

A Correlation Study of Attachment and Body-Focused Repetitive Behavior in Non-treatment Seeking People

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Abstract: The public's body focused repetitive behavior (BFRB) is getting worse and it is important to address the problem. The main basis of this article is that one source of BFRB is negative emotions, and the development of insecure attachment patterns is also associated with negative emotions. This paper also builds on recent studies showing that BFRB is negatively associated with attachment in children with autism. This paper studies the relationship between attachment and BFRB in non-treatment seeking people. The study as a whole is to explore the correlation. Bgs-8 scale for BFRB, IPPA-R scale for attachment and Spearman correlation analysis were used. Among them, IPPA-R includes 3 subscales (maternal attachment, paternal attachment, peer attachment). Five questions were selected from 20 questions on each subscale, covering the three dimensions (communication, trust, alienation) to be examined. Spearman correlation analysis mainly includes two-tail test and significance. The results showed that BFRB was negatively correlated with parent attachment, while BFRB was weakly correlated with peer attachment. In other words, the less parent attachment, the more severe the BFRB. The conclusion of this paper is that BFRB of non-treatment seeking people is related to attachment, and peer attachment has little effect on individual BFRB. In addition, the association between BFRB and attachment in the non-treatment people was negatively correlated, and the association was more significant in autistic children.

Keywords: body-focused repetitive behavior, attachment, correlation

1. Introduction

The topic of this article is correlation between BFRB and attachment. Body focused repetitive behavior includes a group of body-focused, destructive, and non-functional behaviors [1]. Emotion may have effects on BFRB [2]. Common BFRB are includes Dermatillomania, Morsicatio buccarum, Onychophagia, Rhinotillexomania, Trichophagia, Mucus fishing syndrome. Solving BFRB problem is important. Because it causes people's physical damage. The explored wound can lead to serious bacterial infection. It affects people's health and is still unsolved now. The correlation discover on BFRB is important to solve this problem. The correlation study incentive the study use attachment as a variable to solve the problem. If there is a correlation between original people's attachment and BFRB, relevant practitioners probably can improve attachment to hinder the BFRB problem. This article focused on: factors influencing BFRB and the effects of attachment, and explain the use of attachment as an assumption influencer of BFRB.

1.1. Factors Influencing BFRB

People's excessive attention on their appearance is also a factor of BFRB. People may attend on some appearance imperfections that others ignore. This phenomenon claimed as a disease— Body Dysmorphic Disorder (BDD). The possible causation for this is genetic component environmental factor and anxiety disorder [3]. BDD patient exhibited serious self-esteem problem about their appearance. BFRB not only includes the correction of appearance imperfections, but also includes self-regulation of intense emotion [4].

Many researchers conceptualized BFRB as adoption emotion regulation (ER), and the recent review article focus on ER to general the emotional effects of BFRB [5]. As an already proved causation of BFRB, emotion is the popular factor that researcher wants to study. An empirical study found that pressure and sadness emotion may increase the BFRB desires and time. It testing the non-treatment seeking sample. This increases the generalizability, and makes the result adopt to the non-treatment seeking people [6]. This study suggests the measurable emotion can scale the BFRB, and it also shows the importance of study on non-treatment people. There are 842000 study in google scholar is about BFRB, and 13800 of the them are about autism people. The research on non-treatment seeking people is still a block.

1.2. The Effects of Attachment

Attachment theory is firstly suggested by psychologist John Bowlby. He considers the children and their mother relationships. Children tend to depend on competent adults [7]. This inspires the study focuses on the parent attachment as an influencer, and the used study that main study subjects is mother inspire the study additionally focus on the figure of father. This article order to expand the study topic, the study also add the friend attachment as a variable. The main attention is still on parent. Parent's deficient support makes children confusing and feel anxiety, and form anxiety attachment, which is a kind of insecure attachment. Other insecure attachment: avoidant attachment and disorganized attachment styles also have a lot to do with the negative emotion factor [8]. Not only the children attachment has the effects of negative emotion, the adult's emotion also be influenced by attachment. Adults who have insecure attachment style are be worse at dealing their negative emotions [9]. Totally, the attachment is a general style form by some negative emotion, and those emotion mainly form by parents.

