The Durand Adaptive Psychopathic Traits Questionnaire: Development and Validation

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Abstract

While the term ‘‘psychopathy’’ is embedded with negativity, evidence points to the existence of another form of psychopathy, which involves adaptive traits such as stress and anxiety immunity, remarkable social skills, noteworthy leadership ability, and an absence of fear. The newly developed Durand Adaptive Psychopathic Traits Questionnaire (DAPTQ) aims to assess adaptive traits known to correlate with the psychopathic personality. Validation of the questionnaire among 765 individuals from the community gave support to a 10-factor solution: Leadership, Logical Thinking, Composure, Creativity, Fearlessness, Money Smart, Focus, Extroversion, Consequentialism, and Management. The DAPTQ and its 10 subscales demonstrated good internal consistency reliability in a community sample (0.64 - 0.88). Good convergent and divergent validity was confirmed by administering the DAPTQ alongside established measures of the psychopathic personality. Subscales validation against well-established personality assessments further confirms the DAPTQ’s strength. These findings support the potential of the DAPTQ as an instrument for measuring psychopathy-associated adaptive traits. Limitations of the present study and potential directions for future research are also discussed. Further studies are needed to validate the DAPTQ and its subscales against a wider range of personality traits and behaviors.

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Introduction

Many researchers describe psychopathy as a severe personality disorder characterized by emotional detachment, callousness, lack of empathy, impulsivity, social deviance, and poor behavioral control (Gao & Tang, 2013; López, Poy, Patrick, & Moltó, 2013; Tassy, Deruelle, Mancini, Leistedt, & Wicker, 2013). The vast majority of studies on psychopaths have been conducted on inmates, leading to this standard negative description of psychopathy (Berg et al., 2013). However, some theoretical models of psychopathy include an adaptive component. For instance, the Triarchic model of psychopathy describes the concept of psychopathy in terms of disinhibition, meanness, and boldness (Patrick, Fowles, & Krueger, 2009). While disinhibition and meanness assess maladaptive aspects of psychopathy, the construct of boldness refers to adaptive traits such as fearlessness, stress immunity, bravery, and social charm. Thus, this model suggests that psychopathy should be seen as a combination of maladaptive and adaptive traits (Polaschek & Daly, 2013). However, not every diagnostic tool includes this combination of traits.

The diagnosis of psychopathy is commonly achieved through the use of the Psychopathy Checklist-Revised (PCL-R) (Hare, 1991, 2003). The PCL-R, which is the most common and well-validated tool for assessing psychopathy, is a time and resource-consuming procedure requiring a one-on-one interview by a certified assessor for approximately 90 minutes (Ray, Weir, Poythress, & Rickelm, 2011). Factor analysis of the PCL-R identified two-dimensional constructs reflecting two variants of psychopathy. Primary psychopathy (Factor 1) is associated with emotional and interpersonal traits, which include callousness, remorseless exploitation of others, and lack of empathy. Secondary psychopathy (Factor 2) is associated with the social deviance traits of psychopathy, which include criminal and impulsive features, alongside with anxiety, and neuroticism (Dunlop et al., 2011). Although the PCL-R is well-validated, its use is mostly

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restricted to forensic and criminal populations. Indeed, the checklist mainly focuses on the traits found in psychopathic criminals, and may therefore not necessarily apply to the general population (Hall & Benning, 2006; Ray et al., 2011).

The Psychopathic Personality Inventory (PPI) is an alternative to the PCL-R, assessing psychopathic traits on eight subscales using a self-report questionnaire (Lilienfeld & Andrews, 1996). The PPI is also divided into two facets, Fearless Dominance (PPI-I) and Impulsive Antisociality (PPI-II). PPI-I is related to boldness and includes adaptive traits such as social poise, anxiety and stress immunity, and interpersonal boldness, while PPI-II is associated with a combination of disinhibition and meanness. This classification method of psychopathic characteristics is different from the PCL-R, as the Factor 1 of the PCL-R mostly captures elements of meanness and very few elements of boldness (Dunlop et al., 2011; Polaschek & Daly, 2013). Although PPI-I assesses several adaptive characteristics related to the psychopathic personality, the questionnaire measures only a portion of adaptive traits known to correlate with psychopathy.

The term ‘‘successful psychopath’’ refers to individuals who possess several core traits of psychopathy (e.g., lack of empathy, high dominance), but who lack pervasive traits found mostly in secondary psychopathy, such as aggressive externalizing behaviors (Cleckley, 1941; López et al., 2013; Patrick, 2007). The idea behind the concept of successful psychopathy is highly debated in the scientific community. Some researchers describe successful psychopaths as ruthless and irresponsible individuals who abuse others in order to climb to the top of an organization (Boddy, Miles, Sanyal, & Hartog, 2015; Boddy, 2014). However, other researchers focus on the potential links between PPI-I and adaptive behaviors, which include characteristics such as fearlessness, leadership, stress and anxiety immunity, and social dominance (Camp,

