The Durand Adaptive Psychopathic Traits Questionnaire: Development and Preliminary Validation

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Acknowledgement

I would like to thank Erika Matsumoto Plata and Polett Bali for their help in the editing of this paper.

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Abstract

While the term 'psychopathy' is embedded with negativity, evidences point 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 for a 4-factor solution within the DAPTQ: Extroverted Leading, Rational Thinking, Risk Taking, and Composure. The DAPTQ and its four subscales demonstrated high internal consistency in a community sample (0.78 - 0.88). Good convergent and divergent validity was established by administering the DAPTQ alongside established measures of psychopathic personality. Subscales validation against well-established personality assessments further confirm the DAPTQ's strength. These findings indicate that the DAPTQ is a reliable and valid tool for measuring psychopathy-associated adaptive traits. Limitations of the present study and potential directives 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 has 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 term 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 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 resources-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

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mostly 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 (Factor 1, PPI-I) and Impulsive Antisociality (Factor 2, 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 element of boldness (Dunlop et al., 2011; Polaschek & Daly, 2013). Although the PPI-I assess 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, fearlessness) but who lack pervasive traits found 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 primary psychopathy and adaptive behaviors, which include characteristics such as fearlessness, leadership, stress immunity, anxiety immunity and social

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dominance (Camp, Skeem, Barchard, Lilienfeld, & Poythress, 2013; Smith, Watts, & Lilienfeld, 2014). An individual with elevated Factor 1 and low Factor 2 traits as defined by the PPI could then theoretically be diagnosed as a psychopath despite the requirement for high levels of Factor 1 and Factor 2 traits from the PCL-R for a diagnostic of psychopathic personality (Patrick, 2006).

A number of studies have identified several adaptive traits related to the Factor 1 of psychopathy as defined by multiple questionnaires such as the PCL-R and the PPI, 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 type of adaptive characteristics emerged from the aforementioned studies. Social characteristics include high levels of social charm, great leadership abilities, notable displays of heroism, and good management strategies (Dunlop et al., 2011; Hall, Benning, & Patrick, 2004; Smith et al., 2014; Uzieblo, Verschuere, Van den Bussche, & Crombez, 2010). 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; Ray et al., 2011; Zágon & Jackson, 1994). Characteristics related to personal features include boldness, low impulsivity, low provoked aggression, the ability to discard unnecessary relationships, willingness to take calculated risks, absence of irrationality, strategic thinking, innovation, high self-esteem, superior cognitive focus and sensitivity to reward (Baskin-Sommers, Zeier, &

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Newman, 2009; Camp et al., 2013; Dunlop et al., 2011; Eisenbarth, Lilienfeld, & Yarkoni, 2015; Falkenbach, Howe, & Falki, 2013; Gervais, Kline, Ludmer, George, & Manson, 2013; Smith et al., 2014; Uzieblo et al., 2010). Altogether, these characteristics seem to be correlated with a high display of Factor 1 traits.

While these characteristics are considered adaptive and linked to Factor 1 psychopathy, 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 primary psychopathic traits. 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. 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. The development of this questionnaire is based on three assumptions. The first is that psychopathic traits are present in every individual to different degrees, and every individual will lean towards Factor 1 or Factor 2. The second is that individuals leaning towards Factor 1 will display the highest scores on the DAPTQ. Finally, we also assume that individuals leaning towards Factor 2 will display the lowest scores on the DAPTQ.

Study 1: Test development and preliminary psychometric properties

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

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consisted of 305 participants. 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 determine the inconsistency within 10 pair of highly correlated items from the PPI-SF (Tellegen, 1982). 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) of the first sample and 291 participants (186 males and 105 females) of the second sample. 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 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 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).

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158 **Levenson Self-Report psychopathy (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995).** The
159 LSRP is a self-report questionnaire of 26 items assessing psychopathic attitudes and beliefs. The
160 scale was designed using the same factors as the PCL-R for use in non-institutional settings. This
161 test is structured around the PCL-R's Factor 1 and Factor 2. The Factor 1 subscale assesses
162 elements of meanness such as proneness to lying, lack of empathy, and manipulative behaviors.
163 The Factor 2 subscale assesses elements of disinhibition such as impulsivity, proneness to
164 frustration, lack of goals and emotional negativity. Previous studies have already assessed the
165 good convergent and discriminant validity of both scales (Brinkley, Schmitt, Smith, & Newman,
166 2001; Ross, Bye, Wrobel, & Horton, 2008).

