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Associations of the Managing the Emotions of Others (MEOS) scale
with personality, the Dark Triad and trait EI

Elizabeth J. Austin^{1*}

Donald H. Saklofske²

Martin Smith²

Gillian Tohver²

¹Department of Psychology, University of Edinburgh.

²Department of Psychology, University of Western Ontario

*Corresponding author Elizabeth J. Austin, University of Edinburgh, Psychology, 7 George Square, Edinburgh, EH8 9JZ, UK. Phone +44 (0)131 651 1305. Fax +44 (0)131 650 3461

Elizabeth.Austin@ed.ac.uk

Abstract

The associations of the Managing the Emotions of Others (MEOS) scale with the Big Five and the Dark Triad were examined. This extended previous research by using full-length rather than short-form personality measures and also by examining the separate associations of both grandiose and vulnerable narcissism, and primary and secondary psychopathy with MEOS factors. The pattern of personality correlations with the MEOS scales was similar to those found previously. The two non-prosocial factors of the MEOS (Worsen, Inauthentic) were found to be more strongly associated with primary than with secondary psychopathy. For vulnerable narcissism, an interesting pattern of associations with the MEOS Inauthentic factor and with Neuroticism emerged. The possibility of a pathway linking trait EI to the tendency to use non-prosocial mood management was examined using models in which Agreeableness (A) was a mediator or moderator. A was found to mediate the (negative) association between trait EI and both Worsen and Inauthentic, and some evidence was found that A could also act as a moderator, weakening the factors' association with EI at low levels of A.

Keywords: emotion management; emotional intelligence; personality; dark triad

1. Introduction

Managing the emotions of others comprises part of the emotional intelligence (EI) domain. Whilst the primary focus of research in this area has been on emotion management in contexts where the target is intended to benefit (for example trying to raise the mood of a friend who is worried or anxious), both prosocial and non-prosocial versions of interpersonal mood management can occur, and can involve attempting to either improve or worsen the target's mood (Austin & O'Donnell, 2013; Niven, Totterdell, Stride, & Holman, 2011).

Preliminary work on the Managing the Emotions of Others (MEOS) scale (Austin & O'Donnell, 2013) showed this 58-item scale to have four core factors relating to approaches to changing the moods and emotions of others, comprising a prosocial pair (Enhance and Divert) and a non-prosocial pair (Worsen and Inauthentic). Examination of the item content of the factors showed that Enhance included approaches such as offering help or reassurance, whilst Divert included using tactics such as humour or enjoyable activities to improve another's mood. The Worsen factor was characterised by the use of strategies such as criticism and undermining to worsen another's mood, whilst Inauthentic involved the use of displays such as flattery, sulking and inducing guilt. Two additional factors (Conceal, Poor skills) were found to be characterised respectively by a tendency to conceal one's own emotions and by self-assessed low capability to change another's mood. The Worsen and Inauthentic factors are of particular interest within EI research, as they cover an aspect (self-serving manipulation of the emotions of others) of the somewhat under-researched "dark side" of EI (Austin, Farrelly, Black, & Moore, 2007; Kilduff, Chiaburu, & Menges, 2010; O'Connor & Athota, 2013).

The most notable features of the correlation pattern of the MEOS factors with the Big Five and the personality Dark Triad reported by Austin and O'Donnell (2013) were the strong

associations of the prosocial pair of factors with Agreeableness (A) and of the non-prosocial pair with the Dark Triad. The factor/factor correlations were also of interest: the within-pair correlations were large, but correlations across the pairs were small, indicating that the use of the prosocial strategies does not strongly exclude the use of the non-prosocial ones, or vice versa. These associations all require replication, particularly the personality correlations, as short scales for both the Big Five and the Dark Triad were used in the preliminary study; such scales may not capture the full breadth of the relevant constructs. In particular, the brief Dark Triad scale used (Jonason & Webster, 2010) did not allow the separate examination of widely-recognised subcomponents of narcissism and psychopathy. Grandiose narcissism is associated with aggression and dominance, whilst vulnerable narcissism has features of defensiveness and insecurity. The two forms of narcissism show divergent associations with self-esteem (positive for grandiose and negative for vulnerable narcissism) and also differing personality profiles. Both are negatively associated with Agreeableness, but with grandiose narcissism also showing a positive association with Extraversion and vulnerable narcissism a positive association with Neuroticism (Miller et al., 2011). Within the two-factor model of psychopathy, primary psychopathy is characterised by selfishness, uncaringness and manipulative behaviour, and secondary psychopathy by anti-social behaviour, impulsivity and self-defeating lifestyle (Levenson, Kiehl, & Fitzpatrick, 1995).