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Skeem, Barchard, Lilienfeld, & Poythress, 2013; Smith, Watts, & Lilienfeld, 2014). Successful psychopathy can be interpreted by three models (Hall & Benning, 2006; Lilienfeld, Watts, & Smith, 2015). First, the *differential-severity model* conceptualizes successful psychopathy as a milder form of psychopathy. Hypothesizing that psychopathy is a unitary construct, successful and unsuccessful psychopathy represent the same disorder, with only a difference in intensity. Second, the *moderated-expression model* presumes that successful psychopathy is an atypical manifestation of psychopathy due to the emergence of protective factors diminishing the effect of maladaptive outcomes related to psychopathy. Third, the *differential-configuration model* presumes that successful and unsuccessful psychopathy share the same core personality traits (antagonism), but successful psychopathy is related to boldness, extraversion, and conscientiousness, whereas unsuccessful psychopathy is related to impulsivity and low conscientiousness (Mullins-Sweatt, Glover, Derefinko, Miller, & Widiger, 2010).

A number of studies have identified several adaptive traits related to PPI-I, which could be related to successful psychopaths. In order to identify these studies, an online search of the Medline and PsychInfo databases was conducted using the following keywords: [("Psychopathy" OR "Psychopathic traits" OR "Psychopathic Personality Inventory")]. Studies were selected based on whether they showed at least one significant correlation between an adaptive trait and psychopathy or psychopathic personality traits within participants. We define the term ''adaptive trait'' as a trait which maximizes an individual's survival probability within a set environment.

Three types of adaptive characteristics emerged from the aforementioned studies. Social characteristics include high levels of social charm, great leadership abilities, notable displays of heroism, the ability to discard unnecessary relationships, and good management strategies (Babiak, Neumann, & Hare, 2010; Dunlop et al., 2011; Gervais, Kline, Ludmer, George, &

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Manson, 2013; Hall, Benning, & Patrick, 2004; Lilienfeld, Latzman, Watts, Smith, & Dutton, 2014; Smith, Lilienfeld, Coffey, & Dabbs, 2013). Characteristics related to protective features include low levels of anxiety and stress, little nervousness, and absence of fear, both physical and psychological (Camp et al., 2013; Dindo & Fowles, 2011; Dunlop et al., 2011; Gao & Tang, 2013; Hall et al., 2004; López et al., 2013; Uzieblo, Verschuere, Van den Bussche, & Crombez, 2010; Zágon & Jackson, 1994). Characteristics related to personal features include boldness, low impulsivity, low provoked aggression, willingness to take calculated risks, absence of irrationality, strategic thinking, innovation, high self-esteem, superior cognitive focus and sensitivity to reward (Babiak et al., 2010; Baskin-Sommers, Zeier, & Newman, 2009; Camp et al., 2013; Dunlop et al., 2011; Durand, 2016; Eisenbarth, Lilienfeld, & Yarkoni, 2015; Falkenbach, Howe, & Falki, 2013; Hicks, Markon, Patrick, Krueger, & Newman, 2004; Ray et al., 2011; Takahashi, Takagishi, Nishinaka, Makino, & Fukui, 2014; Uzieblo et al., 2010). Altogether, these characteristics seem to be correlated with a high display of Factor 1 traits as defined by the PPI.

While these characteristics are considered adaptive and linked to PPI-I, it is unknown how they interact with each other. It is possible that different patterns among these characteristics lead to the existence of subtypes within PPI-I. Furthermore, the spectrum of adaptive characteristics assessed by the PPI is limited. Thus, the purpose of this article is to validate the Durand Adaptive Psychopathic Traits Questionnaire (DAPTQ), a newly developed self-report measure assessing adaptive traits known to correlate with the psychopathic personality as defined by the PPI. This questionnaire is not intended to diagnose or assess the presence of psychopathy. This article outlines the construction of the DAPTQ, along with its subscales, reports the DAPTQ's basic psychometric properties and describes the validity of the questionnaire in multiple samples.

Study 1: Test development and preliminary psychometric properties

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Participants

The initial construction of the test spanned two rounds of items writing and selection, data collection, and analyses. The first sample consisted of 118 participants and the second sample consisted of 305 participants. Participants of both samples were recruited on social media and websites dedicated to psychological research (e.g.: callforparticipants.com, onlinepsychresearch.co.uk, etc.). Participants were invited to take part in the study if they were fluent in English and over 18 years old. In order to assess for potential deviant responses, we examined PPI-SF data through the Variable Response Inconsistency ($VRIN^2$). The purpose of this statistical procedure is to examine the inconsistencies within 10 pair of highly correlated items from the PPI-SF (Tellegen, 1982). For each of the 10 pairs, the score obtained on the first item is subtracted from the second item, and the differences of the 10 pairs are summed in order to give a total score. A higher score signifies greater variability within similar questions expecting similar answers. Using this method, we were able to identify 6 outliers in the first sample and 14 outliers in the second with a $VRIN^2 \geq 8$. Analyses were performed on the responses of the remaining 112 participants (72 males and 40 females, M = 26.0 years old, SD = 9.23) of the first sample and 291 participants (186 males and 105 females M = 25.3 years old, SD = 8.40) of the second sample. No other demographic than age and sex were recorded in study 1. All participants gave informed consent before participating in any part of the study. This series of studies has been approved by the University of Maastricht Psychology and Neuroscience department's ethics committee, case number ECP-157-03-10-2015.

