ISSN 2959-6122

AL004732

Attachment types and stigma affecting eating disorders patients' help-seeking behaviors in families: A mixed-methods study.

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Abstract:

Eating Disorders (ED) are increasingly common mental illnesses. This study explored the link between ED stigma and attachment styles using grounded theory, combining self-report questionnaires adapted from the Adult Attachment Scale (AAS) with semi-structured interviews analyzed through Nvivo 14. Among 12 Chinese young female adults and adolescents aged over 15, about 83.33% were insecurely attached, often resulting in stigmatization of EDs, particularly within their family context, leading them to conceal their disorders from parents. Over 90% of those with stigma exhibited insecure attachment, predominantly of the preoccupied type. The analysis identified 2 Selective Codes, 4 Axial Codes, and 7 Open Codes related to ED stigma formation. The findings suggest that insecure family dynamics contribute to EDrelated stigma, hindering help-seeking. Healthy family environments should promote open communication and support without body shaming. This research could inform future family therapy approaches and stigma-reduction strategies, though its online recruitment and small sample size limit generalizability. Further research with larger, more diverse samples is recommended.

Keywords: eating disorders, stigmatization, attachment theory

1. Introduction

1.1 Prevalence of Eating Disorders

Eating Disorders (ED) are increasingly prevalent in contemporary society, as evidenced and demonstrated

by various studies from multiple districts and among different age groups. Approximately 9% of the total US population, equating to 28.8 million Americans, will develop an ED at some point of their lives. The impact of Eating Disorders has spanned among all age groups, from as young as 5 years old to 80 years old, and affects individuals among all racial classifications, all gender groups, and all sexual orientations, though they are especially common among females(Austin, B. June 2020)[2]. By mid-life, 15.3% (95% confidence intervals, 13.5-17.4%) of women will have met the criteria for a lifetime ED (Micali, N et al., 2017)[20]. In addition to the prevalence of ED among adult females and mid-life rate of meeting the criteria, considerable research efforts have focused on statistical analysis pertaining to adolescents, males, and populations outside of the United States, highlighting the severity of this issue. In the US, approximately 3.8% of adolescent females and 1.5% of males are diagnosed with Eating Disorders (American Psychiatric Association, 2013)[1]. Empirical studies have identified eating disorder attitudes and behaviors among adolescents ranging from 13% to 29% for adolescent girls (Cella, Iannaccone, & Cotrufo, 2014)[6]. Historically, there have been researchers who studied specifically on the prevalence in ED on adolescent girls using an approach of annual diagnostic interviews. Kept tracking for 8 years among 496 adolescent girls, the lifetime prevalence of Anorexia Nervosa (AN) threshold and subthreshold by age 20 years was 0.6%, while it was 1.6% and 6.1% for threshold and subthreshold bulimia nervosa (BN), 1.0% and 4.6% for threshold and subthreshold binge-eating disorder (BED), and 4.4% for purging disorder (PD). Overall, the data showed that 12% of adolescents experienced some form of eating disorder (Stice, E et al., 2009) [25]. In China, the age-standardized incidence rate (ASIR), prevalence rate (ASPR), and disability-adjusted life years (DALY) rate per 100,000 population were estimated to be 13.22 (95% UI, 9.35-18.23), 38.08 (95% UI: 26.37-55.73), and 8.38 (95% UI, 4.87-13.35) for AN and 130.05 (95% UI, 84.02–187.13), 75.21 (95% UI, 48.52–105.97), and 16.16 (95% UI, 9.23-25.40) for BN, respectively, in 2019 (Zhitao Li et al., 2021)[18]. A seperate research employing screen detection techniques for Eating Disorders assessed 4218 females across 15 different provinces, identifying 296 individuals who screened positive for disordered eating on the SCOFF questionnaire, indicating a potential prevalence rate of Eating Disorders, 7.04%, in China (Shuyang Yao et al., 2021)[28].

