and performance (Johnson and Eldridge, 2004; Sauter et al., 1999).

As an example of a socially desirable trait where stress could be considered as a dark side criterion, consider conscientiousness. Because high conscientiousness is associated with higher achievement striving and dependability, those with higher conscientiousness take on higher workloads and responsibility, and they also feel more pressure to

accomplish their work in a timely manner. The problem is that although these tendencies promote job performance (Barrick and Mount, 1991) and may be intrinsically satisfying. coping with these challenges results in strains such as exhaustion and burnout (LePine et al., 2005). In short, the behavioral tendencies of conscientiousness that manifest in contributions to the organization through effective job performance may also detract from the organization through higher costs associated with health care, lost productivity and retention.

Although there are certainly other criteria that we could mention here, the point we are trying to make with this discussion is that in order to fully appreciate the potential range of bright and dark side effects of personality, scholars may need to expand the set of criteria they consider in their research. One approach to identifying new criteria would be to focus on positive and negative contributions of employees that relate to a wider variety of factors that increase or reduce the value of the organization. We mentioned stress in the previous paragraph, but criteria connected to employee commitment, intellectual capital and organizational reputation could also be considered. An alternative approach to identifying new criteria would be to consider relationships with a small set of theoretically derived criteria that are somewhat less distal to the ultimate criterion. Such an approach might make sense given that some traits have offsetting indirect effects with the ultimate criterion through multiple mediating or suppressing processes.

#### Conclusion

The general purpose of this chapter was to discuss one potential explanation for rather modest validities of personality traits. That is, personality traits have, in certain circumstances, bright sides and dark sides that offset one another. We began by discussing the individual-level research, and in this context, there is plenty of research supporting the premise that, for both bright and dark traits, there are both bright and dark effects. We then turned to overview the research that has examined this issue from a team-level perspective. Although the majority of the research discussed in this section supports the idea that team configuration in terms of traits can have both bright and dark sides, the research has examined the issue only rarely and indirectly. Finally, we discussed selection system implications of bright and dark side effects, in terms of both individual and team contexts. From all of this discussion we conclude that personality traits have both bright and dark effects in both individual and team contexts, and that the ability to predict criteria in both contexts could improve, perhaps dramatically, if our theorizing, research and practice explicitly took these types of effects into account. Unfortunately, however, we regret to say that doing so can only come at the cost of increasing complexity and fragmentation, and thus we will forfeit the beauty of the simplicity of research and practice using a very small set of rather broad personality traits and criteria.

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