Measures

Psychopathic Personality Inventory-Short Form (PPI-SF; Lilienfeld & Widows, 2005). The PPI-SF is a self-report questionnaire of 56 items assessing psychopathic traits on 8 subscales

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derived from the original PPI. A total score is given, along with a score for each subscale: Machiavellian Egocentricity, Social Potency, Fearlessness, Coldheartedness, Impulsive Nonconformity, Blame Externalization, Carefree Nonplanfulness, and Stress Immunity. The scales are divided into two factors. PPI-I is composed of Stress Immunity, Social Potency and Fearlessness. PPI-II is composed of Blame Externalization, Machiavellian Egocentricity, Carefree Nonplanfulness and Impulsive Nonconformity. Coldheartedness is not under either factor. This questionnaire has been used in several studies to assess psychopathic traits in the general population and is considered to be a well-validated instrument (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003; Patrick, Edens, Poythress, Lilienfeld, & Benning, 2006). Previous investigations demonstrated good convergent validity of the PPI-SF subscales with other measures of the psychopathic personality such as the Triarchic Psychopathy Measures (Hall et al., 2014) and the Elemental Psychopathy Assessment (Lynam et al., 2011).

Levenson Self-Report psychopathy (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995). The LSRP is a self-report questionnaire of 26 items assessing psychopathic attitudes and beliefs. The scale was designed using the same factors as the PCL-R for use in non-institutional settings. This test is structured around the PCL-R's Factor 1 and Factor 2. The Factor 1 subscale assesses elements of meanness such as proneness to lying, lack of empathy, and manipulative behaviors. The Factor 2 subscale assesses elements of disinhibition such as impulsivity, proneness to frustration, lack of goals, and emotional negativity. Previous studies have already assessed the good convergent and discriminant validity of both scales (Brinkley, Schmitt, Smith, & Newman, 2001; Ross, Bye, Wrobel, & Horton, 2008). However, due to the low correlation between the PCL-R and the PPI, LSRP Factor 1 correlates poorly with PPI-I ($r = .08$). Alternatively, LSRP Factor 2 has been shown to correlate strongly with PPI-II ($r = .63$) (Ross, Benning, Patrick,

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Thompson, & Thurston, 2009). These results support the divergent validity between Factor 1 and PPI-I, while supporting the convergent validity between Factor 2 and PPI-II.

Procedure

We first identified the 19 constructs, which assess adaptive traits, based on the findings reported in the introduction. Once these constructs were established, 10 items were written for each construct. All 19 adaptive traits can be found in Table 1. Half of these items were written in the negative form for reverse coding. Items were answered using a six-option (Strongly Disagree, Disagree, Slightly Disagree, Slightly Agree, Agree, Strongly Agree) Likert-type format to avoid any bias of central tendency (Guilford, 1954).

The first sample of participants was invited to fill-in the 190-item DAPTQ, the PPI-SF and the LSRP. In order to identify items with the highest validity within each construct, Cronbach's analyses were performed for each group of 10 items in all 19 adaptive traits' subscales. Upon examination of the Cronbach's alpha by deleting the item, the 4 items with the weakest relationship within their respective subscales were removed, leaving a total of 114 questions. The second group of participants was then invited to fill in the 114-item DAPTQ along with the PPI-SF and the LSRP. Cronbach's analyses were performed for each construct in the second sample's results in order to remove the two least correlated items of each construct. This left the four most correlated items for each construct. The removal of 6 items by construct ensured the homogeneity of each construct, leaving out potential non-related items. Two-tailed Pearson correlation confirmed the presence of weak to strong correlations among all scales, at the exception of ''Discarding relationships with no respects''. Items pertaining to that scale were removed from the questionnaire. The remaining 72 items (49 keyed positively, 23 keyed negatively) were randomized once again, which was followed by recruitment for study 2.

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Study 2: Test validation and psychometric properties from a community sample

Participants

Eight hundred and nine (N = 809) individuals from the community were recruited once again via social media and websites dedicated to psychological research for the validation of the DAPTQ. Potential participants were required to not have participated in a previous phase of the DAPTQ's development, be over 18 years old, be fluent in English, and to not be receiving treatment from a mental health care professional. A total of 25 individuals were removed from subsequent analyses due to a $VRIN^2 \geq 8$ on the PPI-SF. Further analyses of standard deviation selected a total of 19 additional outliers on one of the three questionnaire total score which were also removed, leaving a final sample of 765 individuals. The final sample consisted of 519 males and 246 females. The location of most participants was Europe (53%), followed by North America (23%), Asia (11%), South America (6%) and Africa (4%). Regarding education level, the largest group among participants was college dropouts (27%). Following this, the most common education levels completed or in progress were: college (26%), high school (19%), Master degree (14%) and technical school (6%). Regarding ethnic composition, most participants were Caucasian (76%), followed by Hispanic (8%), Asian (11%), or other (5%). Participants' mean age was 24.5 years (SD = 6.87).