167 *Procedure*

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

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Table 1
Principal constructs targeted during Study 1

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

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 trait subscales. The 4 items with the weakest correlation 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. 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 were randomized once again, which was followed by recruitment for study 2.

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

Participants

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Eight hundred and nine (N = 809) individuals from the community were recruited for the validation of the DAPTQ. A total of 25 individuals were removed from subsequent analyses due to a VRIN² ≥ 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%), Masters degree (14%) and technical school (6%). Participants' mean age was 24.5 years.

Procedure

Participants were invited to fill out the latest version of the DAPTQ, along with the PPI-SF and the LSRP. Principal components analysis (PCA) was conducted on the DAPTQ in order to determine the adequate number of subscales needed to extract base values for the eigenvalues. The varimax criterion was used to orthogonally rotate to simple structure principal axes. The purposes of these orthogonal rotations were to develop independent subscales from one another, while the varimax criterion was used to maximize the variance across factors (Lilienfeld & Andrews, 1996). 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

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After inspecting the scree plot and testing alternative models, we determined that the optimal number of factors to extract was four. The eigenvalues of these four factors, accounting for 35% of the total variance, were 11.46, 6.01, 4.19 and 3.52. The four subscales of the DAPTQ, the final number of items for each subscale, and a sample item for each subscale are shown on Table 2. Out of the original 72 items, 52 items were successfully distributed among four factors. Factor 1, Extroverted Leading, refers to an individual's ability to mingle with others, to display creative thinking and to be considered a leader by others. Factor 2, Rational Thinking, relates to characteristics linked to strategic thinking and logical planning. Factor 3, Risk Taking, measures the extent to which an individual is willing to take risks in order to achieve an objective. Factor 4, Composure, considers immunity to stress, anxiety and irritability.

Table 2
DAPTQ subscales and sample items

Extroverted Leading (15 items)
When in a group, other people wait for me to make the decisions. (True)
Rational Thinking (17 items)
My actions are mostly based on my emotions. (False)
Risk Taking (12 items)
I do not fear potential risks when I decide to do something. (True)
Composure (8 items)
I worry a lot in my daily life. (False)

Sex differences

Several gender differences were found on the DAPTQ and other questionnaires. Men received higher scores than females on the DAPTQ total score ($F(1, 764) = 39.038$, $p < .001$), the Risk Taking subscale ($F(1, 764) = 66.043$, $p < .001$) and the Composure subscale ($F(1, 764) = 55.311$, $p < .001$). Men also received a higher PPI-SF total score ($F(1, 764) = 43.951$, $p < .001$) and LSRP total score ($F(1, 764) = 38.046$, $p < .001$). These findings are consistent with previous

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results demonstrating that psychopathic traits, including adaptive psychopathic traits, are more common among men than women (Lilienfeld & Andrews, 1996). Interestingly, no gender differences were found on the Extroverted Leading subscale or the Rational Thinking subscale, indicating that these two traits are possibly gender independent.

Internal consistency

The internal consistency of the DAPTQ total score, as assessed by Cronbach's alpha, is .88. The internal consistencies of the current sample on the four subscales of the DAPTQ ranged from .78 to .85. In comparison, the internal consistency of the PPI-SF total score from the current study was .76, and its eight subscales' internal consistencies ranged from .53 to .87. The internal consistency 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.

Test-retest reliability

Estimation of the test-retest reliability of the DAPTQ and its subscales was done by having 42 participants fill-in the questionnaire twice. Two outliers were excluded based on their total scores, leaving a total of 40 participants. The mean test-retest interval was 28 days. The test-retest reliability of the DAPTQ total score was very high (r = .95). The test-retest reliability of the subscales was as follow: Extroverted Leading (r = .93), Rational Thinking (r = .93), Risk Taking (r = .85) and Composure (r = .92).

