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"Releasing the beast within"? Authenticity, well-being, and the Dark Tetrad

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ABSTRACT

Two studies examined whether the well-documented link between authenticity and well-being is moderated by the Dark Tetrad (Machiavellianism, narcissism, psychopathy, and sadism). We predicted that among those high on these traits, authenticity would be less strongly associated with well-being. Study 1 (N = 404) and Study 2 (N = 415) showed that authenticity was less strongly related to well-being among those high on Dark Tetrad personality traits. In addition, Study 2 showed that the pattern of moderation was not accounted for by desirability bias. Study 2 demonstrated that the Dark Tetrad did not moderate the association between authenticity and basic need satisfaction. In both studies, at low levels of authenticity, the Dark Tetrad were associated with higher well-being.

1. Introduction

The idea that it is best for people to be themselves is well represented in popular lore and psychological research and theory. Authenticity, defined as being aware of one's own characteristics and genuinely expressing these in behavior, is a central theme in many psychological approaches to optimal functioning (see Robinson, Lopez, Ramos, & Nartova-Bochaver, 2012). In particular, humanistic conceptions of personality present authenticity as a key to adjustment and personal growth. Yet, in a sense, the value of genuinely expressing one's innermost desires and impulses rests on another humanistic assumption, namely, that these innermost impulses are ultimately for the betterment of the self and others. In this article, we consider whether authenticity is associated with well-being even for those whose innermost impulses may stand apart from or even conflict with the greater good, individuals who possess so-called dark personality traits. Does authenticity relate to well-being even among such individuals? We propose that authenticity might be less strongly linked to well-being for those high on traits that predispose them to being callous and manipulative toward others. Before presenting two studies testing this proposal, we review the meaning of authenticity and its role in human functioning. We then describe the dark traits that were the center of this investigation and suggest predictions about the ways that Dark Tetrad traits might moderate the association between authenticity and psychological well-being.

1.1. Authenticity and human functioning

Authenticity has long been embraced by philosophers and psychologists as an optimal strategy toward psychological functioning. Following on Kierkegaard's (1983) famous quote, "To be that self which one truly is, is indeed the opposite of despair," Rogers (1961) traced the central role of becoming one's genuine self in the process of therapeutic healing. Rogers observed that as his clients developed toward optimal functioning they showed a pattern of moving away from various externally oriented behavioral controls (e.g., facades, "oughts," meeting expectations, and pleasing others) in favor of relying on their own inner impulses (what Rogers' termed the "organism").

Similarly, the contemporary humanistic approach to motivation, Self Determination Theory (SDT), maintains that authentically following one's innate desires is a pathway to optimal functioning (Ryan & Deci, 2001, 2004). Within SDT, following one's innate tendency toward the satisfaction of organismic needs leads naturally to well-being and growth (Deci & Ryan, 2000; Ryan & Deci, 2001). Not unlike Rogers' portrayal of movement away from reliance on external social controls to reliance on internal personally congruent impulses, SDT presents autonomy as a central aspect of healthy human motivation, particularly as the person is increasingly motivated by intrinsic rather than extrinsic ends (e.g., Deci & Ryan, 2000).

Research supports these humanistic ideals. Self-reported authenticity relates to numerous aspects of well-being (Kernis & Goldman, 2006) and does so across cultures (Robinson et al., 2012). Following one's innate values (Sheldon, Arndt, & Houser-Marko, 2003) toward greater concordance between one's goals and intrinsic, organismic

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needs predicts ever greater well-being (Sheldon, 2014; Sheldon & Houser-Marko, 2001; Sheldon & Kasser, 1995). Individuals high in "self-presentational congruence" (presenting oneself as one truly is across a variety of social relationships) show higher social and psychological well-being (Gohar, Leary, & Costanzo, 2016). Those who present themselves as they really are in everyday life experience higher relationship satisfaction (Gosnell, Britt, & McKibben, 2011). Such findings lend support to the humanistic proposal that authenticity is an essential part of optimal human functioning.

Yet, as noted above, the psychological benefits of authenticity arguably rest on the humanistic assumption that the content of one's innermost impulses are toward self-growth and compassion toward others. In contrast, we might question whether it is optimal for someone who possesses traits that predispose him or her to negative behavior, such as aggression or self-harm, "to be that self which one truly is."

Rogers anticipated this concern. He (1961, p. 177) noted that, for some, his advocacy for being true to oneself might imply "releasing the beast within." In an answer to the possibility that innermost desires might be problematic or dangerous, Rogers (1961) drew an analogy to a lion, attacking and devouring its prey. For the lion, such behavior is an expression of its innermost natural impulses as a member of its species. Rogers maintained that human behavior could be viewed similarly. Increasing trust in a person's "organism" was a good: "...when one is truly and deeply a unique member of the human species, this is not something which should excite horror" (Rogers, 1961, p. 178). Impulses that are feared by the person are likely to emerge as natural and innately beneficial. Of course, from Rogers' perspective, this emergence of feared behaviors as expressions of true human nature would involve the undoing of the socialization that has led to a chasm between the person's current self and his or her true nature. Similarly, addressing the "darker side" of human functioning, SDT scholars maintain that truly heinous behavior can be traced to "serious thwarting of psychological needs during development" (Ryan & Deci, 2000, p. 321). From a humanistic perspective, there are those who have not received the proper nutriments of self-development (for Rogers, unconditional positive regard; for SDT, autonomy support) and may have impulses that are twisted accordingly. For such individuals, true authenticity may be a complicated matter, involving first the uncovering of long suppressed impulses (Kernis & Heppner, 2008).

1.2. Dark personality traits

Paulhus and Williams (2002) identified the Dark Triad (i.e., Machiavellianism, narcissism, and psychopathy), a constellation of traits reflecting aversive personality characteristics. These traits are considered to be subclinical reflections of a shared core of callousness and manipulativeness (Furnham, Richards, & Paulhus, 2013). Machiavellianism is characterized by the willingness to engage in manipulation of others in the pursuit of personal success (Christie & Geis, 1970). Narcissism is reflected in grandiose self-views, dominance, and a strong sense of entitlement (Corry, Merrit, Mrug, & Pamp, 2008). Psychopathy refers to being impulsive, antisocial, and lacking in empathy (Miller, Lyman, Widiger, & Luekefeld, 2001). The traits are conceptually distinct but empirical overlap has been identified (Furnham et al., 2013). Considered together with sadism, which is the enjoyment of cruelty and the suffering of others (Buckels, Jones, & Paulhus, 2013), these traits comprise the Dark Tetrad, which may be considered contemporary personality psychology's approach to evil (Book et al., 2016).