1.2 Different family patterns contributing to Eating Disorders

There has been considerable discussion regarding the interplay between family dynamics and Eating Disorders. A self-report study involving 727 adolescents, comprising 500 boys and 227 girls aged 15 to 18, indicated that various aspects of family functioning—including flexibility, cohesion, disengagement, enmeshment, rigidity, and chaos-are related to disordered eating behaviors among adolescents (Fiorenzo Laghi et al., 2016)[17]. Research has explored the relationship between different family functioning factors and eating disorders, as well as unhealthy weight control methods. Regression analyses have shown that unhealthy family functioning can predict problems in adolescents, with a family's affective responsiveness also contributing to the risk of developing eating disorders. However, it is noted that further research is needed to validate the connections between eating disorder risks and factors such as problem-solving, communication, and behavior control (Jennifer Lyke & Julie Masten, 2013)[19]. In addition to these cross-sectional analyses, which can complicate the identification of the most significant factors influencing weight-related behaviors, targeted studies have been conducted to isolate individual factors in order to make clear its effects. A survey conducted in 1999 on 2,516 adolescents from 31 different Minnesota schools revealed that an authoritative parenting style may encourage more weight-control behaviors (Jerica M Berge et al., 2010)[4]. There was also research highlighting negative perceptions of the father's parenting style and the quality of relationship with him is important for the understanding of the formation and timespan of Eating Disorders (Horesh et al., 2015)[15].

To further explore the theories surrounding family interactions with eating disorders, it's important to consider attachment theory. Research in this area employs two primary methodologies: self-report and interviews. A study involving 53 women with eating disorders, 26 individuals from a psychiatric control group, and 60 healthy participants concluded that attachment anxiety is linked to negative concerns about body image (Horesh et al., 2015)[15]. A meta-analysis that reviewed selections from 154 studies conducting 11 meta-analyses found that individuals with eating disorders exhibit attachment insecurity, characterized by low parental care, high parental overprotection, diminished facial emotion detection and communication, increased facial avoidance, reduced agency, negative self-assessment, alexithymia, and a limited understanding of mental states and social responsiveness (H Pinar Caglar-Nazali et al., 2014)[5]. Furthermore, there's more studies concerning attachment styles and Eating Disorders. A survey of 62 women with eating disorders found that all participants demonstrated anxious attachment (Francoise Ringer & Patricia McKinesey Crittenden, 2007) [24]. An earlier study from 2001 also showed that among 13 participants with eating disorders (including 7 females and 6 males), many displayed dismissing or intertwined attachment styles. Though it has a relatively small sample size, it still highlighted the relationship between different attachment styles and Eating Disorders (A Ramacciotti

ISSN 2959-6122

et al.,2001)[23]. A more recent study identified four clinically relevant subtypes of binge eating, most of which include negative, overcontrolled, or underregulated mindsets (Susanne Lunn et al.,2012)[22]. Additionally, research indicates that 96%-100% of individuals diagnosed with eating disorders report experiencing insecure attachment (Antonios Dakanalis et al.,2014)[8]. This research also suggests that perfectionism may play a mediating role between insecure attachment style and different Eating Disorders, with discussions around the various mechanisms of this relationship, highlighting the potential influence of negative emotions and alexithymia. It has also concluded that childhood trauma may be identified as another contributing factor.

Beyond attachment theory, several other theories correlate with eating disorders from different aspects. Research reveals a positive correlation between the amount of a mother's weight-related discussions with her daughter and her daughter's depressive symptoms. Another study which has drawn its data from an assessment of 218 mothers and adolescent girls has discovered that more frequent weight-related comments or talk with their daughter can cause more depressive symptoms (p=0.041). Data indicated that among girls who received few weight-related comments from their parents, whether it's about shape or weight, only 4.2% reported engaging in extreme weight control measures. Conversely, among those whose parents frequently commented on their weight, 23.2% reported employing extreme weight control methods such as dieting and purging (Katherine W Bauer et al., 2013)[3]. Similar findings have been reported in other studies. One study identified significant elevations in negative affect before binge eating in individuals with binge eating disorder, potentially linking eating disorders, depressive symptoms, and parental comments. This suggests that parents' weight-related comments may trigger depressive symptoms that signal the onset of binge eating disorders (Alissa A Haedt-Matt&Pamela K Keel, 2011)[11]. A result table from a systematic review of primary care and stigmatization of EDs has shown that Eating Disorder families consistently show indifference or significantly lower than the control group on the aspect of affective expression, affective involvement, communication, task accomplishment, and problem-solving (Anita Holtom-Viesel&Steven Alla, 2014)[14].