1.3. The Current Study

The Roberts study in 2015 about non-treatment seeking people's BFRB negative emotion factor supports the feasibility of studying emotional relevant factor of BFRB. Attachment as a general style form by negative emotion, can gives a general view of the study of BFRB. Rather than study only on specific emotion, attachment study is more generalizable.

The study links the attachment with BFRB is still really few. Only a recent study discovers the correlation between attachment and BFRB, but it's for autism children's mother attachment [10]. This study has limitations and the study of BFRB is importance to human life. As a result, I focused on the attachment correlation with non-treatment seeking people's BFRB. This article about correlation between non-treatment seeking people's attachment and BFRB played the role of attachment as an overall style. The article reveals the relationship between attachment and BFRB. Especially non-treatment seeking people's BFRB.

2. Manuscript Preparation

2.1. Participants

Total subjects are 177 in the study (53males 124females). Three samples that answering time less than 20 seconds was removed. The total subjects after remove are 174 (51males 123females). 32.42% are adolescent (below 18 years old), 67.58 are adults (between 18-50 years old). All participants are born and educated in China. The participants are mainly live in eastern China.

2.2. Procedure

All participants finish the questionnaire online by using link of WenJuanxing. They complete the Generic Body-Focused Repetitive Behavior Scale 8 (GBS-8) and the Inventory of Parent and Peer Attachment-Revised Scale (IPPA-R) [11, 12]. The IPPA-R scale is the Chinese version that translate by Hairongg et. al [12].

2.3. Measurement

2.3.1.GBS-8

The GBS-8 include 5 questions, question are two dimensions: desire and self-regulation. It using Likert scoring. This scale scoring higher means BFRB more frequently.

2.3.2.IPPA-R

The IPPA-R includes three sub-scale: mother attachment, father attachment and peer attachment. Each sub-scale includes 5 questions and using Likert scoring. It includes both forward and reverse scoring. Reverse question include: wish I have a mother (or father, friends) different with now.

2.4. Statistical Analyses

The person correlation analysis is used to detect relation between attachment and body focused repetitive behavior (BFRB). Attachment is independent variable and BFRB is dependent variable. This study uses SPSS to analysis correlation.

3. Result

This study examined every variable relation. BFRB correlate with mother attachment, father attachment and peer attachment. BFRB was negatively associated with mother attachment ($r=-0.249$, $p<0.01$), negatively associated with father attachment ($r=-0.230$ $p<0.01$) and almost no associated with peer attachment($r=0.068$).

Table 1: Correlation between BFRB and attachment

	y variable:			
	Body-	x1:	x2: father	x3: peer
	focused	mother	attachment	attachment
	repetitive	attachment		
	behavior			

Table 1: (continued).

Spearman Rho	y variable: Body- focused repetitive behavior	Correlation	1.000	-.249**	-.230**	.068
		coefficient				
		Sig. (two- tailed)	.	.001	.002	.374
		N	174	174	174	174
	x1: mother attachment	Correlation	-.249**	1.000	.613**	.408**
		coefficient				
		Sig. (two- tailed)	.001	.	.000	.000
		N	174	174	174	174
	x2: father attachment	Correlation	-.230**	.613**	1.000	.166*
		coefficient				
		Sig. (two- tailed)	.002	.000	.	.029
		N	174	174	174	174
x3: peer attachment	Correlation	.068	.408**	.166*	1.000	
	coefficient					
	Sig. (two tailed)	.374	.000	.029	.	
	N	174	174	174	174	