Procedure

Participants were invited to fill-in the latest version of the DAPTQ, along with the PPI-SF and the LSRP. An exploratory factor analysis (EFA; maximum likelihood method with direct oblimin rotation) was conducted on the 72 items of the DAPTQ in order to determine the number of subscales within the DAPTQ. Using O'Connor (2000) SPSS syntax, a parallel analysis using

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components was also conducted, suggesting to retain the first 11 factors of the EFA. Items retained in the final version of the DAPTQ loaded .3 or greater on their targeted factor while not loading .3 or greater on any other factor.

Results and discussion

DAPTQ subscales

EFA gave result to an 11 factors solution, accounting for 53.37% of the variance. The Eigenvalues of these 11 factors ranged between 11.46 and 1.39. The 11 subscales of the DAPTQ, the final number of items for each subscale, a sample item for each subscale, Cronbach's alpha, Eigenvalues, and cumulative variance in percentage are shown in Table 2. Out of the original 72 items, 48 items were successfully distributed among the factors.

Sex differences

Several gender differences were found on the DAPTQ and other questionnaires. Males (M = 176.15, SD = 23.77) scored higher than females (M = 164.89, SD = 22.29) on the DAPTQ total score ($F(1, 764) = 38.93$, $p < .001$, $r = .24$), as well as on five other factors: Logical Thinking (Males, M = 21.96, SD = 4.46; Females, M = 20.73, SD = 4.53; $F(1, 764) = 12.70$, $p < .001$, $r = .14$), Composure (Males, M = 21.94, SD = 6.29; Females, M = 18.25, SD = 6.84; $F(1, 764) = 54.41$, $p < .001$, $r = .27$), Fearlessness (Males, M = 23.72, SD = 5.84; Females, M = 20.32, SD = 5.92; $F(1, 764) = 55.96$, $p < .001$, $r = .28$), Extroversion (Males, M = 20.52, SD = 6.54; Females, M = 19.07, SD = 6.53; $F(1, 764) = 8.32$, $p = .004$, $r = .11$), and Consequentialism (Males, M = 11.62, SD = 3.97; Females, M = 9.84, SD = 3.03; $F(1, 764) = 36.10$, $p < .001$, $r = .24$). Alternatively, females scored higher than males on one factor, namely Creativity (Males, M = 14.95, SD = 4.62; Females, M = 16.32, SD = 4.61; $F(1, 764) = 14.79$, $p < .001$, $r = .15$). Males

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also received a higher PPI-SF total score (Males, M = 134.72, SD = 13.97; Females, M = 127.47, SD = 14.45; $F(1, 764) = 44.0$, $p < .001$, $r = .25$) and LSRP total score (Males, M = 55.70, SD = 10.20; Females, M = 50.94, SD = 9.54; $F(1, 764) = 38.0$, $p < .001$, $r = .23$) These findings are consistent with previous results demonstrating that psychopathic traits, including adaptive psychopathic traits, are more common among men than women (Lilienfeld & Andrews, 1996).

Internal consistency reliability

The internal consistency reliability of the DAPTQ total score, as assessed by Cronbach's alpha, is .86. The internal consistency reliability of the current sample on the 11 factors of the DAPTQ ranged from .64 to .86. In comparison, the internal consistency reliability of the PPI-SF total score from the current study was .76, and its eight subscales' internal consistency reliability ranged from .53 to .87. The internal consistency reliability of the LSRP was .85. Deeper examination of the subscales' Cronbach's alphas did not identify any items whose removal would significantly increase the overall internal consistency reliability.

Correlations among the DAPTQ, the PPI-SF, and the LSRP

The intercorrelations among the 11 DAPTQ factors are shown in Table 3A. Ten out of the 11 subscales moderately to strongly correlated with the DAPTQ total score (r = .31 to .64). Similarity did not display any correlation with the DAPTQ total, and very few weak correlations with other factors (r = -.09 to -.20).

The correlation between the DAPTQ and its factors with the PPI-SF and the LSRP can be examined in Table 3B. The DAPTQ is moderately correlated with the PPI-SF total score (r = .46). Closer examination of the PPI-SF's subscales revealed that scores on Social Potency, Carefree Nonplanfulness, and Stress Immunity subscales show the strongest correlation with the DAPTQ,

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while Fearlessness, Coldheartedness, Impulsive Nonconformity, Blame Externalization, and Machiavellian Egocentricity show the weakest correlation. PPI-I shows a strong positive correlation with the DAPTQ, which is not found on PPI-II. This is consistent with the presumed adaptive nature of PPI-I individuals. The LSRP total score does not show any correlation with the DAPTQ. LSRP Factor 1 shows a weak positive correlation with DAPTQ, while LSRP Factor 2 shows a moderate negative correlation.