1.3 Stigmatizations toward Eating Disorders

Currently, Eating disorders are some of the most stigmatized diseases among mental disorders (Daria S Ebneter& Janet D Latner, 2013)[10]. An analysis of 541 journal articles published between 1986 and 2022 has resulted in the conclusion that though there may exist much research on stigmatization under the context of Eating Disorders as well as primary caregivers and Eating Disorders, there has seldom been research combining them. The author of the research also argued that stigma associated with EDs and primary care needs more attention in the future (Hatice Kurdak et al.,2023)[16].

2. Method

2.1 Participants

The study included 12 young adult females from China, all of whom were aged 15 years or older. These participants volunteered through the Chinese social media platform, Little Red Book.

2.2 Design and Procedure

To assess the attachment styles of participants, they were instructed to complete the Adult Attachment Scale (AAS). This scale comprises questions designed to evaluate participants' current feelings regarding close relationships and attachment. The AAS was derived from the original conceptual framework and restructured into 18 questions (Hazen & Shaver, 1987)[13]. The results facilitate the identification of attachment types, aiding in the understanding of participant behaviors and family dynamics. In 1990, its reliability was reported with coefficients of 0.69 for Close, 0.75 for Depend, and 0.72 for Anxiety (Collins & Read, 1990)[7]. Additionally, a study conducted in China indicated that the 1996 edition of the AAS achieved a reliability coefficient of over 0.7 within a normal group, further affirming its validity (Wu et al., 2004)[27]. As a result, the questionnaire was adapted from Collins's 1996 research, which categorizes attachment styles into four types: secure, preoccupied, fearful-avoidant, and dismissive-avoidant.

To elaborate on these styles, the secure attachment style is characterized by the ability to form interdependent relationships without fear of abandonment, viewing both themselves and others as deserving of love. The preoccupied style is marked by low avoidance and high anxiety, reflecting individuals who desire closeness yet question others' willingness to reciprocate. This group often experiences significant fear of loss. The fearful-avoidant style describes individuals who wish to develop close relationships while holding fears of being hurt, leading to hesitation in romantic relationships. Lastly, the dismissive-avoidant style typically encompasses individuals who avoid close relationships due to a fear of trust and an pursuit on personal independence. Next, participants were invited to engage in a one-onone in-depth interview conducted online. Prior to both the interview and the questionnaire, they were informed about the study and consented to participate. Each interview lasted approximately 30 minutes. Participants were asked both determined questions and questions generated along their process of being interviewed. This utilized a semi-structured interview approach.

1. Describe your overall experience through eating disorders, including your weight control method, your opinions about your EDs' formation, how did it progress etc.

2. Do you rather tell your parents that you have eating disorders or you don't? Why?

3. What are your parents' opinions about your EDs if they happened to know you have it no matter if it was accidentally discovered or you told them?

4. What is your family interaction pattern? Do you consider your parents as more modern or more conservative?

2.3 Analysis Measures

The methodology of this paper is based on grounded theory, which enables researchers to develop insightful conclusions instead of testing their hypothesis through data analysis (Chris Drew, 2023)[9]. As additional information is collected, the researcher is able toderive conclusions that contribute to their own evolving theories (Mills, Bonner & Francis, 2017)[21]. Grounded theory is widely utilized across various facets of social life, and one of its key advantages is its ability to uncover complex social issues that current studies have not fully addressed. Therefore, its application in this research is appropriate.

After the interview, their audios are transferred into text. These text was further coded using the application of NVivo 14 (the table below).

The questionnaire results were further calculated by the scale provided in former text.

3. Result

3.1 general information of cases and interview codes

The following table describes the Selective Coding, Axial Coding (theme), Open coding developed through NVivo 14.

Selective Coding	Axial Coding(theme)	Open Coding	Cases	References
formation of EDs	(theme)others' opinions	parents' opinions	10	22
		partners and friends' opinions	5	7
		school's opinions	3	3
		social media	1	1
	(theme)unhealthy fitness methods	binge eating	6	11
		extreme dieting	7	13
		over exercising	2	3
attitudes toward telling parents	negative	/	10	11
	positive	/	1	1
	too serious illnesses	/	1	1
why formed stigmatiza- tion	(theme)improper parents' behaviors	manipulative parents	7	9
	(theme)poor communication	body shaming	4	7
		conflicts with parents	8	12
		the lack of understanding	10	19
why didn't form stig- matization	(theme)positive attitude	no body shame	1	1
		good understanding	1	1
	(theme)supportive behaviors	active help seeking	1	4

Table 1. Eating disorders and family dynamics of Chinese young females.