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

The intercorrelations among the four DAPTQ subscales are shown in Table 3. Examination of these correlations reveals a unique tendency. Indeed, the two highest correlations are of the pairs

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Extroverted Leading - Risk Taking and Rational Thinking - Composure. Theoretically, it is possible to assume these two pairs are linked to each other. An individual with remarkable social skills might also be more prone to move considerable space around him and take many risks to achieve his goals. Inversely, individuals with highly rational, thinking behaviors may fit the typical description of a quiet individual who cannot easily be made anxious. Furthermore, these four scales display a strong positive correlation with the DAPTQ total score (r = .62 to .71).

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

Scales	DAPTQ Total	Extroverted Leading	Rational Thinking	Risk Taking	Composure
DAPTQ					
1. DAPTQ Total	-	-	-	-	-
2. Extroverted Leading	.71**	-	-	-	-
3. Rational Thinking	.65**	.15**	-	-	-
4. Risk Taking	.63**	.39**	.10**	-	-
5. Composure	.62**	.21**	.38**	.21**	-
PPI-SF					
6. Machiavellian Egocentricity	.01	.08*	-.22**	.35**	-.17**
7. Social Potency	.56**	.70**	.10**	.34**	.28**
8. Fearlessness	.36**	.26**	-.04	.63**	.16**
9. Coldheartedness	.22**	-.04	.30**	.08*	.26**
10. Impulsive Nonconformity	.22**	.23**	-.07*	.39**	.06
11. Blame Externalization	-.05	0	-.13**	.26**	-.30**
12. Carefree Nonplanfulness	-.50**	-.31**	-.54**	-.24**	-.13**
13. Stress Immunity	.65**	.33**	.41**	.39**	.63**
14. PPI-I	.68**	.56**	.17**	.65**	.44**
15. PPI-II	-.09**	.02	-.36**	.36**	-.25**
16. Total	.43**	.35**	-.04	.67**	.19**
LSRP					
17. Factor 1	.16**	.02	-.04	.45**	.01
18. Factor 2	-.39**	-.20**	-.53**	.11**	-.37**
19. Total	-.03	-.06	-.24**	.40**	-.14**

Note. * p < .05, ** p < .01, two-tailed.

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The correlation between the DAPTQ and its subscales with the PPI-SF and the LSRP can also be examined in Table 3. The DAPTQ is moderately correlated with the PPI-SF total score. Closer examination of the PPI-SF subscales revealed that scores on the Social Potency and Stress Immunity subscales show the highest correlation with the DAPTQ, while Carefree Nonplanfulness, 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 Factor 1 individuals. The LSRP total score does not show any correlation with the DAPTQ. LSRP Factor 1 shows a weak positive correlation with DAPTQ, while Factor 2 shows a moderate negative correlation. Examination of the DAPTQ's subscales demonstrates several strong correlations supporting the subscales' validity. First, Extroverted Leading is highly correlated to Social Potency and PPI-I. Second, Rational Thinking displays a strong negative correlation to Carefree Nonplanfulness and LSRP Factor 2. Third, Risk Taking is highly correlated to Fearlessness, PPI-I, and PPI-SF Total. Fourth, Composure is highly correlated to Stress Immunity. Altogether, these results provide preliminary results of the validity of the constructs assessed by the DAPTQ and its subscales.

Study 3: Validation of the DAPTQ subscales

Participants

The DAPTQ and its subscales were further validated in a sample of 108 individuals from the community (43 males and 65 females). Participants were mostly located in Europe (54%), North America (27%), Oceania (7%), South America (6%), and Asia (6%). The mean age of the participants was 27.31 (*SD* = 9.46) years old.

Measures

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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 give 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*). The internal consistency of the five scales range from $\alpha = .78$ to .91.

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 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). The internal consistency of the four scales ranged from $\alpha = .87$ to .89.

Pearson Risk Attitude (PRA; Pearson et al., 1995). The PRA is a 6-item questionnaire originally developed to determine physician's tolerance to uncertainty from probability or risks.

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Items are rated on a 6-point Likert scale and include statements such as '*I enjoy taking risks*' and '*Taking risks does not bother me if the gains involved are high*'. The internal consistency in the present study is α = .81.

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*' The internal consistency in the present study is α = .81.

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?*' The internal consistency in the present study is α = .90.

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 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*'. The internal consistency of the STAI-Y2 in the present study is α = .94.