Examination of the DAPTQ's subscales demonstrates several strong correlations supporting the subscales' validity. First, Leadership is highly correlated with Social Potency (r = .57). Second, Composure correlates highly with Stress Immunity (r = .61) and PPI-I (r = .49). Third, Fearlessness correlates strongly with the fearlessness subscale of the PPI-SF (r = .59), PPI-I (r = .65), and PPI-SF Total (r = .62). Fourth, Extroversion is strongly correlated with Social Potency (r = .77) and PPI-I (r = .58). Fifth, Consequentialism shows strong correlations to Machiavellian Egocentricity (r = .52), LSRP Factor 1 (r = .66), and LSRP Total (r = .59). Lastly, Management is negatively highly correlated with Carefree Nonplanfulness (r = -.47) and LSRP Factor 2 (r = -.49).

Due to the lack of correlation between the Similarity factor and the DAPTQ total score, alongside the lack of moderate to strong correlations between Similarity and the PPI-SF or the LSRP, the three items pertaining to similarity were removed. The remaining 45 items (27 keyed positively, 18 keyed negatively) were randomized before starting study 3.

Study 3: Validation of the DAPTQ subscales

Participants

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The DAPTQ and its subscales were further validated in a sample of 133 individuals from the community (44 males and 89 females) recruited once again from social media and websites dedicated to psychological research. As in study 2, participants were instructed to not participate if they had participated in a previous phase of the development of the DAPTQ. Participants were mostly located in Europe (53%), North America (26%), Asia (12%), Africa (4%), South America (3%), and Oceania (2%). Regarding education level, participants were mostly college graduate (29%). Following this, the most common education levels were: Master degree (28%), college dropout (23%), Doctoral degree (7%), or other (13%). Regarding ethnicity, participants were mostly Caucasian (77%), Asian (15%) or other (8%). The mean age of the participants was 27.8 (*SD* = 10.47) years old.

Measures

Big Five Inventory (BFI; John, Donahue, & Kentle, 1991). The BFI is a 44-item questionnaire assessing the Big Five components of personality (Goldberg, 1992). The questionnaire gives 5 subscale scores, namely Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Respondents answer to which extent they agree with a particular characteristic (‘‘*I see myself as someone who is…*’’). Examples include ‘‘*talkative*’’ (Extroversion), ‘‘*helpful and unselfish with others*” (Agreeableness), ‘‘*does a thorough job*’’ (Conscientiousness), ‘‘*depressed, blue*” (Neuroticism), and ‘‘*original, comes up with new ideas*’’ (Openness). Items are rated on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*).

Rational – Experiential Inventory – 40 items (REI; Pacini & Epstein, 1999). The REI is a 40-item questionnaire assessing preferences for information processing (rational style and experiential style). The rational style assesses the usage of a conscious, analytical approach. Alternatively, the experiential style assesses the usage of a pre-conscious, affective, holistic

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approach. The REI is divided into 4 subscales, two for each approach. Rational Ability refers to the ability to think analytically ‘‘*I have a logical mind’’*. Rational Engagement refers to the reliance and enjoyment of analytical thinking ‘‘*I prefer complex problems to simple problems’’*. Experiential Ability refers to the ability of experiencing intuitive impressions and feelings ‘‘*I believe in trusting my hunches”*. Experiential Engagement refers to the enjoyment of relying on feelings to make decisions ‘‘*I like to rely on my intuitive impressions*’’. Items are rated on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*).

Jackson Personality Inventory – Risk Taking scale (JPI-RT; Jackson, 1976). The JPI is a personality assessment measuring various core traits of the personality, such as openness, neuroticism, extraversion, trustworthiness, and organization. The JPI-RT includes the 20 items related to risk taking from the original 320 items of the JPI. The scale uses a True/False format, and assesses preferences to risky behaviors with items such as ‘‘*I would prefer a stable position with a moderate salary to one with a higher salary but less security*’’.

Perceived Stress Scale-10 items version (PSS-10; Cohen & Williamson, 1988). The PSS-10 is a 10-item self-reported questionnaire assessing how an individual can be stressed over everyday situations. The questionnaire is rated on a 5-point Likert Scale (0 = *Never* to 4 = *Very often*). Participants are asked to answer based on their general feelings and thoughts from the last month, i.e.: ‘‘*In the last month, how often have you been upset because of something that happened unexpectedly?’’*

State-Trait Anxiety Inventory – Trait version (STAI-Y2; Spielberger, Gorsuch, & Lushene, 1970). The STAI is a 40-item questionnaire assessing anxiety through a 4-point Likert scale (1 = *almost never* to 4 = *almost always*). The Y2 scale includes 20 items and focuses on how anxious

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an individual is in its everyday life. Participants are asked to answer how they generally feel to statements such as ‘‘*I feel like a failure*’’ and ‘‘*I feel pleasant*’’.

Results and discussion

The intercorrelations among the 10 DAPTQ subscales were once again computed and are shown in Table 4A. Once again, all but one of the DAPTQ factors correlate moderately to strongly with the DAPTQ total score (r = .37 to .68). While Consequentialism displayed a correlation of r = .39 with the DAPTQ total score in study 2, the factor failed to correlate significantly to the total score in study 3. The DAPTQ and its subscales displayed good internal consistency reliability, ranging from α = .63 to .89.