3.2 Parents' role on EDs formation

The table indicates that parents' opinions represent the

most frequently coded theme within the Axial Coding category. This theme accounts for one-third of the references

ISSN 2959-6122

and has been mentioned in approximately 83.33% of the cases analyzed.

"You have such a thick leg"

"I can't even see your ankless"

"Nobody is going to marry you"

"Are you planning to be fat again?"

"Negative comments on my figures lasted for years."

"You look like a vast mountain when you lie down. You look disgusting"

Among all the samples evaluated, only one exhibited a secure attachment style. It is clear that family plays a crucial role in the early self-conception of children. These observations align with their attachment styles. Unlike those with secure attachment, who identify their primary caregiver as a dependable source of support, children with other attachment types may discover that their parents may not always be attentive, and they do not experience significant distress when separated from them.

3.3 Stigmatization

These cases are primarily characterized by a reluctance to disclose eating disorders to their parents, as indicated by approximately 83.33% of individuals exhibiting significant negative attitudes, 8.33% displaying neutral attitudes, and 8.33% expressing significant positive attitudes.

The reason for forming the stigmatization was coded as two Selective Coding, four Axial Coding, and seven Open Coding.

3.4 Stigmatization characterized by poor family communication

One of the two themes identified during the Axial Coding for participants with Eating Disorders who experience stigmatization associated with disclosing their condition to their parents is the lack of support from family. This theme was noted in 11 out of 12 cases and includes 38 coding references.

To further elaborate this Axial Coding, there are 3 Open Coding under this theme.

The first one is "the lack of understanding", which commonly features parents' lack of understanding of Eating Disorders and refuse to regard it as an actual disease. The participant has been reporting that their parents can't place themselves in the same shoes as them, and they can't think from their perspectives.

"They are so mad at me. They don't understand why I dislike eating. They love to tell people about my symptoms and they scold me together."

"Of course they are unable to understand."

"From my parents' opinion, they consider the symptoms of BED as being too lazy and lack self-discipline to control

myself from eating."

"They thought that I was trying to threaten them by a hunger strike."

This was mentioned in 10 cases out of 12.

The second Open Coding was "conflicts with parents". These conflicts are usually because of authoritative parenting styles. This is mentioned in 8 cases out of 12.

"We've argued for times."

"She always loses her mind when she is arguing with me, so that she says everything that comes to her mind."

The last Open Coding under this theme is "body shame". This is characterized by severe criticism of daughters' figures that brought deep insecurity on parental love and confidence. This was mentioned in 4 cases out of 12.

"You are such a fat girl"

"How dare you to see these feminine dresses in such a huge figure, especially pink dresses."

"You are a fat bitch."

These hurtful and disrespectful words were mentioned as their impressive or representations of their parents' body shame.

3.5 Stigmatization characterized by improper parents' behaviors

The second Axial Coding of why some ED participants tend to withhold the fact that they have EDs from their parents was the improper parents' behaviors.

This theme contains only one Open Coding "manipulative parents". This contains the element of authoritative parenting style and physically beating their kids.

"They are so manipulative"

"They threaten me that if I don't have my meal I will be forced to be sent to the hospital no matter if I want to."

"They like scolding and hurting me physically ever since I was a child."

"My mother told me that if I don't eat my meal, she won't give me money for school."

These manipulative experiences made them regret that they've told their parents, or don't expect them to react properly from the start and therefore not telling them.

Other than these behaviors, there's also people's family that are divorced, or constantly involve fights within the family.

3.6 Healthy way of treating EDs family's characteristics

From the secure attachment style and fully recover case, there were two themes and accordingly four Open Coding. It was overall characterized by "supportive behaviors" and "positive attitudes". This was because the ED participant in this case has never received body shame from her parents. They have always been supportive of her. After she told them that she has EDs, they went to hospital to seek help, calling for help from their health advisor. They've even studied eating disorders together.

Her family neither showed any symptoms mentioned in the other 11 cases, nor had the tendency towards it.