A notable conceptual ambiguity regards whether the Dark Tetrad traits represent the core selves of those who endorse measures of the Dark Tetrad or are, instead, superficial qualities, laid over true, good human nature. To some extent, research and theory on the Dark Triad treats these traits as core aspects: They share substantial genetic components (e.g., Onley, Veselka, Schermer, & Vernon, 2013; Petrides, Vernon, Schermer, & Veselka, 2011), and evolutionary approaches to these dark traits consider them under the umbrella of fast life history

strategies (e.g., Jonason, Koenig, & Tost, 2010; McDonald, Donnellan, & Navarrete, 2012). In some ways, descriptions of these traits resonate with Rogers' notion of the feared "beast within." Dark personality traits, particularly psychopathy, have been conceptualized as predatory life strategies that hold frequency dependent adaptive value (Hare, 2001; Mealey, 1995). Psychopathy and Machiavellianism are thought to represent social mimicry strategies, similar to those of non-human predators that extract resources by using deception (Jones, 2014). Clearly, as noted above, the humanistic perspective would posit that such characteristics likely emerge from problematic socialization. This ambiguity notwithstanding, if one possesses these traits, is it a good idea to express oneself genuinely in behavior? We consider this question next.

1.3. The content of the authentic self

How might the content of a person's traits affect the association between authentic self-expression and well-being? Answering this question is complicated by the fact that authenticity and positivity share a strong association. Indeed, Strohminger, Knobe, and Newman (2017) proposed that the true self is inherently moral. Although authenticity is often thought of as being oneself "warts and all," research suggests that when people feel that they are being themselves they are rarely showing their warts: positive, socially desirable behaviors are more likely to feel like authentic expressions of the self, even if they are not. For example, Sheldon, Ryan, Rawsthome, and Ilardi (1997) found that people feel more authentic when they are enacting socially desirable traits. Similarly, Jongman-Sereno and Leary (2016) found that people rated positive behaviors as more authentic expressions of themselves than negative behaviors, regardless of whether these were actually behaviors they had performed.

Research on the "true self" has addressed this issue indirectly. Schlegel, Hicks, Arndt, and King (2009) showed that exposure to even negative aspects of one's true self led to higher meaning in life, suggesting that authenticity may relate to well-being regardless of the qualities a person possesses. Gohar et al. (2016) found that self-presentational congruence predicted higher well-being and social adjustment controlling for Machiavellianism. However, these authors did not test for moderation.

For those who possess traits that are socially problematic, inauthentic behavior could be functional, at least in terms of personal well-being. That is, if one knows that s/he is prone to manipulative or callous behavior toward others, hiding that fact might be lead to better well-being outcomes. There are at least three reasons for this possibility. First, for such individuals, hiding who "they really are" may be an attempt, simply, to be a good person. For those low in the dark traits, following their innermost impulses toward goodness may be a relatively easy proposition. However, for those high on dark traits, personal wellbeing, growth, and maintaining positive social relationships may require them to hide their innermost impulses (which the person may have no intention of actually enacting). Being good, even if it is not an expression of the person's "true self," may lead to well-being benefits (e.g., Martela & Ryan, 2016). Second, individuals who possess Dark Tetrad traits might engage in strategic inauthenticity. Not showing one's hand might be a superior strategy to revealing one's negative or harmful intents. Well-being might be higher among those who are successful at this manipulation as a function of goal attainment (e.g., Heckhausen & Kay, 2018). Finally, it might be that for those who report themselves as cold and calculating, being inauthentic is, itself, authentic. That is, if a person experiences his or her "core self" as deceitful and manipulative, being inauthentic may be a genuine expression of the self. To the extent that being true to oneself is associated with wellbeing, we might expect inauthenticity to be associated with well-being for those for whom being inauthentic is true to their core sense of self.

Essentially, we propose that the context of the Dark Tetrad will flip the meaning of (in)authenticity. This idea is akin to a recent set of studies showing that narcissism is associated with finding higher meaning in extrinsic goals and that among those high in narcissism, relatively more extrinsic than intrinsic values predicts higher meaning in life (Abeyta, Routledge, & Sedikides, 2017). Perhaps, in the context of potentially evil impulses, authenticity is less strongly linked to wellbeing.

2. Study 1

2.1. Overview and predictions

As an initial exploration of these issues, Study 1 participants completed abbreviated measures of authenticity, the Dark Tetrad, and wellbeing (including meaning in life, life satisfaction, mood, and self-esteem). We expected that authenticity would be positively related to well-being and tested whether this association was moderated by the Dark Tetrad traits, considered individually and collectively. We predicted that authenticity would be less strongly related to well-being among individuals with dark personalities. In addition, because these associations may differ as a function of hedonic well-being (i.e., the presence positive mood, and the absence of negative mood), and eudaimonic well-being (e.g., well-being that arises out of self-growth, and moral behavior), we included measures of a variety of indicators of well-being.

3. Method

3.1. Participants

404 MTurk workers (paid \$0.25) participated in this online assessment. The sample was 49.9% women, 74.6% White/European American, 7.7% Black/African American, 11.4% Asian American, 4.2% Latino/a American, < 1% Native American, and 1.2% "other." Ages ranged from 19 to 72, M(SD) = 35.70(11.23). Education level spanned some high school through doctoral degree and income ranged from under \$15,000 to over \$150,000. Modal education was a Bachelor's (40%) and median income was \$35,000–\$50,000.

3.2. Materials

Participants completed measures of authenticity, the Dark Tetrad, and well-being. All ratings were made on scales from 1 (low endorsement) to 7 (high endorsement). Descriptive statistics and reliabilities for all measures are shown in Table 1.

Authenticity was measured using 10 items drawn from the Authenticity Inventory (Kernis & Goldman, 2006). Items were chosen based on their corrected item-total correlations in another sample as well as their face validity, and an attempt to draw broadly across the factors. To measure the Dark Tetrad, we first pulled items from the Short Dark Triad (SD3; Jones & Paulhus, 2014) measure to assess narcissism (4 items, e.g., "Many group activities tend to be dull without me."), Machiavellianism (5 items, e.g., "I like to use clever manipulation to get my way"), and psychopathy (4 items; e.g., "People who mess with me always regret it."). To measure Sadism we drew 6 items, three from each subscale (vicarious and direct sadism) of the Varieties of Sadistic Tendencies scale (Paulhus & Jones, 2015). The vicarious measure had very low reliability, $\alpha = 0.44$, and was dropped. Thus, all three sadism items referred to direct sadism, (e.g., "I enjoy making people suffer"). The items for authenticity and Dark Tetrad scales are shown in Appendix A.