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Results and discussion

The intercorrelations among the four DAPTQ subscales were once again computed and are shown in Table 4. A different pattern emerged from the present results compared to the data obtained in study 2. Indeed, while the pair Rational Thinking – Composure once again display a strong correlation together (r = .50), Extroverted Leading is not significantly correlated with Risk Taking anymore, but now correlates with Rational Thinking (r = .57) and Composure (r = .67). These results could be explained by the type of participants recruited. While both study 2 and study 3 used community sample, the worldwide nature of this sample can cause large variations within the subscales, supporting the need for future replication in various samples. Nevertheless, the four subscales show once again moderate to strong positive correlations with the DAPTQ total score (r = .43 to .86).

The correlation between the DAPTQ and the BFI, the REI the PRA, the JPI-RT, the PSS-10, and the STAI-Y2 is shown in Table 4. The DAPTQ total score showed a moderate positive correlation 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 the two rational scales of the REI, demonstrating the analytical nature of individuals high on the DAPTQ. The PRA and the JPI-RT both showed modest correlations 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 confirmed their validity to measure their respective constructs. Extroverted Leading showed a strong positive correlation with the Extroversion and Openness subscales of the BFI, alongside a strong negative correlation to Neuroticism, PSS-10, and STAI-Y2. Rational Thinking showed a strong positive correlation with Conscientiousness and the two rational subscales of the REI, and moderate to strong negative

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correlation with Neuroticism, PSS-10, and STAI-Y2. Risk Taking correlated strongly with the two measures of risk: PRA and JPI-RT. Finally, Composure negatively correlated strongly with Neuroticism, PSS-10, and STAI-Y2.

Table 4: Correlations between the DAPTQ, the BFI, the REI, the PRA, the JPI-RT, the PSS-10, and the STAI-Y2 (*N* = 108).

Scales	DAPTQ Total	Extroverted Leading	Rational Thinking	Risk Taking	Composure
DAPTQ					
1. DAPTQ Total	-	-	-	-	-
2. Extroverted Leading	.86**	-	-	-	-
3. Rational Thinking	.78**	.57**	-	-	-
4. Risk Taking	.43**	.12	.13	-	-
5. Composure	.77**	.67**	.50**	.10	-
BFI Subscales					
6. Extroversion	.41**	.51**	.13	.27**	.20*
7. Agreeableness	.27**	.35**	.12	-.11	.38**
8. Conscientiousness	.45**	.42**	.63**	-.09	.28**
9. Neuroticism	-.76**	-.72**	-.51**	-.12	-.85**
10. Openness	.44**	.56**	.23*	.16	.23*
REI Subscales					
11. Rational Ability	.62**	.43**	.73**	.21*	.40**
12. Rational Engagement	.51**	.41**	.55**	.15	.34**
13. Experiential Ability	.02	.05	-.07	.09	-.04
14. Experiential Engagement	-.19*	-.08	-.32**	.00	-.17
PRA					
15. Total	.33**	.18	-.06	.72**	.17
JPI-RT					
16. Total	.29**	.13	-.03	.61**	.18
PSS-10					
17. Total	-.60**	-.59**	-.42**	-.01	-.68**
STAI-Y2					
18. Total	-.70**	-.73**	-.48**	-.03	-.74**

Note. * $p < .05$, ** $p < .01$, two-tailed.

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Study 4: Further validation of the DAPTQ subscales

Participants

In order to further validate the subscales of the DAPTQ, 162 bachelor graduates from the Philippines (Males = 72, Females = 90) were recruited. The mean age of the participants was 28.10 years old (*SD* = 7.63). A total of 115 of these participants completed the Applicant Risk Profiler, 90 to 120 completed the Manchester Personality Questionnaire depending on the subscale, and 79 to 131 completed the Work Profile Questionnaire-Emotional Intelligence depending once again on the subscale.

Measures

Applicant Risk Profiler (ARP; Llobet, 2001). The ARP is a 65-item self-report questionnaire in which each item is rated from 1 to 5 (*Strongly Agree* to *Strongly Disagree*), assessing an individual's counterproductive workplace behaviors. The items are divided among five subscales, each of which evaluates different behaviors. Higher scores reflect more counterproductive behaviors in the workplace. The Integrity subscale rates how likely an individual is to steal from an employer or perform tasks without approval. The Illegal Drug Use subscale relates to the likelihood of an individual to work while under the influence of illegal drugs. The Workplace Policy Compliance subscale evaluates how likely an individual is to disobey company policies and procedures. The Workplace Aggression subscale looks at the probability that an individual will behave violently at work. The Deception subscale assesses the individual attempts to present him or her in an overly favorable light. The ARP's internal consistency in the present study is $\alpha = .88$.

