

The Relation Between Cluster B Personality Disorders and Attachment Dimensions

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ABSTRACT

Personality disorders are highly associated with dysfunctional relationships, and one of the most commonly used models to conceptualize the mechanism of intimate relationships is the attachment model. In the current study, we examined the relationship between Cluster B personality disorders and attachment dimensions in a small Chinese sample (N = 70, Mean age = 18.70). Using correlational regression analysis, we found that all of the four Cluster B personality disorders are positively and moderately associated with each other, among which NPD, HPD and BPD are significantly and positively associated with anxiety of abandonment, and ASPD is significantly and positively associated with avoidance of intimacy. The results revealed the role of attachment in Cluster B personality disorders. In addition, the findings also implied cross-cultural generalizability of the relationship between the disorders and attachment dimensions.

Keywords: Attachment, Personality Disorders, Relationships, Chinese

1. INTRODUCTION

1.1. Background of Cluster B Personality Disorders

Personality disorders are characterized by pathological thoughts and behaviors that are rigid, pervasive, and maladaptive in nature. Individuals with personality disorders often suffer significantly in their social interactions or cause significant stress in others. These interpersonal stresses can also impact other areas of functioning such as these individuals' ability to maintain a job or to fulfill their responsibilities as a family member. In addition, certain disorders are strongly associated with delinquent and criminal behaviors (e.g. antisocial personality disorder) and have adverse effects on the function of our society.

In the latest version of the diagnostic and statistical manual of mental disorders (DSM-5, 2013), personality disorders are broadly divided into three clusters: the first cluster (i.e. Cluster A) includes personality disorders with some schizophrenic features, the second cluster (i.e. Cluster B) includes personality disorders with dramatic symptoms in interpersonal interactions, the last cluster (i.e. Cluster C) includes personality disorders featured with anxiety-oriented symptoms. Although all types of personality disorders are associated with deficits in social functioning, cluster B disorders have direct and more specific connections to maladaptive interpersonal behaviors than the other two categories. In the current study, we aim to understand the motivational systems in relationships for Cluster B personality disorders using the attachment model.

To further explore Cluster B personality disorders, it is important to unpack the cluster itself first. There are four Cluster B personality disorders: antisocial personality disorder, borderline personality disorder, histrionic personality disorder, and narcissistic personality disorder. Antisocial personality disorder (ASD) is characterized by hostility and aggression. Deceit and manipulation also frequently accompany this disorder. Individuals with ASD take little responsibility for their actions and often blame their others for their wrong actions. Moreover, they often violate other people's rights (Hare et al., 2012). [1]

Borderline personality disorder (BPD) is characterized by intense and unstable emotions and moods with rapid shifts. In relationships, individuals with BPD often hold extreme views of their close ones and their relationships, and changes in the relationships can cause intense negative emotion outbursts (e.g. anger) that are hard to be controlled or soothed (Hooley, Cole, & Gironde, 2012) [2]. Additionally, individuals with BPD are likely to engage in impulsive and harmful behaviors (e.g. drug abuse, cutting) to release or show their pain or as an attempt to keep important people in their life. Histrionic personality disorder (HPD) is characterized by excessive emotionality and attention seeking. In relationships, individuals with HPD often want to be the center of attention. To obtain the desired attention, they often engage in flirtatious or seductive behaviors, and like to exhibit an exaggerated degree of emotional expression (Blashfield, Reynolds, & Stennett, 2012) [3]. They can appear also flighty and fickle to draw attention. Narcissistic personality disorder (NPD) is characterized by grandiosity, entitlement and extreme needs for admiration. These traits lead individuals with NPD to believe that they are better than others, deserve special treatment, or uniquely talented. In relationships, their sense of entitlement can often lead to problems with antagonism,

being disrespectful of others, and difficulty handling criticisms from others (Ronningstam, 2012)[4]. All cluster B personality disorders are associated with maladaptive patterns in interpersonal behaviors that can majorly impede the establishment, maintenance, and quality of intimate relationships. As a result, it is important to unpack how individuals with these disorders internalize and approach their intimate relationship. In the study, we aim to explore this topic using the mostly commonly adopted model in understanding individuals' mechanisms and approaches in intimate relationships – the attachment model, as detailed in the next section.