Well-being measures included the Presence of Meaning subscale from the Meaning in Life Questionnaire (MLQ-P; Steger, Frazier, Oishi, & Kaler, 2006, e.g., "I have a good sense of what makes my life

meaningful") and the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985; e.g., "I am satisfied with my life"). Participants also completed single item measures of positive affect ("Rate the extent to which you feel happy") and self-esteem ("I have high self-esteem;" Robins, Hendin, & Trzesniewski, 2001).

4. Results

As shown in Table 1, authenticity was positively correlated with all of the well-being measures, which were, in turn, significantly correlated with each other. We standardized the well-being measures and created a composite score (also shown in Table 1) to simplify analyses. As can be seen in the table, this composite was significantly associated with authenticity and narcissism but was unrelated to the other aspects of the Dark Tetrad. The Dark Tetrad traits were positively correlated, with the association between psychopathy and direct sadism being especially strong. In the Dark Tetrad literature it is not uncommon to aggregate these variables, as well (Furnham et al., 2013). Because we were interested in the moderation of the association between authenticity and well-being by "bad" personality traits and to simplify analyses, we standardized the Dark Tetrad measures and created a composite (weighting all members equally). As Table 1 shows, this composite was negatively related to authenticity and unrelated to the well-being composite.

For those interested in each Dark Tetrad member, Table 1 also presents the third order partial correlations for each controlling for the other three, for authenticity (in the Authenticity column) and wellbeing (in the well-being composite row). Narcissism was positively and Machiavellianism and psychopathy were negatively associated with authenticity. Narcissism was positively and Machiavellianism was negatively related to well-being composite. Because narcissism was related to the other three Dark Tetrad traits and well-being, we computed partial correlations between well-being and these traits, controlling for narcissism. The partial r's were negative, modest, and significant: partial r = -0.18, p < .001 for Machiavellianism, partial r = -0.11, p = .029 for psychopathy, and partial r = -0.12, p = .014 for direct sadism.

To test whether the association between authenticity and well-being depends on personality characteristics, the well-being composite was regressed on (mean-centered) Dark Tetrad traits (and the composite Dark Tetrad variable) and authenticity and their interactions in five hierarchical multiple regression equations. Results are shown in Table 2. The main effect step was significant in all equations, with authenticity contributing significantly and positively in every case. Narcissism, psychopathy, and sadism contributed significantly and positively. (Controlling for the narcissism as a covariate, the main effect of psychopathy remained significant, $\beta = 0.10$, p = .03; the main effect of sadism did not, $\beta = 0.05$, p = .28). In each equation, main effects were qualified by significant interactions. Generated regression lines for individuals ± 1 SD from the mean (or at the mean) on authenticity and the Dark Tetrad composite are shown in Fig. 1. The figure shows that although authenticity was positively related to well-being, this association was stronger for those low in Dark Tetrad traits. The patterns for each Dark Tetrad member were similar to Fig. 1 and are shown in the Supplementary materials.²

To ensure that Fig. 1 accurately represents the raw data, Table 3

¹ Data available online: https://osf.io/dy2pe/?view_only = 1bd771b9bac14a1188b472109077c10e.

 $^{^2}$ Age was negatively related to the Dark Tetrad as can be seen in Table 1. In a regression equation controlling for age and entering the interactions of age \times authenticity and age \times Dark Tetrad composite as well as the threeway interaction, only the authenticity \times Dark Tetrad interaction was significant, $\beta=-0.12,\,p=.006;$ for two- and three-ways with age, all p's>0.25.

In a regression equation controlling for age, entering the interactions of age \times authenticity and age \times Dark Tetrad composite as well as the threeway interaction, only the authenticity \times Dark Tetrad interaction was significant, $\beta=-0.14,\,p=.003;$ for two- and three-ways with age, all p's >0.36.

Table 1 Descriptive statistics and correlations, Study 1.

	Aut	Nar	Mac	Psy	Sad	MIL	LS	PA	SE	DT	WB
Authenticity	0.81										
Narcissism	0.17*	0.54									
Partial r	0.33*										
Machiavellianism	-0.28*	0.19*	0.73								
Partial r	-0.16*										
Psychopathy	-0.33*	0.33*	0.46*	0.65							
Partial r	-0.21*										
Direct sadism	-0.30*	0.26*	0.37*	0.67*	0.66						
Partial r	-0.12										
Meaning in life	0.53*	0.24*	-0.15*	-0.07	-0.07	0.94					
Life satisfaction	0.46*	0.27*	-0.11	0.03	-0.02	0.67*	0.92				
Positive affect	0.44*	0.25*	-0.04	0.01	-0.06	0.61*	0.68*	_			
Self-esteem	0.44*	0.42*	-0.03	0.11	0.07	0.59*	0.66*	0.58*	-		
Dark Triad composite	-0.25*	0.75*	0.68*	0.53*	0.59*	-0.02	0.06	0.06	0.19*	0.71	
Well-being composite	0.55*	0.34*	-0.10	0.02	-0.02	0.85*	0.89*	0.84*	0.83	0.08	0.87
Partial r		0.37*	-0.14*	0.00	-0.06						
Gender	0.13*	-0.13*	-0.06	-0.27*	-0.15*	0.12	0.07	-0.05	0.01	-0.21*	0.05
Age	0.20*	-0.11	-0.16*	-0.25*	-0.16*	0.19*	0.06	0.10	0.11	-0.23*	0.14*
M	4.91	3.63	3.82	2.67	2.19	4.76	4.28	4.72	4.37	0	0
SD	0.92	1.04	1.11	1.03	1.18	1.55	1.52	1.57	1.67	1	1

Note. N = 399-404; * $p \le .008$. PA and SE were single items. Ratings were made from 1 to 7. Coefficients on the diagonal are α reliabilities. For gender, 1 = women, 0 = men. Partial correlations for authenticity and well-being for each dark trait control for the other 3 Dark Tetrad members.

Moderation analyses regressing well-being on authenticity \times Dark Tetrad, Study 1.