The correlations between the DAPTQ and the BFI, the REI, the JPI-RT, the PSS-10, and the STAI-Y2 are shown in Table 4B. The DAPTQ total score showed moderate to strong positive correlations with all measurements of the BFI, at the exception of a strong negative correlation with Neuroticism. Strong positive correlations were also found between the DAPTQ and the two rational scales of the REI, demonstrating the analytical nature of individuals high on the DAPTQ. A weak correlation was also found between the DAPTQ and experiential ability. The JPI-RT showed a weak correlation to the DAPTQ, and the measures of stress and anxiety (PSS-10 and STAI-Y2) both showed a strong negative correlation to the DAPTQ.

Examination of the DAPTQ’s subscales further support their validity to measure their respective constructs. First, Leadership correlates strongly with Extroversion (r = .58). Second, Logical Thinking is strongly correlated to Rational Ability (r = .61), and highly negatively correlated with Experiential Engagement (r = -.47). Third, Composure is highly negatively correlated to Neuroticism (r = -.85), PSS-10 (r = -.65), and STAI-Y2 (r = -.75). Fourth,

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Creativity shows a strong correlation with Openness (r = .65). Fifth, Fearlessness display a strong correlation with JPI-RT (r = .54). Sixth, Focus highly correlates to Conscientiousness (r = .53). Seventh, Extroversion correlates strongly with the Extroversion scale of the BFI (r = .76). Lastly, Management display a strong correlation with Conscientiousness (r = .66), and strong negative correlations with Neuroticism (r = -.50) and STAI-Y2 (r = -.60).

General discussion

The purpose of these studies was to develop and validate a new questionnaire for assessing adaptive traits known to correlate with the psychopathic personality. The aforementioned studies' results confirm the adequacy of the DAPTQ in various samples, as well as providing support for the subscales' validity. The DAPTQ demonstrated good internal consistency reliability for its total score and all its subscales for all samples, as well as a strong correlations to well-established assessments of the psychopathic personality and to other personality measures.

As expected, the DAPTQ was highly positively correlated with PPI-I and weakly positively correlated with LSRP Factor 1. Alternatively, the DAPTQ was not correlated with PPI-II and moderately negatively correlated with LSRP Factor 2. These results stem from the difference in the conceptual definition of psychopathy by each questionnaire. The PPI defines psychopathic traits by adhering to the differential configuration model. PPI-I focuses on adaptive traits only, while PPI-II focuses on maladaptive outcomes (Skeem, Polaschek, Patrick, & Lilienfeld, 2011). While both PPI-I and PPI-II assess fundamentally different psychopathic traits, the LSRP assesses maladaptive outcomes on both of its factors without taking into account any form of adaptive behaviors. The weak correlation between the DAPTQ and LSRP Factor 1 further supports the divergent validity of the scale, demonstrating the inability of the LSRP to assess adaptive outcomes in psychopathic individuals. Alternatively, the moderate negative

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relationship between the DAPTQ and LSRP Factor 2 supports the maladaptive behaviors assessed by the LSRP and its opposition to the adaptive traits assessed by the DAPTQ.

By selecting a wide range of adaptive traits known to correlate with the psychopathic personality and developing an assessment specific to these traits, it was possible to investigate the relationship between them. The first factor refers to the leadership attributes of an individual and the perception of others to one's role as a leader. The second factor assesses the preference of an individual to act logically and rationally, rather than on emotions. The third factor relates to the ability to remain calm in most situations, including stressful scenarios. The fourth factor assesses creative thinking and a 'think outside the box' mentality. The fifth factor encompasses the fearless nature associated with psychopathic individuals. The sixth factor assesses the tendency of an individual to efficiently manage money. The seventh factor refers to one's ability to stay focus despite potential distractions. The eighth factor assesses extroversion and the charismatic attitudes of an individual. The ninth factor refers to the 'the end justify the means' mentality. The last factor encompasses the ability of an individual to manage a group of tasks or individuals. Altogether, these 10 factors showcase the traits through which PPI-I individuals benefit the most in comparison to the general population.

As previously mentioned, while this test assesses the adaptive traits found in Factor 1 psychopathic individuals, as defined by the PPI, it should not be seen as a psychopathy measurement for several reasons. First, the diagnostic of psychopathy is a combination of Factor 1 and Factor 2 as defined by the PCL-R, and this test focuses exclusively on traits related to PPI-I (Patrick et al., 2009). The questionnaire can therefore only assess a portion of psychopathy-related traits, which is under a lot of debate regarding its validity with the concept of psychopathy (Lilienfeld et al., 2012; Lynam & Miller, 2012; Miller & Lynam, 2012). Furthermore, this

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questionnaire has not been validated for use in criminal populations, despite the propensity of psychopaths in criminal settings (Polaschek & Daly, 2013). In conclusion, the DAPTQ should solely be used to assess an individual's adaptive characteristics in non-criminal populations until further validation.