** . at 0.01 level (two-tailed), correlation significance

* . at 0.05 level (two-tailed), correlation significance

4. Discussion

BFRB is an important problem need to be solved. Recently, BFRB relevant study increase. The relationship between BFRB and attachment can help the study prevent question by manipulate attachment. According to attachment theory, children find attachment figure because of the pressure. Pressure and anxiety are possible causation of BFRB [13]. This gives the possibility that attachment may help reduce the BFRB and different attachment figure can be concern. Recent study by MacCallum is about autistic attachment and BFRB correlation. The study shows same trend with this study: mother attachment has negative correlation with BFRB. Compare to MacCallum in 2020 study about Autism Spectrum children BFRB and mother attachment correlation, we examine the new variables of father and peer. Father attachment negative correlate with BFRB, but peer attachment no significance influence on BFRB. Totally, parent attachment has negative correlation with BFRB, and peer attachment is low correlation. Not only add new factor, we also have subjects from each age group who without Autism. The correlation in the study sees the table1. ($r=-0.249$, $r=-0.230$) is not as significance as the result of Autism children ($r=-0.470$). This comparative shows that improving attachment to treat BFRB is more effective in Autism children than non-treatment seeking people. That may because Autism children's higher anxiety. Mother and father attachment are both in negative correlation with BFRB, but they also have inner difference. Mother are always principal attachment figure [14]. And father is always secondary attachment figure [15]. The study result shows that correlation between mother attachment and BFRB is more significance than father attachment with BFRB. Mother's principal attachment figure is the possible explanation for this result. The study

developed study is importance to human life. The same trend of result between used study and the study makes result more convincing. The correlation with parent rather than peer gives suggestion of treatment focus. And the study on non-treatment seeking people rather than special group makes result more generalizability. The study gets a general trend, however, there are some exception situations. Individual have different family structure; this can lead to different attachment between father and mother. The question about attachment may led to participants' responds by social expectation. Social environment requires children respect their parent. So, they will lie on question like "will you change your parent now?". And the explanation of peer insignificance correlation may cause by some social environment.

There are also some shortcomings in the study. First, participants mainly from eastern of China, culture may be an influencer to the result. The study did not take into account the effects of gender and age at the same time. Secondly, the study uses online questionnaire form to examine the participants, this makes the result reality not sure. We can't control the irrelevant factor in the study directly. Additionally, items number in the questionnaire is less than original scale. This can increase the questionnaire complete rate, but may decrease the accuracy of Result. Because IPPA scale test attachment through communication, trust and alienation three dimension. The choosing item is deficient to cover every dimension. Thirdly, this study only relies on GBS-8 to testing BFRB. indiverse in scale can hinder the result accuracy. And only forward scoring question in GBS-8 is also reduce the accuracy. Study lacking in comparable between different gender and age. As a result, the study can find correlation between different gender and age's attachment with BFRB in the future. The reason of insignificance of peer attachment correlation is also a great future study direction. Totally, this study is valuable for treatment of BFRB, and gives a distinguish between parent attachment and peer attachment influence.

5. Conclusion

The main topic of this paper is the correlation between BFRB and attachment. The study was intended to explore this correlation and help suppress BFRBS. This study found that the less parent attachment an individual had, the more BFRBS they had. The peer attachment and BFRB association of individuals are weak. Compared to the BFRB-mother attachment of autistic children, the association of ordinary individuals was weaker. This paper hypothesizes that this may be related to the greater emotional sensitivity of children with autism. This study further fills the gap in the research field of BFRB influencing factors. The negative correlation between BFRB and maternal attachment was confirmed not only in children with autism, but also in the general population. It fills a gap in the research on the correlation between BFRB and paternal attachment and peer attachment. This paper suggests to further investigate whether the subject's different gender and age will have an impact on their BFRB, so as to deal with the BFRB problem in a more targeted manner. In the future, the relationship between parent attachment and BFRB can be further explored by manipulating parent attachment through experiments and observing its effect on inhibiting BFRB. Recalling memories about supportive person can promote secure attachment and improve positive emotion [16]. Based on the negative correlation between BFRB and attachment, future study can use this memory according method to improve subjects' attachment, and then treat the BFRB.

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