Dark Tetrad	Main effect step \mathbb{R}^2	Main effects β	Interaction step R^2	Interaction β	Equation \mathbb{R}^2
Narcissism	0.37***		0.011**		0.48***
Narcissism		0.27***		-0.11**	
Authenticity		0.50***			
Machiavellianism	0.31***		0.01*		0.32***
Machiavellianism		0.07			
Authenticity		0.57***		-0.09*	
Psychopathy	0.35***		0.01*		0.36***
Psychopathy		0.21***		-0.09*	
Authenticity		0.61***			
Direct sadism	0.33***		0.014**		0.34***
Direct sadism		0.13**		-0.12**	
Authenticity		0.57***			
Dark Tetrad composite	0.35***		0.02***		0.37***
DTC		0.23***		-0.14***	
Authenticity		0.56***			



^{***} p < .001.

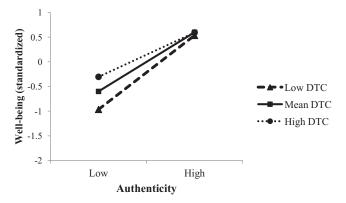


Fig. 1. Well-being as a function of Dark Tetrad composite × authenticity, Study

Note. Generated regression lines predicting well-being from the Dark Tetrad composite and authenticity, Study 1.

Correlations between well-being and authenticity for those low/high in Dark Tetrad composite, Study 1.

	Low Dark Tetrad (1 SD below the mean)	High Dark Tetrad (1 SD above the mean)	z (difference)
Meaning in life	0.75**	0.35*	2.42*
Life satisfaction	0.65**	0.16	2.44*
Positive affect	0.62**	0.29	1.70
Self-esteem	0.63**	0.46*	0.97
Well-being composite	0.75**	0.41*	2.14*

Note. For low Dark Tetrad, n = 32; for high Dark Tetrad, n = 38.

shows the correlations between authenticity and well-being for those low (i.e., < 1~SD below the mean) vs. high (> 1~SD above the mean) on the Dark Tetrad composite. As can be seen, the very strong association between authenticity and well-being was diminished substantially at

^{*} p < .04. ** p < .007.

^{**} p < .001.

^{*} p < .05.

Table 4Correlations between well-being and Dark Tetrad composite, for those low/high in authenticity. Study 1.

	Low authenticity (1 <i>SD</i> below the mean)	High authenticity (1 SD above the mean)	z (difference)
Meaning in life	0.50**	-0.41*	5.04**
Life satisfaction	0.51**	-0.27*	4.30**
Positive affect	0.40*	-0.27*	3.59**
Self-esteem	0.59**	0.05	3.21**
Well-being composite	0.58**	-0.29*	4.92**

Note. For low authenticity, n = 57; for high authenticity, n = 54.

high levels of the Dark Tetrad, and significantly so for meaning in life, life satisfaction, and the well-being composite.

Because in Fig. 1 it appeared that Dark Tetrad traits were positively related to well-being among the inauthentic, we calculated correlations between the Dark Tetrad composite and well-being at low and high levels of authenticity. As Table 4 shows, the Dark Tetrad composite was associated with *higher* well-being among the inauthentic and these associations significantly differed from those for individuals high in authenticity for all well-being measures.

4.1. Brief discussion of Study 1

Study 1 showed that, as predicted, the association between authenticity and well-being was moderated by undesirable traits. These findings provide preliminary support for the hypothesis that for individuals high on the Dark Tetrad, authenticity is less strongly linked to well-being. These results also point to the notion that among those high in traits related to callous manipulativeness, being inauthentic may represent a kind of authenticity: Among those low in authenticity, the Dark Tetrad composite predicted higher well-being. As noted, research on the association between Dark Tetrad traits and well-being has produced mixed results (e.g., Aghababaei & Błachnio, 2015; Durand, 2018; Love & Holder, 2014). The results of Study 1 suggest that authenticity may be an important moderator in this regard.

A weakness in Study 1 was the use of limited measures of constructs of interest. In addition to seeking to replicate Study 1, Study 2 employed full measures of each construct of interest. A conceptual ambiguity in Study 1 results was what it means for those who are high in the Dark Tetrad to endorse inauthenticity. Are they being authentic in their endorsement of inauthenticity? Inauthenticity is socially undesirable as are Dark Tetrad traits. Perhaps these results simply indicate a tendency to be more honest on the measures. Thus, Study 2 also included a measure of socially desirable responding.

5. Study 2

5.1. Overview and predictions

Study 2 sought to replicate and extend Study 1 results. We predicted that authenticity would be related to well-being and that this relationship would again be moderated by the Dark Tetrad such that authenticity and well-being would be more strongly related for those low on the dark traits than for those high on these traits. Based on the results of Study 1, we also predicted that the relationship between the Dark Tetrad and well-being would differ as a function of authenticity, with the Dark Tetrad relating positively to well-being among the inauthentic. Among the inauthentic, there are certainly individuals whose personal well-being suffers. However, as Study 1 showed, there appear to be others whose personalities predispose them to enjoy higher well-being even as they do not engage in authentic behavior. Thus, in the

context of inauthenticity, we expected the dark traits to be positively related to well-being. Additionally, the inclusion of a full measure of authenticity allowed us to explore whether the role of the Dark Tetrad in moderating the association between authenticity and well-being would differ based on various forms of authentic functioning.

In Study 2, we added two additional measures to attempt to address remaining issues in Study 1. First, Study 2 included the Balanced Inventory of Desirable Responding (BIDR, Paulhus, 1991; including subscales tapping self-deceptive enhancement and impression management). We used the BIDR to probe whether the pattern of results from Study 1 was attributable to desirability bias. Second, we measured organismic need satisfaction. Within SDT, optimal functioning is supported by the satisfaction of three basic, organismic needs, including autonomy, competence, and relatedness. Including a measure of the satisfaction of these needs allowed us to probe whether, among those high in the Dark Tetrad, being authentic is less strongly related to the satisfaction of organismic needs. Such results might add support to the idea that among these individuals *in*authenticity facilitates optimal functioning.

6. Method

6.1. Participants

415 participants were recruited to participate in a 30-minute online survey in exchange for \$2.50 via Amazon Mechanical Turk. The sample was 49.5% women, 70.3% White/European American, 10.3% Black/ African American, 8.0% Asian American, 6.0% Latino/a American, 0.8% Native American, and 1.3% "other." Ages ranged from 19 to 73 M (SD) = 34.50(10.74). Modal education was "some college" with 89.7 completing "some college" or more. Incomes ranged from under \$15,000 to over \$151,000 and median income was \$35,001-\$50,000.