Although the current findings are highly encouraging, additional constructs validation is needed to further assess the validity of each subscale. The DAPTQ also needs to be administered against measures of social potency, leadership, creativity, logical reasoning, propensity to take calculated risks, goal driven behavior, and display of aggression scales. While some of these components were included in the current study and the findings were encouraging with regard to establishing the validity of the DAPTQ's subscales, further validation against alternative measures of personality is recommended.

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Table 1

Principal constructs targeted during Study 1

A) Social characteristics	C) Personal characteristics
1. Social charm	10. Boldness
2. Leadership abilities	11. Cautiousness
3. Heroism	12. Low provoked aggression
4. Management abilities	13. Calculated risks
5. Discarding relationships with no respect	14. Rational thinking
6. Discarding relationships with no common grounds	15. Strategic thinking
B) Protective characteristics	16. Innovative thinking
7. Anxiety immunity	17. High self-esteem
8. Stress immunity	18. Superior focus
9. Fear immunity	19. Reward sensitivity

Babiak et al., 2010[1, 2, 15, 16]; Baskin-Sommers et al., 2009[18]; Camp et al., 2013[9, 12]; Dindo & Fowles, 2011[9]; Dunlop et al., 2011[1, 8, 10]; Durand, 2016[12, 17]; Eisenbarth et al., 2015[9, 19]; Falkenbach et al., 2013[12, 17]; Gao & Tang, 2013[7]; Gervais et al., 2013[5, 6]; Hall et al., 2004[2, 8]; Hicks et al., 2004[11, 15]; Lilienfeld et al., 2014[4]; López et al., 2013[9]; Ray et al., 2011[12]; Smith et al., 2013[3]; Takahashi et al., 2014[13]; Uzieblo et al., 2010[8, 9, 14]; Zágon & Jackson, 1994[7].

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Table 2

DAPTQ Subscales, sample items, Cronbach's alpha, eigenvalues, and variance

Scales	Alpha	Eigenvalues	Cumulative % of Variance
Leadership (4 items)	.82	11.46	15.92
People often follow my lead. (True)			
Logical Thinking (5 items)	.80	6.02	24.28
I prefer to act first and think later. (False)			
Composure (6 items)	.86	4.20	30.11
I rarely worry. (True)			
Creativity (4 items)	.85	3.53	35.00
I am the most creative one out of my friends. (True)			
Fearlessness (6 items)	.84	2.76	38.84
Dangerous situations frighten me. (False)			
Similarity (3 items)	.76	2.21	41.90
It is important that my friends are like me. (True)			
Money smart (3 items)	.79	1.91	44.55
I am a reckless money spender. (False)			
Focus (4 items)	.78	1.74	46.97
I can't be distracted easily. (True)			
Extroversion (6 items)	.83	1.66	49.27
I can effortlessly mingle with any group. (True)			
Consequentialism (4 items)	.64	1.55	51.43
The end justify the means. (True)			
Management (3 items)	.68	1.39	53.37
I feel like I have very poor management skill. (False)			

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Table 3A
Inter-correlations between the DAPTQ subscales (*N* = 765)

Scales	1	2	3	4	5	6	7	8	9	10	11
DAPTQ											
1. DAPTQ Total											
2. Leadership	.61**										
3. Logical Thinking	.37**	.02									
4. Composure	.64**	.19**	.26**								
5. Creativity	.34**	.21**	-.04	0							
6. Fearlessness	.59**	.31**	.01	.36**	.12**						
7. Similarity	.01	-.02	-.02	-.14**	0	-.11**					
8. Money Smart	.31**	-.01	.39**	.15**	.05	-.04	-.03				
9. Focus	.57**	.21**	.32**	.35**	.12**	.21**	-.05	.25**			
10. Extroversion	.56**	.52**	-.13**	.25**	.18**	.28**	-.20**	-.05	.13**		
11. Consequentialism	.39**	.27**	-.03	.09*	-.04	.31**	.13**	-.05	.06	.19**	
12. Management	.59**	.36**	.34**	.37**	.10**	.14**	-.09*	.30**	.47**	.23**	.11**

Table 3B
Correlations between the DAPTQ, the PPI-SF and the LSRP by their respective subscales (*N* = 765)