4. Discussion

4.1 Innovations

This research has been discussing the relationship between attachment style, which is closely related to primary caregivers, and stigmatization of EDs. This attempts to compensate the gap which was pointed out earlier by Hatice that stigma associated with EDs and primary care needs more attention in the future (Hatice Kurdak et al.,2023)[16]. It has also combined quantitative and qualitative study, making efforts to correlate them. Moreover, it has been using grounded theory which allows the paper to generate insightful conclusion without the limitations of hypothesis. Also, it has been discussing EDs' risks and factors such as problem-solving, communication, and behavior control, which was called for attention in a previous study. (Jennifer Lyke & Julie Masten, 2013)[19]. Its result may illustrate that secure attachment with zero body shame family atmosphere may be better for ED patients' recovery, while insecure attachment types alongside body shaming and lack of understanding may be of the opposite effect.

4.2 Future potentials

The result of this research may provide more insights to the development of family therapy and may have the potential of being utilized on ED family guidelines.

4.3 Limitations

The limitations of this paper include its relatively small sample size, as the participants were individuals who actively engage with Little Red Book, which may restrict the generalizability of the findings.

5. Conclusion

In summary, eating disorders represent a complex mental health challenge influenced by various factors, including societal norms, social media, and familial relationships. A thorough understanding of these disorders necessitates sample analysis. Attachment styles, which reflect how individuals engage with others and perceive their social standing, may be linked to intricate family dynamics. It is important to note that families in China may display different patterns compared to those observed in prior research focused on Western families. Overall, it is evident that family relationships are a significant factor in the development of eating disorders. Insecure attachment is frequently observed among individuals with eating disorders, particularly among those whose conditions were initiated in familial interactions. A secure family environment, characterized by active help-seeking behaviors, a solid understanding of the disorder, and zero body shame, can be important in promoting recovery and encouraging individuals to seek assistance. Conversely, insecure attachment styles are often associated with detrimental parental behaviors, such as manipulation and physical abuse, as well as ineffective communication marked by severe body shaming, misunderstandings, and conflicts. In conclusion, ED patients with insecure attachment style may tend to have higher probabilities of forming stigmatization on having ED under their family context.

References

[1] American Psychiatric Association, D. S. M. T. F., & American Psychiatric Association, D. S. (2013). Diagnostic and statistical manual of mental disorders: DSM-5 (Vol. 5, No. 5). Washington, DC: American psychiatric association.

[2] Austin, B. (Ed.). (2020, June). Report: Economic Costs of Eating Disorders. Strategic Training Initiative for the Prevention of Eating Disorders. https://www.hsph.harvard.edu/striped/

[3] Bauer, K. W., Bucchianeri, M. M., & Neumark-Sztainer, D. (2013). Mother-reported parental weight talk and adolescent girls' emotional health, weight control attempts, and disordered eating behaviors. Journal of eating disorders, 1, 1-8.

[4] Berge, J. M., Wall, M., Neumark-Sztainer, D., Larson, N., & Story, M. (2010). Parenting style and family meals: crosssectional and 5-year longitudinal associations. Journal of the American Dietetic Association, 110(7), 1036-1042.

[5] Caglar-Nazali, H. P., Corfield, F., Cardi, V., Ambwani, S., Leppanen, J., Olabintan, O., ... & Treasure, J. (2014). A systematic review and meta-analysis of 'Systems for Social Processes' in eating disorders. Neuroscience & Biobehavioral Reviews, 42, 55-92.

[6] Cella, S., Iannaccone, M., & Cotrufo, P. (2014). How perceived parental bonding affects self-concept and drive for thinness: a community-based study. Eating Behaviors, 15(1), 110-115.

[7] Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. Journal of Personality and Social Psychology, 58(4), 644–663. https://doi.org/10.1037/0022-3514.58.4.644

[8] Dakanalis, A., Timko, C. A., Zanetti, M. A., Rinaldi, L., Prunas, A., Carrà, G., ... & Clerici, M. (2014). Attachment

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ISSN 2959-6122

insecurities, maladaptive perfectionism, and eating disorder symptoms: A latent mediated and moderated structural equation modeling analysis across diagnostic groups. Psychiatry Research, 215(1), 176-184.

[9] Drew, C. (2023, October 26). 10 Grounded Theory Examples (Qualitative Research Method). HelpfulProfessor.Com. https:// helpfulprofessor.com/grounded-theory-examples/

[10] Ebneter, D. S., & Latner, J. D. (2013). Stigmatizing attitudes differ across mental health disorders: a comparison of stigma across eating disorders, obesity, and major depressive disorder. The Journal of nervous and mental disease, 201(4), 281-285.