6.2. Materials

All responses were recorded on a scale from 1 ("not at all/strongly disagree") to 7 ("very much/strongly agree") unless otherwise noted. To measure authenticity, we administered the 45-item Authenticity Inventory 3 (Kernis & Goldman, 2006), M(SD) = 4.82(0.76), $\alpha = 0.93$. This scale contains 4 subcomponents. Authentic awareness measures self-awareness of one's motivations, desires, strengths and weaknesses (e.g., "For better or for worse I am aware of who I truly am"), M (SD) = 5.15(0.91), $\alpha = 0.87$. The unbiased processing component measures one's tendency to engage in objective internal evaluations of self-relevant information (e.g., "I am very uncomfortable objectively considering my limitations and shortcomings," reverse scored), M (SD) = 4.40(0.99), α = 0.79. The third component, authentic behavior measures the extent to which an individual engages in behavior based on their internal values and preferences (e.g., "I am willing to endure negative consequences by expressing my true beliefs about things"), M (SD) = 4.67(0.94), $\alpha = 0.82$. The last component, relational orientation measures one's tendency to engage in genuine openness and truthfulness in one's close relationships (e.g. "I want people with whom I am close to understand my weaknesses"), M(SD) = 4.97(0.81),

As in Study 1, participants completed the MLQ-P, M (SD) = 4.77(1.49), α = 0.93; the SWLS M(SD) = 4.17(1.58), α = 0.91; and the single item measuring self-esteem, M(SD) = 4.23(1.88). To measure positive and negative affect, participants rated how much they felt, cheerful, enjoyment/fun, happy, pleased, M(SD) = 3.91(1.68), α = 0.93, and how much they felt anxious, frustrated, angry, and sad, M(SD) = 2.02(1.22), α = 0.84, for PA and NA, respectively.

Study 2 employed full measures of each Dark Tetrad member. Narcissism was measured using the 40-item Narcissistic Personality Index (NPI), which presents 40 pairs of items in forced choice format (Raskin & Hall, 1981). NPI responses are coded and summed such that

^{**} p < .001.

^{*} p < .05.

the narcissistic option receives a 1 and the alternative option receives a 0, resulting in a composite score that may range from 0 to 40, M (SD) = 11.92(8.88), α = 0.92. We also administered the 20-item Mach IV scale to measure Machiavellianism (Christie & Geis, 1970; sample item: "It is wise to flatter important people"), M(SD) = 3.58(0.78), α = 0.84. For psychopathy, participants completed the Levenson Self-Report psychopathy scale (Levenson, Kiehl, & Fitzpatrick, 1995; sample item: "For me, what's right is whatever I can get away with"), M (SD) = 2.75(1.06), α = 0.92. To measure sadism, participants also completed the 9-item Assessment of Sadistic Personality (Plouffe, Saklofske, & Smith, 2017; sample item: "When I mock someone, it is funny to see them get upset"), M(SD) = 2.13(1.12), α = 0.90.

To measure basic need satisfaction, participants also completed the 21-item Basic Psychological Need Satisfaction Scale (Gagné, 2003) that is composed of 3 subscales: Autonomy (e.g., "I feel like I am free to decide for myself how to live my life"), M(SD) = 4.93(1.08), $\alpha = 0.80$; competence (e.g., "People I know tell me I am good at what I do"), M(SD) = 4.85(1.27), $\alpha = 0.81$; and, relatedness (e.g. "People in my life care about me"), M(SD) = 4.99(1.09), $\alpha = 0.84$.

Last, participants completed the 40-item Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1991), which is composed of a self-deception subscale (e.g., "I don't care what other people really think of me"), M(SD) = 5.39(4.23), and an impression management subscale (e.g., "I sometimes try to get even rather than forgive and forget"), M(SD) = 6.01(4.51). Scale scores are computed by counting the extreme scores (ratings of 6 or 7) for items within each scale.

Additionally, participants responded to 2 attention check items, and those that failed both were dropped prior to analyses (n = 7).

7. Results

Study 2 analyses first focused on replicating Study 1 and considering the role of desirability bias in the results. Then, we turned to the possibility that basic need satisfaction might help to illuminate the inauthenticity of those high in the Dark Tetrad.

Correlations among measures of authenticity, well-being, the Dark Tetrad, impression management and self-deceptive enhancement are shown in Table 5. As can be seen, using full measures of the constructs of interest, relations were largely in keeping with Study 1. As expected, both impression management and self-deceptive enhancement were positively correlated with authenticity and well-being measures and negatively correlated with the Dark Tetrad. We again computed two composites, for the Dark Tetrad and well-being, aggregating standardized scores for constituent variables. Third order partials for the Dark Tetrad members and authenticity and well-being are show in Table 6. As can be seen, controlling for the other members, narcissism remained positively associated with well-being and authenticity variables, and Machiavellianism remained negatively related to these. The relationships between psychopathy and sadism with authenticity were stronger when controlling for the other Dark Tetrad members, but both remained weakly related or unrelated to well-being. The third order associations between the Dark Tetrad and socially desirable responding were similar to the zero order correlations, but controlling for the other members wiped out the relationships of impression management to narcissism and psychopathy.

As in Study 1, we computed partial correlations for the well-being composite and the Dark Tetrad members, controlling for narcissism: For Machiavellianism, partial r = -42, for psychopathy, partial r = -0.18, and for sadism, partial r = -20, all p's < .001.

7.1. Do dark traits moderate the link between authenticity and well-being?

We regressed the well-being composite on each Dark Tetrad trait and their composite with authenticity and their interactions in five hierarchical multiple regression equations. Table 7 shows the results. As can be seen, for the Dark Tetrad composite, narcissism, psychopathy,

Table 5
Correlations among measures, Study 2.

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Note. $N=393-412; \ ^{\circ}_{r} \le .001.$ SE was a single item. DTC = Dark Tetrad Composition; WBC = well-being composite; partial r's control for narcissism. Coefficients on the diagonal are α reliabilities. For gender,

Table 6Third order partials for Dark Tetrad members, authenticity and well-being.