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Manchester Personality Questionnaire (MPQ; Cameron, 1996). The MPQ factor version 14 is a 90-item self-report questionnaire assessing 14 personality characteristics. Items are rated from 1 to 5 (Never to Always). The subscales of the MPQ are: Originality, Rule Consciousness, Openness to Change, Assertiveness, Social Confidence, Empathy, Communicativeness, Independence, Rationality, Competitiveness, Conscientiousness, Perfectionism, Decisiveness, and Apprehension. The MPQ's internal consistency in the present study is $\alpha = .82$.

Work Profile Questionnaire-Emotional Intelligence (WPQei; Cameron, 1999). The WPQei is an 84-item self-report questionnaire assessing personal qualities and competencies that employees need to develop to manage emotions at work. Items are rated on a Likert scale from 1 to 5. The WPQei was developed around a conceptual model of emotional intelligence, and is divided in 7 components. Those components include innovation, self-awareness, intuition, emotions, motivation, empathy and social skills. Three of these subscales were excluded due to a lack of participation. The four subscales assessed in this study were Emotions, Motivation, Empathy and Social Skills. The WPQei's internal consistency in the present study is $\alpha = .93$.

Results and discussion

The intercorrelations among the four DAPTQ subscales were computed a third time and are shown in Table 5. A different yet similar pattern emerged from the present results compared to the results obtained in study 2 and 3. While Rational Thinking – Composure is once again a strongly correlated pair ($r = .62$), Extroverted Leading now combines the correlations from previous studies and correlates on Rational Thinking ($r = .60$), Risk Taking ($r = .42$), and Composure ($r = .49$). Similar to study 2, weak correlations are also found between Risk Taking – Rational Thinking ($r = .30$) and Risk Taking – Composure ($r = .19$). The results show once again the need to perform multiple correlations studies between the subscales in order to examine

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potential variability between the DAPTQ's subscales. However, once again, the four subscales displayed a strong positive correlation with the DAPTQ total score (r = .62 to .86).

Table 5: Correlations between the DAPTQ, the ARP, the MPQ, and the WPQei.

Scales	DAPTQ Total	Extroverted Leading	Rational Thinking	Risk Taking	Composure
DAPTQ (N = 162)					
1. DAPTQ Total	-	-	-	-	-
2. Extroverted Leading	.86**	-	-	-	-
3. Rational Thinking	.84**	.60**	-	-	-
4. Risk Taking	.62**	.42**	.30**	-	-
5. Composure	.71**	.49**	.62**	.19*	-
ARP Subscales					
1. Integrity (N = 115)	-.34**	-.27**	-.41**	-.02	-.34**
2. Illegal Drug Use (N = 113)	-.27**	-.16	-.42**	.09	-.36**
3. Work Compliance (N = 113)	-.22*	-.19*	-.32**	.16	-.36**
4. Work Aggression (N = 113)	-.28**	-.20*	-.38**	.11	-.42**
5. Deception (N = 115)	.39**	.35**	.31**	.13	.43**
MPQ Subscales					
6. Originality (N = 90)	.35**	.34**	.24*	.23*	.20
7. Rule Consciousness (N = 120)	-.05	-.04	-.15	.10	-.04
8. Openness to Change (N = 90)	.24*	.18	.24*	.17	.09
9. Assertiveness (N = 90)	.42*	.41**	.40**	.15	.24*
10. Social Confidence (N = 120)	.42*	.40**	.46**	.16	.16
11. Empathy (N = 120)	.29**	.20*	.39**	.04	.21*
12. Communicativeness (N = 90)	.20	.28**	.15	.10	-.02
13. Independence (N = 120)	.04	.05	-.01	.07	.01
14. Rationality (N = 120)	.33**	.21*	.50**	.04	.20*
15. Competitiveness (N = 90)	.33**	.25*	.38**	.15	.17
16. Conscientiousness (N = 120)	.19*	.08	.33**	-.12	.28**
17. Perfectionism (N = 90)	.30**	.17	.40**	.11	.20
18. Decisiveness (N = 120)	.57**	.45**	.59**	.17	.51**
19. Apprehension (N = 120)	-.22*	-.11	-.32*	-.01	-.22*
WPQei Subscales					
20. Emotion (N = 128)	.48**	.47**	.40**	.11	.49**
21. Motivation (N = 131)	.52**	.46**	.55**	.10	.47**
22. Empathy (N = 82)	.54**	.45**	.49**	.23*	.53**
23. Social skills (N = 79)	.49**	.47**	.42**	.18	.45**