The initial MEOS study also examined the associations of its factors with trait EI. These were in the expected direction for the core factors, i.e. positive for the prosocial and negative for the non-prosocial pair (Austin & O'Donnell, 2013). As with consistent findings of negative associations of trait EI with Machiavellianism (O'Connor & Athota, 2013), these associations do not provide an obvious link to the "dark side" of EI, as they indicate that high EI is negatively rather than positively associated with self-serving and manipulative

behaviour, even though EI in principle provides a capability for such behaviour. A recent study (O'Connor & Athota, 2013) has highlighted the key role of Agreeableness in a possible resolution of this issue. In this work, a mediation model showed that Agreeableness accounted for the association between trait EI and Machiavellianism. Further analysis showed that the association between a perceived emotional competence (PEC) EI subscale and Machiavellianism was also moderated by Agreeableness with an effect direction showing that PEC is positively related to Machiavellianism at low levels of A; this approach is potentially extendable to the non-prosocial MEOS scales. In the light of the above review, the objectives of the research presented here were:

- (1) To re-examine the associations of the MEOS factors with the Big Five and Dark Triad using longer scales. This includes examining associations with grandiose and vulnerable narcissism and with primary and secondary psychopathy.
- (2) To re-examine the associations amongst the MEOS factors.
- (3) To examine the role of Agreeableness as both a potential mediator and moderator of the association between EI and the non-prosocial aspects of managing the emotions of others.

It was expected that the MEOS/personality associations and the associations amongst the factors would be similar to those found previously (Austin & O'Donnell, 2013). As primary psychopathy is more strongly associated than secondary psychopathy with manipulative behaviour, it was expected that it would have stronger associations than secondary psychopathy with the non-prosocial factor pair.

2. Method

Two online data collections were performed using the same set of measures. The Study 1 group comprised students at a Canadian university, whilst the Study 2 participants were a more heterogeneous group of web survey respondents.

2.1 Participants

The Study 1 participants were 369 university students (123, male 246 female); the mean age of the group was 18.63 years, standard deviation 2.03 years. There were 432 Study 2 participants (105 male, 327 female), with mean age 22.25 years, standard deviation 7.72 years. Of this group 85% identified as students, with the remainder being working, unemployed or retired.

2.2 Materials

2.2.1 MEOS. (Austin & O'Donnell, 2013) This scale comprises 58 items which provide scores on four core scales relating to managing the emotions of others (Enhance, Divert, Worsen, Inauthentic) together with scores relating to emotional concealment and self-assessed poor emotion skills.

2.2.2 Minimarkers. (Saucier, 1994). This 40-item set of trait-descriptive adjectives provides scores on the Big Five personality dimensions: Neuroticism (N), Extraversion (E), Openness, (O) and Conscientiousness (C).

2.2.3 Mach IV (Christie & Geis, 1970). This 20-item scale covers the Machiavellianism domain of deceit in interpersonal relationships and a cynical attitude to human nature.

2.2.4 Narcissism. Narcissism scales were selected to assess both its grandiose and vulnerable aspects. The NPI-16 (Ames, Rose, & Anderson, 2006) assesses grandiose narcissism; the scale comprises 16 forced-choice items. Vulnerable narcissism was assessed

with the 10-item Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997), which comprises 10 Likert-scale items.