Scales	1	2	3	4	5	6	7	8	9	10	11	12	α
PPI-SF													
Mach Ego	.09*	.16**	-.20**	-.02	-.03	.19**	.18**	-.23**	-.13**	.10**	.52**	-.15**	.70
Social Potency	.56**	.57**	-.05	.31**	.21**	.33**	-.20**	-.02	.16**	.77**	.15**	.29**	.59
Fearlessness	.34**	.22**	-.09*	.24**	.07	.59**	-.13**	-.06	.05	.26**	.22**	.03	.79
Coldheartedness	.25**	.01	.30**	.27**	-.05	.11**	-.04	.22**	.19**	-.02	.11**	.20**	.68
Impul Nonconfor	.22**	.16**	-.08*	.11**	.22**	.37**	-.04	-.05	-.01	.15**	.12**	-.10**	.58
Blame External	-.03	.11**	-.15**	-.23**	.03	.22**	.11**	-.13**	-.05	-.06	.21**	-.15**	.87
Carefree Nonplan	-.46**	-.35**	-.39**	-.10**	.21**	-.17**	-.03	-.24**	-.32**	-.12**	-.15**	-.47**	.53
Stress Immunity	.61**	.27*	.33**	.61**	.09*	.46**	-.24**	.17**	.37**	.30**	.06	.39**	.53
PPI-I	.66**	.46**	.06	.49**	.16**	.65**	-.24**	.02	.23**	.58**	.21**	.28**	.77
PPI-II	-.04	.08*	-.32**	-.12**	.02	.29**	.11**	-.27**	-.19**	.03	.33**	-.33**	.75
Total	.46**	.34**	-.09*	.31**	.10**	.62**	-.10*	-.10**	.08*	.37**	.38**	.02	.77
LSRP													
Factor 1	.23**	.14**	-.03	.14**	-.09*	.28**	.09*	-.10**	.02	.05	.66**	0	.88
Factor 2	-.31**	-.10**	-.35**	-.24**	-.16**	.08*	.07	-.34**	-.32**	-.10**	.17**	-.49**	.64
Total	.06	.07	-.16**	.01	-.13**	.26**	.09**	-.21**	-.12**	0	.59**	-.19**	.85

Note. PPI-SF = Psychopathic Personality Inventory – Short Form; Mach Ego = Machiavellian Egocentricity; Impul Nonconfor = Impulsivity Nonconformity; Blame External = Blame Externalization; Carefree Nonplan = Carefree Nonplanfulness; LSRP = Levenson Self-Report Psychopathy. * $p < .05$, ** $p < .01$, two-tailed.

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Table 4A
Inter-correlations between the DAPTQ subscales (*N* = 133)

Scales	1	2	3	4	5	6	7	8	9	10
DAPTQ										
1. DAPTQ Total										
2. Leadership	.59**									
3. Logical Thinking	.42**	.10								
4. Composure	.68**	.22*	.28**							
5. Creativity	.37**	.18*	.06	.17*						
6. Fearlessness	.37**	.15	-.07	.15	-.06					
7. Money Smart	.40**	-.06	.29**	.21*	.20*	-.08				
8. Focus	.54**	.27**	.21*	.32**	.05	.14	.27**			
9. Extroversion	.58**	.53**	.02	.24**	.23**	.13	.07	.12		
10. Consequentialism	.11	.16	-.10	-.11	-.27**	.21*	-.22*	-.13	.12	
11. Management	.68**	.36**	.28**	.50**	.15	.01	.42**	.48**	.32**	-.03

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Table 4B
Correlations between the DAPTQ, the BFI, the REI, the JPI-RT, the PSS-10, and the STAI-Y2 (*N* = 133)

Scales	1	2	3	4	5	6	7	8	9	10	11	α
BFI Subscales												
Extroversion	.51**	.58**	-.08	.17*	.21*	.18*	.05	.19*	.76**	.09	.32**	.83
Agreeableness	.29**	-.01	.07	.26**	.10	.10	.24**	.29**	.28**	-.18*	.30**	.78
Conscientiousness	.46**	.31**	.23**	.18*	.08	-.07	.40**	.53**	.16	-.04	.66**	.80
Neuroticism	-.67**	-.22*	-.37**	-.85**	-.22*	-.13	-.26**	-.28**	-.27**	.08	-.50**	.88
Openness	.36**	.28**	.10	.16	.65**	.09	.11	.12	.30**	-.20*	.16	.79
REI Subscales												
Rational Ability	.45**	.30**	.61**	.19*	.05	.16	.24**	.25**	.13	0	.32**	.86
Rational Engagement	.45**	.33**	.39**	.14	.18*	.21*	.17	.18*	.33**	.01	.29**	.82
Exp Ability	.24**	.25**	-.16	.04	.09	.30**	-.09	.13	.19*	.19*	.16	.87
Exp Engagement	.02	.10	-.47**	-.03	.18*	.18*	-.15	.01	.13	.05	.05	.87
JPI-RT												
Total	.28**	.32**	-.12	.13	.04	.54**	-.24**	.04	.32**	.21*	.01	.80
PSS-10												
Total	-.51**	-.19*	-.31**	-.65**	-.15	-.04	-.23**	-.32**	-.18*	.22**	-.44**	.89
STAI-Y2												
Total	-.65**	-.24**	-.32**	-.75**	-.27**	-.03	-.36**	-.32**	-.30**	.22*	-.60**	.95

Note. BFI = Big Five Inventory; REI = Rational-Experiential Inventory; Exp = Experiential; JPI-RT = Jackson Personality Inventory – Risk Taking Scale; PSS = Perceived Stress Scale; STAI-Y2 = State-Trait Anxiety Inventory – Trait version. * p < .05, ** p < .01, two-tailed.

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