	Narcissism	Machiavellianism	Psychopathy	Sadism
Authenticity	0.35**	-0.26**	-0.13*	-0.22**
Awareness	0.33**	-0.20**	0.00	-0.24**
Unbiased processing	0.25**	-0.12*	-0.13*	-0.13*
Behavior	0.30**	-0.23**	-0.15*	-0.08
Relational orientation	0.24**	-0.30**	-0.16*	-0.27**
Meaning in life	0.32**	-0.32**	0.04	-0.10
Life satisfaction	0.24**	-0.37**	0.10	0.00
Positive affect	0.26**	-0.33**	0.15*	-0.04
Negative affect	-0.06	0.14*	-0.07	0.20**
Self-esteem	0.44**	-0.27**	0.05	0.00
Impression management	0.09	-0.36**	-0.11	-0.21**
Self-deceptive enhancement	0.42**	-0.28**	0.03	-0.23**
WBC	0.36**	-0.38**	0.11*	-0.10

Note. N=396; coefficients are third order partials, controlling for the other three Dark Tetrad members.

and sadism, main effects were qualified by a significant interaction. For Machiavellianism, the main effect was significant and negative, but the interaction was not significant. Generated regression lines for individuals \pm 1 SD from the mean (or at the mean) on authenticity and the Dark Tetrad composite are shown in Fig. 2. As in Study 1, the positive association between authenticity and well-being was higher at low levels of Dark Tetrad. With the exception of Machiavellianism, when considering each Dark Tetrad trait individually, the patterns were similar to Fig. 2 (shown in Supplementary materials).

Table 8 shows correlations between each well-being variable and authenticity for participants ± 1 SD from the mean on the Dark Tetrad composite. As in Study 1, the strong relationship between authenticity and well-being was weakened at higher levels of the Dark Tetrad, and the magnitude of these differences was larger than in Study 1. Table 9 shows correlations for well-being and the Dark Tetrad among those low vs. high on authenticity. As in Study 1, at low levels of authenticity, the Dark Tetrad composite was positively related to well-being, whereas it was unrelated or negatively related to well-being at higher levels of authenticity. Replicating Study 1, these differences were significant for all well-being variables, except negative affect (which was not measured in Study 1).

We then computed parallel regression analyses for each subscale of

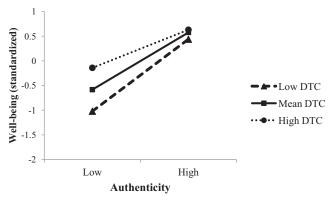


Fig. 2. Well-being as a function of the Dark Tetrad composite \times authenticity, Study 2.

Note. Generated regression lines predicting well-being from the Dark Tetrad composite and authenticity, Study 2.

Table 8Correlations between well-being and authenticity for those low/high in Dark Tetrad composite, Study 2.

	Low Dark Tetrad (1 <i>SD</i> below the mean)	High Dark Tetrad (1 SD above the mean)	z (difference)
Meaning in life	0.60**	0.10	3.52**
Life satisfaction	0.63**	0.05	4.10**
Positive affect	0.29*	-0.04	2.01
Negative affect	0.51*	0.32**	1.37
Self-esteem	0.55**	0.26*	2.09
Well-being composite	0.63**	0.28*	2.69*

Note. For low Dark Tetrad, n=70; for high Dark Tetrad, n=77. **p<.001; *p<.026. Negative affect was reverse scored. Higher values reflect less negative affect.

the authenticity measure. Results (shown in the Supplement) were essentially the same as the full scale, with the exception of authentic awareness, which was marginally significant. Examining Dark Tetrad members separately revealed that results were stronger for psychopathy and sadism compared to the other Dark Tetrad members (see the Supplement).

Table 7Moderation analyses regressing well-being on authenticity × Dark Tetrad, Study 2.

Dark Tetrad	Main effect step \mathbb{R}^2	Main effects β	Interaction step \mathbb{R}^2	Interaction β	Equation R ²
Narcissism	0.36***		0.01*		0.37***
Narcissism		0.26***		-0.10*	
Authenticity		0.52***			
Machiavellianism	0.30***		0.00		0.30***
Machiavellianism		-0.10*			
Authenticity		0.50***		0.00	
Psychopathy	0.33***		0.01*		0.34***
Psychopathy		0.22***		-0.10*	
Authenticity		0.62***			
Sadism	0.32***		0.02**		0.34***
Sadism		0.17***		-0.14**	
Authenticity		0.60***			
Dark Triad composite	0.32***		0.02**		0.34***
DTC		0.18***		-0.13**	
Authenticity		0.60***			

Note.

p < .023.

^{**} p < .001.

^{*} p < .02.

^{**} p < .002.

^{***} p < .001.

Table 9Correlations between well-being and Dark Tetrad composite, for those low/high in authenticity, Study 2.

	Low authenticity (1 SD below the mean)	High authenticity (1 SD above the mean)	z (difference)
Meaning in life	0.33**	-0.35*	3.92**
Life satisfaction	0.47**	-0.28*	4.42**
Positive affect	0.48*	-0.14	3.68**
Negative affect	-0.20	0.04	1.34
Self-esteem	0.60**	0.06	3.50**
Well-being composite	0.44**	-0.21	3.79**

Note. For low authenticity, n=68; for high authenticity, n=61. **p<.001; *p<.05. Negative affect was reverse scored. Higher values reflect less negative affect.

7.2. Is the pattern explained by desirability bias?

We regressed well-being on impression management (IM) and self-deceptive enhancement (SDE) on the first step, ($\Delta R^2 = 0.24$, p < .001), main effects of authenticity and Dark Tetrad composite on the second ($\Delta R^2 = 0.11$, p < .001), and the authenticity × Dark Tetrad composite interaction on the third, ($\Delta R^2 = 0.02$, p = .002). Controlling for IM ($\beta = -0.07$) SDE ($\beta = 0.23$, p < .001), main effects for authenticity ($\beta = 0.45$, p < .001) and the Dark Tetrad composite ($\beta = 0.14$, p = .006) were qualified by the predicted interaction, ($\beta = -0.13$, p = .002).

In addition, neither subscale of the BIDR interacted with the Dark Tetrad composite to predict well-being. When impression management and self-deceptive enhancement and were entered into an equation predicting well-being from authenticity, the Dark Tetrad, and all possible interactions, main effects for authenticity, $\beta=0.44$ and self-deceptive enhancement $\beta=0.25$, were qualified only by the previously identified Dark Tetrad \times authenticity interaction, $\beta=-0.22$, all pis<0.001. Results for the Dark Tetrad traits considered individually are shown in the Supplement. Overall, the moderation of the association between authenticity and well-being by the Dark Tetrad was not explained by desirability bias.

7.3. Basic need satisfaction

Table 10 shows the correlations for basic need satisfaction, overall authenticity, and the well-being and Dark Tetrad composites. (All authenticity subscales were strongly correlated with basic need satisfaction, with correlations ranging from 0.50 for unbiased processing to 0.70 for authentic awareness, all p's < .001). To probe whether inauthenticity might facilitate need satisfaction among those high on the Dark Tetrad, we regressed overall need satisfaction and each of the three needs on authenticity, the Dark Tetrad composite, and their interaction. Results for the 5 regression equations are shown in Table 11.