2.2.5 Levenson Self-Report Psychopathy Scale (Levenson et al., 1995). This scale is designed to assess primary (16 items) and secondary (10 items) psychopathy in general population samples.

2.2.6 Trait EI. The short, 30-item, version of the TEIQue (TEIQue-SF; Petrides & Furnham, 2006) was used; this scale provides a measure of global trait EI.

2.3 Procedure

For both studies, data collection was conducted via an online survey. Study 1 participants were recruited through the psychology undergraduate subject pool of a large Canadian university. For Study 2 the link to the survey was submitted to research participation websites, and also publicised on the UK psychology department website. Both studies were approved by the ethics committee of their respective universities.

3. Results

Table 1 shows descriptive statistics and internal reliabilities for the measures.

Table 1 near here

Tables 2 and 3 show the correlations amongst the MEOS factors and their correlations with the other measures. For both sets of data, the pattern of correlations amongst the factors was similar to that observed previously (Austin & O'Donnell, 2013); in particular the associations of Enhance with Divert and Worsen with Inauthentic were large, with associations of the Enhance/Divert pair with the Worsen/Inauthentic pair being weaker or non-significant. The

correlations of the MEOS scales with the Big Five and the Dark Triad were also similar to those found with short form measures (Austin & O'Donnell, 2013). Enhance and Divert had their highest Big Five correlation with A and were negatively correlated with all the Dark Triad measures, whilst Worsen was strongly negatively correlated with A and Inauthentic strongly positively correlated with N. Both non-prosocial factors also showed positive correlations with the Dark Triad. In both sets of data, hypersensitive narcissism, which was not examined separately in the earlier study (Austin & O'Donnell, 2013), showed a strong association with Inauthentic and also with N, with less strong associations with Worsen and with A. As observed previously, Conceal was relatively weakly related to both the Big Five and Dark Triad, with its largest correlation (negative) being with E. Poor skills showed a pattern of negative associations with E, O, A, and C and (Study 1 only) a positive association with N. As expected, the correlations of primary psychopathy with Worsen and Inauthentic were larger than those for secondary psychopathy, with these differences being more pronounced for Study 1. The MEOS factor correlations with EI were also similar to those observed previously and with signs that match what would be expected, i.e. positive with Enhance and Divert, negative with Worsen and Inauthentic. The correlations of EI with the other two factors were also negative, strongly so in the case of Poor skills.

Tables 2 and 3 near here

The associations of the factor scores with personality traits were examined further using regression models. These focussed on the two pairs of core factors (Enhance/Divert; Worsen/Inauthentic). Models using only the Dark Triad (Model 1) or the Big Five as independent variables (Model 2) and a model including both (Model 3) are summarised in Tables 4 and 5. As some scores were significantly related to age and/or sex, these were also

included in the models. Examination of the R^2 and R^2 change values indicates that the Enhance and Divert were more closely related to the Big Five whilst Worsen and Inauthentic were more closely related to the Dark Triad. Other features of the pattern of regression coefficients were that in both datasets A appeared as a significant predictor of the four factors in Models 2 and 3, except for Model 3 for Inauthentic, and N was a significant predictor of Inauthentic in Models 2 and 3. Within the Dark Triad, psychopathy (especially primary) showed the most consistent pattern of significant regression coefficients, whilst in the presence of other predictors Machiavellianism and NPI score had mostly weak or non-significant coefficients, as did HSNS score, other than for Inauthentic. For Worsen and Inauthentic, primary psychopathy emerged as a stronger predictor than secondary psychopathy; this effect was more pronounced in the models for Inauthentic, with only the regression coefficient for primary psychopathy being significant.