Note. Work Compliance = Workplace Policy Compliance; Work Aggression = Workplace Aggression. * $p < .05$, ** $p < .01$, two-tailed.

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Table 5 displays the correlations of the DAPTQ and its subscales to the ARP, the MPQ and the WPQei. The DAPTQ total score shows a weak to moderate negative correlation with all of the ARP subscales, at the exception of a positive moderate correlation with Deception. Moderate to strong correlations were also found between seven the MPQ subscales (Originality, Assertiveness, Social Confidence, Rationality, Competitiveness, Perfectionism, and Decisiveness), and the DAPTQ. The four subscales of the WPQei also showed a strong correlation to the DAPTQ. Examination of the DAPTQ's subscales further support the adaptive nature of the four subscales. Extroverted Leading displayed a moderate to strong correlation with Deception from the ARP, Originality, Assertiveness, Social Confidence, and Decisiveness from the MPQ, as well as to Emotion, Motivation, Empathy, and Social skills from the WPQei. Rational Thinking was moderately to strongly correlated to Integrity, Deception, Assertiveness, Social Confidence, Empathy, Rationality, Competitiveness, Conscientiousness, Perfectionism, Decisiveness, Apprehension, as well as to the four subscales of the WPQei. The Risk Taking subscale did not showed any correlation, at the exception of a weak positive correlation to Originality and Empathy from the WPQei. Finally, Composure was moderately to strongly correlated to all measures of the ARP and of the WPQei, as well as to the Decisiveness subscale of the MPQ.

Overall, all of the DAPTQ subscales were significantly correlated on a wide variety of similar constructs, at the exception of the Risk Taking subscale, which was weakly correlated on only two subscales. While the present findings support the validity of the DAPTQ's Extroverted Leading, Rational Thinking and Composure subscale, the Risk Taking subscale is a newly developed construct which is not normally associated with adaptive personality. However,

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considering the present questionnaire assesses adaptive psychopathic traits, the absence of results on the Risk Taking subscale with non-psychopathy related questionnaire is not surprising.

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 community samples, as well as providing preliminary support for the subscales' validity. The DAPTQ demonstrated good internal consistencies for its total score and all its subscales for all populations, as well as a strong correlation to well-established assessments of the psychopathic personality and moderate to strong correlations to other personality measures. Indeed, the moderate correlation of the DAPTQ with the PPI-SF's total score and its strong correlation with PPI-I from Benning et al. (2003) are consistent with previous literature regarding the adaptive nature of Factor 1 psychopathic individuals (Skeem, Polaschek, Patrick, & Lilienfeld, 2011). Finally, principal component analysis further established the existence of four non-overlapping subscales within the DAPTQ, each assessing core adaptive traits.

By selecting the entire known range of adaptive traits known to correlate with psychopathy and developing an assessment specific to these traits, it was possible to investigate the relationship between them. The first cluster encompasses all the adaptive social features of psychopathic individuals. The second cluster groups all the logical traits of an individual, from planning to reasoning. The third cluster includes an individual's willingness to face greater risks in the hopes of greater benefits. The fourth cluster contains protective traits. Altogether, these four clusters showcase the traits through which Factor 1 individuals benefit the most in comparison to the general population.

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As previously mentioned, while this test assesses the adaptive traits found in Factor 1 psychopathic individuals, it should not be seen as a psychopathy measurement for several reasons. First, psychopathy is a combination of Factor 1 and Factor 2, and this test focuses exclusively on traits related to Factor 1 individuals (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 questionnaire has not been validated for use in criminal populations. In fact, it may be inapplicable for such groups since they may not possess many adaptive traits. 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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