1.2. Background of Attachment Styles

Personality disorders are rooted in maladaptive social behaviors, and one commonly used approach in understanding individual differences in approaching social relationships and situations is through the attachment model (Ainsworth, 1970[5]; Brennan, Clark, & Shaver, 1998[6]). Attachment refers to the emotional tie between a child and their caregiver that endures across time and situations, and prior studies have suggested that individuals' early attachments set the ground for their adult relationships and their approach with affection and intimacy (Birnbaum et al.[7], 2006; Fraley et al., 2013[8]), and people who report secure relationships tend to report better psychological and social outcomes in general.

The attachment theory postulated the model that adult attachment styles can be conceptualized into a four-category model (secure, preoccupied, fearful, and dismissing) based on two dimensions defined by anxiety of abandonment and avoidance of intimacy. Secure attachment is often seen as a combination of low avoidance and low anxiety in intimate relationship, and individuals who are securely attached often hold a positive attitude towards other and are empathic and easy to collaborate. Dismissing attachment is often seen as a combination of high avoidance and low anxiety in intimate relationship, and those who are dismissing are often highly independent and do not value intimate relationship as highly as people who are securely attached. Preoccupied attachment is often seen as a combination of low avoidance and high anxiety in intimate relationship, and those with preoccupied attachment style are often vulnerable in relationships and need a lot of validation for the bond and for themselves. Fearful attachment is often seen as a combination of high avoidance and high anxiety in intimate relationship, and people with such attachment styles are often too scared to seek close relationship, even though they strongly desire intimacy with others.

Although the four-category approach has been commonly used to group individuals' attachment styles, it can also generate problems such as overly generalize individual differences and ignoring variance along the same dimension. In other words, this approach fails to capture individual differences within the same category (e.g. two people who are categorized as fearfully attached may

differ drastically in their levels of high anxiety and high avoidance), and it can also group people into different categories for statistically minor differences (e.g. two individuals with average level of anxiety and avoidance are grouped into different categories because one's anxiety is slightly higher and the other is slightly lower). To avoid such bias and to capture nuanced difference in attachment styles, we took a dimensional approach in the current study and measured attachment using the two continuous variables of anxiety and avoidance.

1.3. Past Literature on the Association Between Cluster BPDs and Attachment Styles

Several previous researches have attempted to unpack the association between attachment styles and Cluster B personality disorders. Timmerman and Emmelkamp (2006)[9] collected data from prisoners and forensic inpatients and found that in this population, ASPD was associated with dismissing attachment, BPD and NPD were associated with preoccupied attachment style, and HPD was negatively associated with the dismissing attachment. The results were also influenced by measurement of the personality disorders. For example, BPD was only associated with preoccupied attachment when being treated as a categorical variable. In addition, all Cluster B personality disorders seem to associate negatively with secure attachment.

Among the Cluster B personality disorders, BPD has been more frequently studied from the lens of attachment styles relative to the other three personality disorders, and BPD is consistently found to associate with preoccupied or anxious attachment styles, both related to an internal working model that is low in avoidance and high in anxiety in intimate relationships (Crawford et al., 2006[10]; Morse et al., 2009[11]; Nickell, Waudby & Trull, 2002[12]; Timmerman & Emmelkamp, 2006[9]). Although current studies have depicted a basic idea of how the Cluster B personality disorders relate to the four typical attachment styles, the categorical approach of measuring attachment that previous studies typically adopt largely limited the variance that can be captured with a more dimensional conceptualization of attachment. For example, if ASPD has a strong association with low anxiety and no association with avoidance in relationships, using a categorical measurement of attachment, the associations may instead be represented by a combination of mild to moderate associations with secure (i.e. low anxiety and low avoidance) and dismissing (i.e. low anxiety and high avoidance) attachment styles, which would fail to portray the core of the association between the disorder and the attachment styles.