Tables 4 and 5 near here

The final set of analyses examined the associations amongst EI, A, and the non-prosocial pair of MEOS factors. The focus of interest was on the two “dark” factors because the examination of pathways allowing high EI to be related to non-prosocial behaviour are of particular interest. Structural equation models in which A mediated the effect of EI on the two non-prosocial factors were initially examined. The models used 354 and 342 complete cases for Study 1 and Study 2, respectively. In order to simplify the structure of the models, age and sex effects were first removed from all scores by saving regression residuals; models using the correlations of these residualised scores were then examined. For the Study 1 data,

a model with full mediation of the effects of EI on both Worsen and Inauthentic, shown in Figure 1, was well-fitting (see Table 6). For Study 2, fit was less good. Examination of the Lagrange multiplier test for adding paths indicated that a modified model with partial rather than full mediation for Inauthentic (additional dotted path in Figure 1) should be considered, and this model showed improved fit. The models were examined further using bootstrap sampling (EQS SIMULATE command), and all the regression paths in Figure 1 were found to have 95% confidence intervals that did not include zero. Alternative models with EI mediating the effect of A were also examined and found to have poor fit for both sets of data.

Table 6, Figure 1 near here.

The possible moderation of the associations of EI with Worsen and Inauthentic by A was examined using regression modelling with standardised scores. For the Study 1 data, both models had a significant EI x A interaction. An examination of the moderation effects for regions of significance using the SPSS MODPROBE macro (Hayes & Matthes, 2009) showed that for Worsen the regression coefficient of EI was negative and significant for A values at or above 1.03 standard deviations (sd) above the mean, and positive and significant for A at or below 1.44 sd below the mean. For Inauthentic, there was one region of significance: for A at or above .22 standard deviations above the mean the regression coefficient of EI was negative and significant. These results indicate a weakening of the negative association of EI with Worsen and Inauthentic as A decreases, with a sign change for the former, but were not replicated in the Study 2 data, which did not show a significant EI x A interaction for either Worsen or Inauthentic.

4. Discussion

This paper extended previous findings on the MEOS scale in two different samples. Both the pattern of correlations amongst the MEOS factors and their associations with the Big Five, trait EI, and the Dark Triad were similar to those reported previously (Austin & O'Donnell, 2013). In particular, the personality correlations confirmed the core role of Agreeableness and the Dark Triad, respectively, in prosocial and non-prosocial interpersonal emotion management. These associations are readily interpreted given that Agreeableness is related to affiliation and positive interpersonal relations (Jensen-Campbell & Graziano, 2001; Traupman, Smith, Uchino, Berg, Trobst, & Costa, 2009), whilst all the Dark Triad components are associated with interpersonal manipulation (e.g. Jakobwitz & Egan, 2006; Jonason, Slomski, & Partyka, 2012). The use of longer Dark Triad scales than in the earlier study allowed the associations of vulnerable narcissism and of primary and secondary psychopathy with the MEOS scales to be examined for the first time. For hypersensitive narcissism, an interesting pattern emerged indicating close linkages amongst Neuroticism, hypersensitive narcissism, and the MEOS Inauthentic factor. For psychopathy, examination of the correlation and regression results confirmed that the non-prosocial and manipulative Worsen and Inauthentic factors were more strongly related to primary than to secondary psychopathy (see Grieve & Mahar, 2010 for a similar finding). Also of interest is that, as previously, the Poor skills scale showed a strong negative correlation with trait EI; from the item content of this scale this result can be interpreted as indicating low self-efficacy for changing the moods of others, which links to general low self-perceived EI.

Models in which the associations of Agreeableness and EI with the two “dark side” factors, Worsen and Inauthentic were examined in more detail showed that A mediated the effect of EI on both factors, indicating that it is the prosociality aspect of trait EI which accounts for the overall tendency of high EI scorers to not use the Worsen and Inauthentic

strategies. In addition, for the Study 1 data a moderation effect was found which showed the negative relation between trait EI and the non-prosocial factors was weakened if A scores were low—a result which would allow a path from high trait EI to non-prosocial interpersonal mood management. However, this effect was not replicated in the Study 2 data, which could be related to the greater heterogeneity of this sample. Our analyses also used a global measure of trait EI rather than an emotional competence subscale, as used by O'Connor and Athota (2013), which would be likely to weaken any moderation effect. Pending further studies, the results presented here provide only partial support for the proposed pathway, conditional on level of Agreeableness, linking trait EI to non-prosocial management of the moods of others, but theoretical considerations suggest that the role of low Agreeableness in this and similar processes should be further investigated.