 $\begin{tabular}{ll} \textbf{Table 11} \\ \textbf{Moderation analyses regressing BNS on authenticity} \times \textbf{Dark Tetrad, Study 2}. \\ \end{tabular}$

Authenticity	Main effect step R^2	Main effects β	Interaction step R ²	Interaction β	Equation R ²
Autonomy	0.65**		0.00		0.65**
DTC		0.01		-0.03	
Authenticity		0.25**			
Competence	0.67**		0.01*		0.68**
DTC		0.19**			
Authenticity		0.30**		-0.06*	
Relatedness	0.64**		0.00		0.64**
DTC		-0.18**		0.05	
Authenticity		0.03			
Basic need satisfaction	0.52**		0.00		0.52**
DTC		0.01		-0.05	
Authenticity		0.72**			

Note. ${}^{\circ}p = .034, {}^{\circ\circ}p < .001$. Each equation predicting autonomy, competence or relatedness controlled for the other two needs as covariates that were not entered as the outcome variable.

As can be seen, only competence was significantly predicted by the Dark Tetrad composite, overall authenticity, and their interaction. Importantly, controlling for well-being fully wiped out this interaction, suggesting that it was accounted for by the overlap between well-being and competence. In contrast, controlling or all three needs, the authenticity × Dark Tetrad composite interaction remained a significant predictor of well-being, $\beta=-0.09,\,p=.008.$ Thus, the pattern identified for well-being does not generalize to organismic need satisfaction, which was related to well-being regardless of Dark Tetrad traits.

7.4. Brief discussion of Study 2

Study 2 replicated the moderating role of the Dark Tetrad in the relationship between authenticity and well-being using more comprehensive measures of the variables of interest. Once again, authenticity and well-being were less strongly linked among individuals high on the Dark Tetrad. Study 2 also showed that this pattern of moderation was not accounted for by desirability bias. Moreover, as in Study 1, examining participants high vs. low on authenticity revealed positive associations between the Dark Tetrad and well-being at relatively low levels of authenticity.

While the results for the Dark Tetrad replicated Study 1 overall, Machiavellianism did not show the same pattern as in Study 1. The failure to replicate the results for Machiavellianism in Study 2 may be due to a chance finding in Study 1 or to differences in the measures used across studies. Study 1 employed a brief measure of Machiavellianism, while Study 2 employed a long measure of this construct that included items tapping Machiavellian tactics (similar content to Study 1), as well as Machiavellian views of the world and morality (different from Study 1). It is possible that differences in the measures account for differences

Table 10
Basic need satisfaction, Dark Tetrad, authenticity, and well-being, Study 2.

	BNS	BNS: A	BNS: C	BNS: R	IM	SDE	Auth
Basic need sat.							
Autonomy	0.90*						
Competence	0.91*	0.73*					
Relatedness	0.90*	0.73*	0.72*				
Impression mgmt.	0.32*	0.31*	0.26*	0.31*			
Self-deceptive enhancement	0.58*	0.55*	0.56*	0.47*	0.49*		
Authenticity	0.72*	0.67*	0.67*	0.61*	0.47*	0.64*	
Dark Tetrad Comp.	-0.21*	-0.21*	-0.09	-0.30*	-0.54*	-0.09	-0.32*
Well-being Comp.	0.76*	0.65*	0.76*	0.64*	0.21*	0.49*	0.54*

Note. N = 393, *p < .001. BNS = basic need satisfaction (A = autonomy, C = competence, R = relatedness). IM = impression management. SDE = self-deceptive enhancement. Auth = authenticity.

in results. Future studies should further probe the function of Machiavellianism in the relationship between authenticity and wellbeing, if any.

Finally, Study 2 also demonstrated that those high on the Dark Tetrad that endorsed inauthenticity did not experience greater satisfaction of their basic needs. Thus, people high on the Dark Tetrad do not appear to be likely to have their basic needs met via lower authenticity. Interestingly, having one's needs for autonomy, relatedness, and competence met is associated with well-being regardless of the content of a person's personality.

8. General discussion

Two correlational studies provided support for the prediction that Dark Tetrad traits moderate the relationship between authenticity and well-being. In both studies, authenticity was more weakly related to well-being among those high in dark traits. In addition, among the inauthentic, Dark Tetrad traits were positively related to well-being. While analyses providing support for predictions focused on composite variables reflecting overall well-being, and overall dark personality traits, this pattern was generally consistent for each member of the Dark Tetrad, and each individual well-being variable. For the Dark Tetrad, only results for Machiavellianism were inconsistent across studies, and this inconsistency may have been due to measurement differences.

Importantly, while well-being was positively associated to the Dark Tetrad for those who also endorsed inauthenticity (compared to those low in the Dark Tetrad), authenticity did not relate to *lower* well-being for people with relatively dark personalities. Even among those high in the Dark Tetrad, authenticity was related positively to well-being (to a lesser degree than among those low in the Dark Tetrad). The present research indicates that for those high on the Dark Tetrad, inauthenticity is less problematic for personal well-being.

A remaining question is, why were Dark Tetrad personality traits positively related to well-being at low levels of authenticity? We offer several possible explanations. One possibility involves the definition of authenticity. Fundamentally, being authentic refers to being one's true self. What does this definition imply for people with personality traits that involve characteristics such as grandiose self-views and affinity for manipulation? It is possible that for those high on the Dark Tetrad, to be one's true self is to be inauthentic. If it is being one's true self that promotes higher well-being (rather than simply scoring high on measures of authenticity), this may explain why we observed a positive relationship between the Dark Tetrad and well-being at low levels of authenticity. Another possibility is that for individuals high on the Dark Tetrad, maintaining important social connections (with loved ones, friends, and in the professional realm) requires that they not always put their "true self" on display. Thus, it may be that inauthenticity allows those high on the Dark Tetrad to be kind and prosocial and maintain important social relationships. Still another possibility is that inauthenticity is a strategy for those high on the Dark Tetrad to manipulate others and achieve their goals. Goal attainment may confer benefits to well-being, as well (e.g., Heckhausen & Kay, 2018). Study 2 results suggest that these goals may not serve basic organismic needs, as inauthenticity among those high in Dark Tetrad did not related positively to the satisfaction of these needs.