1.4. Aims and Hypothesis of the Current Study

The current study aims to further examine the association between attachment styles and personality disorders using

a dimensional approach in measuring attachment. Considering the similarity between Cluster B personality disorders (e.g. NPD and ASPD share an antagonism element), we will examine the associations between the four disorders. We hypothesize that the four Cluster B personality disorders will be moderately and positively associated with each other. As for the associations between the four disorders and attachment, based on previous research findings, on the anxiety dimension, we hypothesize that NPD, HPD and BPD will be significantly and positively associated with anxiety, and ASPD will be significantly and negatively associated with anxiety; on the avoidance dimension, we hypothesize that ASPD will be significantly and positively associated with avoidance, and NPD, HPD and BPD will be significantly and negatively associated with avoidance. We also hypothesized that the effects of attachment on the disorders will be above and beyond the effect of demographic variables such as SES and age.

2. METHOD

2.1. Participants

One hundred and seven participants were recruited to complete an online survey. We excluded responses that showed evidence of insufficient validity, defined by answering more than one out of three validity checks (e.g. “select yes”) incorrectly or scored two or more out of four on the QTG scale in PDQ-4+, which implies purposeful positive impression management. Our final sample consisted of 70 participants, among which 52 (74.3%) identified as female. 60 of our participants were students when they completed the survey, among which 24 were high school students and 33 were college students. The age of our participants ranged from 15 to 31 ($M = 18.70$; $SD = 2.61$). Among them, 19 participants reported a monthly family income of 5000 yuan (i.e. Chinese currency) or below, with 22 between 5000 and 10000, 10 between 10000-20000 and 15 between 20000-50000, while 4 participants reported 50000 yuan and above.

2.2. Measures

2.2.1. Attachment styles.

The Experience of Close Relationships Scale (ECR; Brennan et al., 1998[6]) is a 36-item measure of adult attachment. Participants answered items according to their intimate relationships in general. Participants indicated how true each statement was of their relationship with a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Sample item from the scale include “I want to get close to my partner, but I keep pulling back.” The measure was scored in accordance with Brennan et

al.[6]’s (1998) instructions for the two dimensions of avoidance and anxiety. We administered the Mandarin version of the scale translated and validated by Li and Kazuo (2006) [13]. Cronbach’ s alpha was .88 for anxiety and .76 for avoidance.

2.2.2. Cluster B personality disorders.

The Personality Diagnostic Questionnaire - 4 (PDQ-4; Hyler, 1994[14]) is a 99-item true/false self-report inventory that assesses 12 personality disorders according to DSM-IV personality disorder criteria. We used the items that measure NPD (9 items), ASPD (9 items), HPD (8 items) and BPD (8 items), and each of them corresponds to a diagnostic criterion for the associated disorder. Participants indicated whether each of the item described themselves accurately using “True” or “False”. Sample item from the scale include “I have accomplished far more than others give me credit (NPD items).” We administered the Mandarin version of the scale translated and validated by Yang and colleagues (2002)[15]. Cronbach’ s alpha was .57 for NPD, .66 for ASPD, .57 for HPD and .76 for BPD.

2.3. Procedure

Participants in this study were recruited from online platforms (e.g. WeChat), and all participants accessed the online survey through a QR code or a link. The survey included a set of measures that first collected their demographic information, and then assessed their attachment styles and personality disorders. We obtained informed consent from all participants at the beginning of the survey.

2.4. Analysis

We used bivariate correlations to analyze the associations between the four Cluster B personality disorders to measure the degree of association within the cluster. Then, a hierarchical regression was performed to assess associations between attachment styles and personality disorders. Demographic variables (i.e. gender, age, grade, degree, income) were introduced in the regression at Step 1 to control for social-biological factors, and anxiety and avoidance were entered at Step 2 to examine the impact of the two attachment dimensions on Cluster B personality disorders.