Study limitations included the use of a student sample in Study 1 and a predominantly-student sample in Study 2; males were under-represented in both samples. Examination of the above effects in more representative samples would thus be desirable. The interpretation of the mediation models examined is limited by the use of cross-sectional data, as establishing an indirect effect of EI via A as in Figure 1 cannot be used to make any inferences about causality.

Future work could involve using a measure of the HEXACO model of personality in place of the Big Five. The common variance of the Dark Triad is strongly correlated with (low) Honesty-Humility (H-H) in this model (Lee et al., 2013), so re-examining the personality associations of the MEOS with HEXACO personality traits would be of interest, as this could give a clearer view of how normal personality is related to the MEOS factors. In particular, the lack of an H-H factor in the Big Five model may account for the Dark Triad

explaining more variance in Worsen and Inauthentic than normal personality in the current data (see Grieve, 2011).

Whilst the present work examined subcomponents of narcissism and psychopathy, Machiavellianism was represented by a unidimensional scale; there is, however, evidence for the multidimensionality of this construct (e.g. Rauthmann, 2012), so examination of the associations of Machiavellianism facets with the MEOS would be of interest. The use of a longer EI scale would allow the associations of the MEOS with EI facets to also be examined. The inclusion of measures of ability as well as trait EI would also be of interest. Expanding the breadth of the EI domain examined could also be combined with a more detailed exploration of how low Agreeableness and high EI in combination can facilitate non-prosocial interpersonal emotion management by also using an Agreeableness measure which assesses the facets of this key interpersonal trait.

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Table 1

Descriptive statistics

	Study 1				Study 2			
	<i>M</i>	<i>SD</i>	α	N	<i>M</i>	<i>SD</i>	α	N
Enhance	59.98	8.37	.92	369	62.31	8.17	.92	432
Divert	27.40	4.10	.79	369	27.49	4.29	.81	432
Worsen	30.85	9.55	.91	369	27.69	9.33	.90	432
Inauthentic	32.69	7.03	.83	369	30.54	7.71	.85	432
Conceal	23.23	4.90	.78	369	22.69	5.06	.76	432
Poor skills	11.78	3.18	.65	369	11.41	3.43	.71	432
N	21.96	4.65	.71	365	22.66	5.60	.78	394
E	26.28	5.44	.82	366	25.97	5.82	.83	394
O	29.60	4.37	.75	362	30.31	4.81	.78	393
A	31.40	4.85	.84	366	32.47	4.84	.82	387

C	29.81	4.73	.79	359	28.53	5.66	.84	389
EI	142.33	21.12	.89	357	144.54	22.45	.89	362
Machiavellianism	55.74	9.08	.78	347	54.70	9.34	.77	378
NPI-16	4.92	3.21	.73	355	4.47	3.11	.72	382
HSNS	29.44	5.80	.74	362	29.13	6.10	.74	386
Primary psychopathy†	38.32	9.66	.87	363	29.64	7.69	.86	375
Secondary psychopathy†	25.26	5.67	.72	364	21.19	4.37	.65	387

†Psychopathy was scored on a five-point scale in Study 1 and a four-point scale in Study 2.

N = Neuroticism, E = Extraversion, O = Openness, A = Agreeableness, C = Conscientiousness