8.1. The Dark Tetrad and well-being

The present data address an inconsistency in the literature with regard to the ways that the Dark Tetrad relate to well-being. Although typically studied in the context of negative behaviors (such as deception, Jones & Paulhus, 2017), the correlations between these traits and well-being have also attracted scholarly attention. Given its relatively recent addition to the Dark Tetrad, research has not examined sadism and well-being. The present data show that sadism is generally unrelated to well-being, but is positively associated with negative affect.

In past research, associations for the other three traits vary and, at times, depend on the specific measure used. Overall, narcissism tends to relate positively to well-being (e.g., Aghababaei & Błachnio, 2015; Egan, Chan, & Shorter, 2014). Particularly as measured by the Narcissistic Personality Inventory, narcissism predicts greater daily levels of life satisfaction and positive mood (Giacomin & Jordan, 2016). We replicated the positive association between narcissism and various forms of well-being in both Studies 1 and 2. Psychopathy relates to depressive symptoms and lowered well-being (Aghababaei & Błachnio, 2015; Love & Holder, 2014), though some facets of psychopathy might relate positively to well-being (Durand, 2018). However, in the current studies, psychopathy was uniformly unrelated to various measures of well-being. A negative correlation between Machiavellianism and wellbeing has been reported (Egan et al., 2014) but other studies have found no significant associations (Aghababaei & Błachnio, 2015). In Study 1, using a brief measure of Machiavellianism, we found a weak negative relationship with well-being, and, in Study 2, using a more comprehensive measure, we found that Machiavellianism negatively associated with most measures of well-being. Differences across studies for Machiavellianism may indicate that the cynical view of the world that this trait implies is particularly negatively related to psychological functioning. The present results suggest that authenticity may be an important moderator to consider in the relationship between Dark Tetrad traits and well-being.

8.2. Hedonic vs. eudaimonic well-being

These results also bear on the literature regarding hedonic wellbeing (well-being arising from activities that make one feel good) vs. eudaimonic well-being (well-being arising from activities that are typically morally pure and involve self-actualization). One might expect that the well-being associated with inauthenticity for those high on the Dark Tetrad would be specific only to hedonic well-being, because it does not involve moral or growth-oriented components in the same way as eudaimonic well-being. However, the current research suggests that the well-being associated with inauthenticity among those high on Dark Tetrad traits is not specific to hedonic well-being (e.g., high positive affect and low negative affect), but also applies to facets of well-being typically considered as eudaimonic happiness (e.g., meaning in life, life satisfaction). Nonetheless, while these data do offer support for the prediction that authenticity is less strongly linked to well-being, and that inauthenticity is associated with subjective well-being among individuals high on "dark" traits, they also suggest that inauthenticity is not a viable strategy for the satisfaction of basic needs for autonomy, competence, and relatedness. These results might suggest that while Dark Tetrad traits buffer against the negative effects of inauthenticity on well-being, this strategy may not facilitate personal growth and flourishing. Future research might further address the discrepancies between indicators of well-being and need satisfaction uncovered here, and investigate if and how individuals high on the Dark Tetrad might satisfy their basic needs.

8.3. Limitations and future directions

A number of limitations to the current research warrant note. Both studies relied on cross-sectional, self-report data, which limits our ability to understand the temporal order of these relationship, and may call into question the quality of the personality assessments obtained. In Study 2, we addressed this limitation by measuring impression management, and self-deceptive enhancement, but accounting for social desirability did not change the relationships among authenticity, wellbeing, and the Dark Tetrad.

An important consideration is what exactly it means for someone high on the Dark Tetrad, whose personality involves tendencies for manipulation and deceit, to endorse items reflecting those dispositions, or items reflecting authenticity. Perhaps inauthenticity is simply

personality-consistent behavior for individuals high on these traits. Nonetheless, because well-being and authenticity are socially desirable features, and the Dark Tetrad are socially undesirable, the possibility of deceptive responding remains a concern. As such, future research should study the relationships among these constructs using behavioral and observational paradigms. Third party observers or peer reporters may be able to provide objective reports that are less contaminated by bias to corroborate the associations established by the present research. Additionally, research using behavioral paradigms would be able to provide individuals both high and low on the Dark Tetrad the opportunity to behave in authentic or inauthentic ways and measure their resulting sense of well-being. It also still remains unclear exactly why those high on the Dark Tetrad report higher well-being at low levels of authenticity. In our view, there are a number of possible explanations, including successful goal pursuit, maintaining social relationships, and personality-congruent behavior. Future research should use such behavioral and observational paradigms to address this lingering issue.

Lastly, in the current investigation, we studied the relationship between well-being and authenticity in the context of relatively extreme traits. It is possible that other "negative," yet less extreme traits, such as high neuroticism and low agreeableness might also show similar moderation of the relationship between well-being and authenticity. There may be benefits to focusing on less extreme traits. For instance, high neuroticism and low agreeableness may be more prevalent in the general population, and such traits may not be as socially undesirable as the Dark Tetrad. Additionally, it may be fruitful for future research to consider the role of the Dark Tetrad in the relationship between wellbeing and state authenticity, rather than dispositional authenticity (Sedikides, Slabu, Lenton, & Thomaes, 2017). Understanding how authentic expressions of the self fluctuate across time and situations, especially for those high vs. low on the Dark Tetrad, may help further illuminate the function of inauthenticity in the context of such personality traits.

8.4. Conclusion

The present results support the idea that "to be that self which one truly is" is an excellent path to well-being. However, among individuals with dark personalities, inauthenticity may not exact a toll on personal well-being. Instead, among such individuals, inauthenticity may provide a context in which such socially undesirable traits are, in fact, associated with higher well-being.

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Appendix A. Authenticity items, Study 1 (subscale)

- 1. For better or for worse I am aware of who I truly am. Awareness
- 2. I understand why I believe the things I do about myself. Awareness
- I actively try to understand which of my self-aspects fit together to form my core or true-self. Awareness
- I am very uncomfortable objectively considering my limitations and shortcomings. Unbiased Processing
- I have a very good understanding of why I do the things I do. Awareness
- I find it very difficult to critically assess myself. Unbiased Processing
- 7. I tend to have difficulty accepting my personal faults, so I try to cast

- them in a more positive way. Unbiased Processing
- 8. People close to me would be shocked or surprised if they discovered what I keep inside of me. **Relational Orientation**
- 9. I try to act in a manner that is consistent with my personally held values, even if others criticize or reject me for doing so. **Behavior**
- I actively attempt to understand myself as best as possible.
 Awareness

Appendix B. Supplementary material

Supplementary material to this article can be found online at https://doi.org/10.1016/j.paid.2018.08.022.

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