3. RESULTS

Results from the correlational analysis among the Cluster B personality disorders are shown in Table 1. As indicated in the table, all four disorders are moderately to largely

correlated, with correlational coefficient ranging from .41 to .60 ($p < .01$). Such results suggested that all Cluster B personality disorders are closely associated and may share some elements in common, and thus we should be careful when interpreting the effect of attachment on these disorders, as some of the effects may overlap due to the high correlations.

For the hierarchical regression analysis, we first entered five demographic variables (i.e. gender, age, grade, degree, income), and then entered the two attachment dimensions separately.

Table 1 Correlations between Cluster B personality Disorders

	Histrionic	Narcissistic	Antisocial	Borderline
Histrionic	-			
Narcissistic	.55**	-		
Antisocial	.51**	.44**	-	
Borderline	.45**	.41**	.60**	-

Note: * $p < .05$. ** $p < .01$

Results from the analysis (shown in Table 2 and Table 3) suggested that for three of the four disorders, attachment dimensions accounted for a significant amount of variance in the disorders above and beyond the demographic variables. Attachment explained 14% additional variance in BPD, 17% additional variance in NPD, and 21% additional variance in HPD. For BPD, NPD, and HPD, none of the demographic variable showed any significant effect, and the effect of attachment are largely similar in these three disorders, with anxiety of abandonment

showing a significant, moderate, and positive effect on BPD ($\beta = .38, p < .01$), NPD ($\beta = .43, p < .01$), and HPD ($\beta = .44, p < .01$), and avoidance of intimacy does not show a significant effect on these disorders. Such results suggest that individuals who is anxious in intimate relationships and who is afraid of rejection or being left alone are more likely to show symptoms of Borderline, Narcissistic, and Histrionic personality disorders.

Table 2 Hierarchical regression for Borderline and Antisocial Personality Disorders

Variable	Borderline						Antisocial					
	Model 1			Model 2			Model 1			Model 2		
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Gender	.07	.08	.11	.06	.08	.10	-.09	.05	-.20	-.08	.05	-.19
Age	.02	.02	.17	.02	.02	.21	.02*	.01	.35*	.03**	.01	.42**
Grade	-.03	.03	-.14	-.05	.03	-.22	-.03	.02	-.19	-.04	.02	-.26
Degree	-.03	.04	-.10	-.03	.03	-.12	-.02	.02	-.13	-.03	.02	-.16
Income	.04	.03	.17	.02	.03	.08	.02	.02	.14	.01	.02	.10
Anxiety				.11**	.04	.39**				.04	.02	.19
Avoidance				.08	.05	.23				.06*	.03	.25*
R2	.06			.21			.21			.27		
F for change in R2	.85			5.50**			3.26**			2.88		

Note: * $p < .05$. ** $p < .01$.

Table 3 Hierarchical regression for Histrionic and Narcissistic Personality Disorders

Variable	Histrionic						Narcissistic					
	Model 1			Model 2			Model 1			Model 2		
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Gender	-.02	.07	-.03	-.05	.06	-.10	.06	.06	.14	.04	.06	.09
Age	.01	.01	.05	-.03	.01	-.04	.01	.01	.10	.00	.01	.06
Grade	.01	.03	.05	.01	.03	.05	.02	.03	.12	.01	.02	.09
Degree	-.04	.03	-.18	-.03	.03	-.14	.01	.03	.05	.02	.03	.07

Income	.05	.03	.25	.02	.02	.13	.04	.02	.27	.03	.02	.16
Anxiety				.11**	.03	.44**				.09**	.03	.43**
Avoidance				-.04	.04	-.12				-.01	.03	-.02
R2	.13			.34			.08			.26		
F for change in R2	1.90			9.89**			1.15			7.09**		

Note: *p < .05. **p < .01.