Table 2

Study 1 bivariate correlations

	Enhance	Divert	Worsen	Inauthentic	Conceal	Poor	N	E	O	A	C	EI	Mach	NPI	HSNS	P1
Divert	.60***															
Worsen	-.27***	-.13**														
Inauthentic	-.06	.02	.61***													
Conceal	.02	.07	-.06	-.01												
Poor skills	-.45***	-.36***	.06	-.01	.19***											
N	-.07	-.14**	.21***	.45***	-.10*	.13*										
E	.14**	.29***	.09	.09	-.31***	-.42***	-.16**									
O	.14**	-.01	.04	.06	-.01	-.15**	.05	.00								
A	.52***	.38***	-.49***	-.24***	.04	-.34***	-.22***	.12*	.04							
C	.21***	.07	-.10	-.14**	-.12*	-.22***	-.23***	.16*	.07	.20***						
EI	.40***	.34***	-.13**	-.22***	-.20***	-.59***	-.52***	.45***	.18**	.33***	.39***					
Mach	-.35***	-.25***	.45***	.39***	.14**	.13**	.27***	-.11*	.06	-.50***	-.25***	-.33***				
NPI-16	-.13**	-.10	.37***	.25***	-.12*	-.21***	.04	.34***	.31***	-.26***	.09	.21***	.29***			
HSNS	-.17**	-.17**	.40***	.51***	.14**	.22***	.44***	-.29***	.15**	-.31***	-.15**	-.48***	.41***	.19***		

P1	-.40***	-.20***	.56***	.44***	-.04	.15**	.17**	.08	-.08	-.54***	-.09	-.25**	.54***	.38***	.37***	
P2	-.29***	-.14**	.40***	.34***	.04	.29***	.35***	-.09	-.09	-.41***	-.39***	-.57***	.43***	.09	.44***	.44***

*Note: N = Neuroticism, E = Extraversion, O = Openness, A = Agreeableness, C = Conscientiousness, Mach = Machiavellianism, P1 = primary psychopathy, P2 = secondary psychopathy. *N* range 337-369, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3

Study 2 bivariate correlations

	Enhance	Divert	Worsen	Inauthentic	Conceal	Poor	N	E	O	A	C	EI	Mach	NPI	HSNS	P1
Divert	.67***															
Worsen	-.31***	-.15**														
Inauthentic	-.14**	-.01	.62***													
Conceal	.22***	.17**	-.16**	-.07												
Poor skills	-.46***	-.35***	.20***	.19***	.11**											
N	-.14**	-.16**	.34***	.42***	-.16**	.07										
E	.14**	.27***	.04	-.05	-.24***	-.29***	-.13*									
O	-.23***	.17**	.01	.02	-.04	-.21***	-.04	.10								
A	.54***	.35***	-.53***	-.35***	.14**	-.38***	-.34***	.20***	.20***							
C	.29***	.27***	-.20***	-.14**	.03	-.27***	-.31***	.12*	.29***	.42***						
EI	.38***	.30***	-.24***	-.26***	-.11*	-.47***	-.35***	.36***	.31***	.47***	.49***					
Mach	-.29***	-.12*	.42***	.36***	.04	.10	.30***	-.09	-.07	-.49***	-.27***	-.37***				
NPI	-.16**	-.03	.44***	.31***	-.16**	-.02	.17**	.21***	.20***	-.31***	-.09	.06	.35***			

HSNS	-.14*	-.10	.38***	.50***	.00	.25***	.45***	-.24***	.05	-.34***	-.17**	-.44***	.36***	.24***		
P1	-.44***	-.21***	.56***	.43***	-.06	.25***	.23***	.00	-.25***	-.53***	-.31***	-.31***	.65***	.45***	.34***	
P2	-.32***	-.22***	.48***	.37***	-.10	.33***	.46***	-.07	-.13*	-.48***	-.48***	-.58***	.46***	.19***	.44***	.48***

*Note: N = Neuroticism, E = Extraversion, O = Openness, A = Agreeableness, C = Conscientiousness, Mach = Machiavellianism, P1 = primary psychopathy, P2 = secondary psychopathy. *N* range 335-432 * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4.