[11] Haedt-Matt, A. A., & Keel, P. K. (2011). Revisiting the affect regulation model of binge eating: a meta-analysis of studies using ecological momentary assessment. Psychological bulletin, 137(4), 660.

[12] Haines, J., Neumark-Sztainer, D., Hannan, P. J., Van Den Berg, P., & Eisenberg, M. E. (2008). Longitudinal and secular trends in weight-related teasing during adolescence. Obesity, 16(S2), S18-S23.

[13] Hazan, C., & Shaver, P. (1987). Romantic Love Conceptualized as an Attachment Process. Journal of Personality and Social Psychology, 52(3), 511–524.

[14] Holtom-Viesel, A., & Allan, S. (2014). A systematic review of the literature on family functioning across all eating disorder diagnoses in comparison to control families. Clinical psychology review, 34(1), 29-43.

[15] Horesh, D., Lowe, S. R., Galea, S., Uddin, M., & Koenen, K. C. (2015). Gender differences in the long-term associations between posttraumatic stress disorder and depression symptoms: Findings from the detroit neighborhood health study. Depression and anxiety, 32(1), 38-48.

[16] Kurdak, H., Tiyekli, E., Özcan, S., Özer, Z. Y., & Nur Topuz, A. (2023). Eating disorders, primary care, and stigma: an analysis of research trends and patterns. Frontiers in Psychiatry, 14, 1243922.

[17] Laghi, F., Pallini, S., Baumgartner, E., Guarino, A., & Baiocco, R. (2016). Parent and peer attachment relationships and time perspective in adolescence: Are they related to satisfaction with life?. Time & Society, 25(1), 24-39.

[18] Li, Z., Wang, L., Guan, H., Han, C., Cui, P., Liu, A., & Li, Y. (2021). Burden of eating disorders in China, 1990-2019: an updated systematic analysis of the global burden of disease study 2019. Frontiers in psychiatry, 12, 632418.

[19] Lyke, J., & Matsen, J. (2013). Family functioning and risk factors for disordered eating. Eating behaviors, 14(4), 497-499.

[20] Micali, N., Martini, M. G., Thomas, J. J., Eddy, K. T., Kothari, R., Russell, E., ... & Treasure, J. (2017). Lifetime and 12-month prevalence of eating disorders amongst women in mid-life: a population-based study of diagnoses and risk factors. BMC medicine, 15, 1-10.

[21] Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. International journal of qualitative methods, 5(1), 25-35.

[22] Pedersen, S. H., Lunn, S., Katznelson, H., & Poulsen, S. (2012). Reflective functioning in 70 patients suffering from bulimia nervosa. European Eating Disorders Review, 20(4), 303-310.

[23] Ramacciotti, A., Sorbello, M., Pazzagli, A., Vismara, L., Mancone, A., & Pallanti, S. (2001). Attachment processes in eating disorders. Eating and weight disorders-Studies on Anorexia, Bulimia and Obesity, 6, 166-170.

[24] Ringer, F., & Crittenden, P. M. (2007). Eating disorders and attachment: The effects of hidden family processes on eating disorders. European Eating Disorders Review: The Professional Journal of the Eating Disorders Association, 15(2), 119-130.

[25] Stice, E., Marti, C. N., Shaw, H., & Jaconis, M. (2009). An 8-year longitudinal study of the natural history of threshold, subthreshold, and partial eating disorders from a community sample of adolescents. Journal of abnormal psychology, 118(3), 587.

[26] Voelker, D. K., Reel, J. J., & Greenleaf, C. (2015). Weight status and body image perceptions in adolescents: current perspectives. Adolescent health, medicine and therapeutics, 149-158.

[27] Wu, W. L., Zhang, W., & Liu, X. H. (2004). The reliability and validity of adult attachment scale (AAS-1996 revised edition): a report on its application in China. Sichuan da xue xue bao. Yi xue ban= Journal of Sichuan University. Medical science edition, 35(4), 536-538.

[28] Yao, S., Zhang, R., Thornton, L. M., Peat, C. M., Qi, B., Du, S., ... & Bulik, C. M. (2021). Screen-detected disordered eating and related traits in a large population sample of females in mainland China: China Health and Nutrition Survey. International Journal of Eating Disorders, 54(1), 24-35.