On the other hand, ASPD showed a different pattern from the other three disorders. On the first step of the hierarchical regression analysis, the demographic variables together explained 21% variance in the disorder ($p < .05$), with age showing a significant effect on APD ($\beta = .35, p < .05$), and the effect of age was still significant after we entered the attachment dimensions ($\beta = .42, p < .01$).

Adding the attachment dimensions did not account for a significant amount of variance above and beyond the demographics, but avoidance alone showed a significant effect ($\beta = .25, p < .05$). Such results suggested that in this relatively young sample, older age seems to associate with increased antisocial behaviors, and individuals who tend to avoid intimate relationships have a better chance of displaying ASPD symptoms.

4. DISCUSSION

Consistent with our hypothesis, the four Cluster B personality disorders correlated with each other moderately and positively, indicating that all Cluster B personality disorders, in their essence, may share similar or highly associated elements. It is important to consider the significant amount of shared content among these disorders when unpacking their relations with attachment one by one and be aware that the similarity in the nature of the disorders can lead to similar patterns of associations with attachment. Also consistent with our hypothesis, results showed that NPD, HPD and BPD are significantly and positively associated with anxiety of abandonment, and ASPD is significantly and positively associated with avoidance of intimacy. In other words, individuals who are maladaptively narcissistic, attention-seeking, and experience unstable sense of self tend to fear that their close ones may abandon them, and individuals who lacks empathy and are uncaring of others tend to avoid intimate relationships. At the same time, we did not find the predicted relationship between the disorders and the secondary dimensions that they were hypothesized to associate with according to previous literature (i.e., negative association between NPD, HPD, BPD and avoidance, negative association between ASPD and anxiety). Such results supported the idea that Cluster B personality disorders tend to associate significantly with only one of the attachment dimensions, and the four-category approach of attachment tends to force artificial association between these disorders and the other dimension of attachment.

In addition to the importance of dimensional approach in looking at personality disorders from an attachment perspective, considering that most studies that examined

the relationship between personality disorders and attachment were conducted in the United States, the Chinese sample used in our study had implications of the generalization of such relationships. The highly consistent themes between results from the current study and results from previous research implied broad cross-cultural generalizability of our findings.

There are several limitations of the current study. One major limitation is the small sample size. The currently study was not be sufficiently powered for the hierarchical regression analysis. However, our preliminary results can serve as a base for future researchers to confirm the results, and the consistent theme between findings from the current study and previous findings suggest highly likelihood that the results may replicate in future studies. The second limitation is the limited range of age in our sample. Most of the participants were teenagers or young adults, which may explain the age effect identified for ASPD, as individuals naturally display more defiant behaviors to some extent in their teenage years as attempts to strive for independency (Moffitt, 2015[16]). Another limitation if that personality disorders may also be represented using a dimensional approach instead of a cluster-based approach. Future researchers are encouraged to explore the relationship between attachment dimensions and the alternative models of personality disorders using a larger and more diverse sample.

Adding the attachment dimensions did not account for a significant amount of variance above and beyond the demographics, but avoidance alone showed a significant effect ($\beta = .25, p < .05$). Such results suggested that in this relatively young sample, older age seems to associate with increased antisocial behaviors, and individuals who tend to avoid intimate relationships have a better chance of displaying ASPD symptoms.

5. CONCLUSION

In conclusion we have found that Cluster B Personality disorders seem to share similar or highly associated elements. Individuals who are maladaptively narcissistic, attention-seeking, and experience unstable sense of self tend to fear that their close ones may abandon them (i.e., positive association between NPD, HPD, BPD and anxiety). Individuals who lacks empathy and are uncaring of others tend to avoid intimate relationships. (i.e., positive association between ASPD and avoidance). Also, in this sample, slightly older people are more likely to exhibits antisocial personality disorder (i.e., positive association between ASPD and age). Cluster B personality disorders tend to associate significantly with only one of the

attachment dimensions, and the four-category approach of attachment tends to force artificial association between these disorders and the other dimension of attachment. The findings also seem to reflect cross-cultural generalizability of the relationship between the disorders and attachment dimensions.

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