Study 1 regression models

	Enhance	Divert	Worsen	Inauthentic
Model 1				
Age	-.01	-.06	.00	-.06
Sex	.06	-.01	-.14**	.07
Mach	-.01	.05	.06	.05
NPI	.01	.07	.19***	.10
HSNS	.07	-.02	.11**	.37***
P1	-.38***	-.22*	.29***	.23***
P2	-.16**	-.14*	.20***	.05
R ² (%)	22.3	7.6	43.5	37.0
Model 2				
Age	.00	-.06	-.03	-.09

Sex	.08	-.03	-.21***	.00
N	.05	.02	.22***	.37***
E	.03	.19	.15**	.04
O	.10	.04	.08	.08
A	.46***	.25***	-.45***	-.26***
C	.10	.18**	.04	.08
R ² (%)	28.8	19.8	34.9%	25.2
Model 3				
Age	-.02	-.07	.00	-.06
Sex	.04	-.04	-.16**	.03
Mach	.08	α .15*	.01	.01
NPI	-.01	.01	.08	.02
HSNS	.11	.08	.09	.32***
P1	-.30***	-.18*	.31***	.27***
P2	-.06	-.02	.16***	.03

N	.06	-.01	.10	.22***
E	.09	.23***	.10	.07
O	.03	.00	.10*	.08
A	.37***	.25***	-.24***	-.08
C	.08	.18**	.11*	.12*
R ² (%)	34.1	21.8	49.2	42.0
R ² change M3-M1(%)	11.8	14.2	5.7	5.0
R ² change M3-M2(%)	5.3	2.0	14.3	16.8

Standardised regression coefficients and significance levels are shown. N = Neuroticism, E = Extraversion, O = Openness, A = Agreeableness, C = Conscientiousness, Mach = Machiavellianism, P1 = primary psychopathy, P2 = secondary psychopathy.* p < .05, ** p < .01, *** p < .001

Table 5

Study 2 regression models

	Enhance	Divert	Worsen	Inauthentic
Model 1				
Age	.09	-.04	.08	-.04
Sex	.10	.11	-.13**	.08
Mach	-.09	-.10	.05	.03
NPI	.03	-.03	.11*	.08
HSNS	.00	-.12	.18**	.34***
P1	-.32***	-.10	.34***	.22**
P2	-.12	.01	.15*	.08
R ² (%)	23.7	8.6	39.3	32.9
Model 2				
Age	.10	-.02	.02	-.08

Sex	.08	.13*	-.15**	.01
N	.02	-.12*	.15**	.40***
E	.07	.23***	.16**	.19***
O	.09	-.05	.02	.05
A	.45***	.26***	-.48***	-.15**
C	.09	-.06	.04	-.07
R ² (%)	28.8	18.8	31.5	25.1
Model 3				
Age	.07	-.04	.07	-.02
Sex	.06	.11	-.13**	.02
Mach	.01	.02	.05	.05
NPI	-.06	-.13	.03	.01
HSNS	.03	.04	.22***	.33***
P1	-.21**	-.09	.22**	.24***
P2	-.06	.04	.15*	.02

N	.04	-.13*	.01	.25***
E	.12*	.29***	.15**	.21***
O	.09	-.02	-.02	.00
A	.32***	.22**	-.25***	.07
C	.08	-.02	.10	-.05
R ² (%)	32.8	20.5	45.4	41.0
R ² change M3-M1(%)	9.1	11.9	6.1	8.1
R ² change M3-M2(%)	4.0	1.7	13.9	15.9

Standardised regression coefficients and significance levels are shown. N = Neuroticism, E = Extraversion, O = Openness, A = Agreeableness, C = Conscientiousness, Mach = Machiavellianism, P1 = primary psychopathy, P2 = secondary psychopathy,* p < .05, ** p < .01, *** p < .001

Table 6

Fit indices for models with Agreeableness mediating the effects of EI on Worsen and Inauthentic

	$\chi^2(df)$	CFI	SRMR	RMSEA (95% CI)
Study 1 full mediation	4.12 (2) $p = .13$.99	.025	.055 (.00, .13)
Study 2 full mediation	13.51 (2) $p = .001$.96	.042	.13 (.07, .20)
Study 2 modified model	.23 (1) $p = .63$	1.00	.010	.00 (.00, .11)

CFI = comparative fit index, SRMR = standardised root mean square residual, RMSEA = root mean square error of approximation

Figure 1

Mediation model for Worsen and Inauthentic. Path labels (standardised regression coefficients) are in the form Study 1/Study 2

