

A Review of Emotional Eating Behavior and Its Influencing Factors among College Students

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Abstract: Against the backdrop of the “Healthy China 2030” initiative, which emphasizes promoting healthy lifestyles and dietary behaviors, this paper explores the phenomenon of emotional eating among college students. As future societal pillars, college students face multifaceted pressures (academic, interpersonal, and employment-related) that can trigger emotional fluctuations and subsequently influence their eating behaviors. Given their representative status as a distinctive social group, studying their emotional eating patterns is crucial. This research aims to provide deeper insights into the causes, manifestations, and potential guidance strategies for such behaviors among youth, thereby offering theoretical and practical implications for advancing the Healthy China strategy.

Keywords: Healthy China 2030; Emotional eating; College students; Dietary behavior; Health promotion

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1. Introduction

The “Healthy China 2030” Outline, issued by the Central Committee of the Communist Party of China and the State Council, sets forth new requirements for public health: promoting healthy lifestyles, strengthening health education, and shaping healthy behaviors^[1]. In response to the call for “Healthy China,” the Office of the National Nutrition and Health Guidance Committee released the core message of “Healthy Eating, Balanced Diet,” which focuses on how ordinary people can achieve healthy eating. This includes, but is not limited to, increasing the intake of various fruits and vegetables in daily life, cooking with minimal oil and salt, moderately consuming aquatic products, and canteens and restaurants taking the initiative to shoulder social responsibilities by innovating dishes and providing healthy meals. These efforts aim to guide the public toward a healthier dietary structure and contribute to the realization of Healthy China^[2].

In recent years, with the rapid development of the social economy, the public’s demand for eating has evolved from simply satisfying hunger to pursuing quality in various aspects^[3]. Eating behavior is no longer just a basic necessity of life. Under different situational conditions, the diverse eating behaviors people exhibit are also an

undeniable fact on the path to achieving the goal of a healthy China. Emotional eating behavior is increasingly drawing attention from researchers and relevant professionals across society.

College students are at a special stage of life. As the backbone of future social development, the pressures they face are not limited to academic stress within the school environment, but also include interpersonal pressures arising from social relationships and employment pressures when entering society. These sources of pressure can lead to various emotional states among college students, which in turn affect their eating behaviors. As a distinctive social group in contemporary society, college students' lifestyles often serve as representative models. Therefore, studying their emotional eating behaviors helps us gain deeper insights into the causes, current patterns, and future guidance directions of such behaviors among young people. This research provides significant theoretical and practical implications for implementing the Healthy China strategy.

2. Concept and research status of emotional eating

2.1. The concept of emotional eating

The concept of emotional eating refers to eating behaviors driven by negative emotions such as stress and loneliness rather than physiological hunger^[4]. While initial studies identified emotional eating as a contributing factor to binge eating symptoms in individuals with bulimia, subsequent research revealed its prevalence among obese populations, those with eating disorders, and even people with normal weight who continue restrictive diets^[4]. Emotional eating is not merely a pathological issue but also a socio-psychological phenomenon embedded in eating behaviors^[5].

2.2. Current status of emotional eating research

2.2.1. Current status of international research on emotional eating

Research on emotional eating has been established earlier abroad, with more comprehensive developments compared to China. Internationally recognized instruments such as the Comprehensive Emotional Eating Scale (CEES)^[6] and the Reactive Movement Scale (RES)^[7], which measure responses to emotional cues, eating behaviors, and body image triggers, have been developed. These instruments provide researchers with scientifically validated statistical methods and deliver precise data support for studies on emotional eating.

In studying the factors influencing emotional eating, international researchers have not only focused on psychological and social factors but also explored the relationship between physiological factors and emotional eating. A study examining parental control over college students' emotional eating^[8] analyzed 1,167 participants, revealing significant positive correlations between parental behavioral control and psychological control with emotional eating. Higher parental control was associated with increased emotional eating behaviors, with anxiety, stress, and expressive suppression playing crucial roles. In another groundbreaking study, Smirnov *et al.*^[9] measured electromyography (EMG) parameters of chewing muscles and evaluated food bolus characteristics using agar chewing tests. The results showed that emotional eaters with negative emotions exhibited significantly reduced chewing and swallowing frequencies compared to control groups. Researchers led by Mikhail *et al.*^[10] demonstrated that ovarian hormone-feeding disorder associations showed the strongest individual variation in adult women. Their findings revealed that fluctuations in endogenous estradiol and progesterone levels significantly modulate how genetic factors influence individual variations in emotional eating patterns.

Research by international scholars on emotional eating reveals that its occurrence is determined by multiple factors, including but not limited to individual psychological resilience, the influence of social relationships,

and physiological characteristics. These findings highlight the complex nature of emotional eating. A deeper understanding of this phenomenon could significantly contribute to global health promotion efforts.

2.2.2. Current research on domestic emotional eating

Research on emotional eating in China started relatively late, with the first study addressing this issue not until 2014^[11]. The research highlighted the rapid growth of eating disorders and obesity among the Chinese population, noting how related social problems are increasingly threatening public health. It emphasized that examining emotional factors influencing eating behaviors can help identify root causes of eating disorders, reveal why dieting efforts succeed or fail due to emotional triggers, and provide crucial theoretical foundations for preventing and intervening in associated social issues.

In China, the earliest research report specifically addressing emotional eating was published in 2016^[12]. This study officially adopted a revised emotional eating scale better suited for Chinese adolescents^[13], conducting an emotional eating study among 600 college students and concluding that the scale demonstrated good reliability and validity. The reliability analysis showed a total scale α coefficient of 0.879, with female students showing significantly higher levels of positive emotions compared to males, while no significant differences were observed in depressive, anxious, or hostile emotions. This signifies the official commencement of research on emotional eating in China, which has gained mainstream academic attention. Subsequent studies have progressed from broadly examining the negative correlation between mindfulness and emotional eating from a personal perspective, as well as the mediating role of self-emotional assessment in emotional intelligence between mindfulness and emotional eating^[14], to increasingly detailed investigations into specific environmental and population-related emotional eating behaviors. A report on the impact of stress perception on emotional eating among military academy cadets^[15] explicitly identified three influencing factors—stress perception, anxiety, and sleep quality—as showing significant positive correlations with emotional eating. Furthermore, it proposed that anxiety and sleep quality partially mediated these relationships, accounting for 49.32% of the total effect. Similarly, a study on emotional eating patterns in specific populations^[16] conducted among 220 obese patients who underwent sleeve gastrectomy revealed significant correlations between emotional eating and body weight internalization discrimination. The research utilized psychosocial questionnaires, including the Social Inequality Scale, Body Weight Internalization Discrimination Scale, Self-Esteem Rating Scale, Anxiety Rating Scale, Depression Rating Scale, and the three-factor eating scale (emotional eating component). The findings highlighted that surgically treated obese patients generally exhibited both pronounced emotional eating issues and complex mental health challenges.

Based on domestic research examples of emotional eating discussed above, we can draw a clear conclusion: While emotional eating is indeed a behavior driven by personal emotions, people living in society inevitably experience social environmental influences that trigger corresponding emotional responses. When these emotions affect individuals, they often lead to emotional eating behaviors during the process of processing them. Therefore, conducting sociopsychological studies on emotional eating while exploring the influencing factors affecting such behaviors from both individual and group perspectives plays an indispensable role in preventing and treating emotional eating behaviors.

3. Study on the status quo of emotional eating among college students

One of the earliest reports in China on emotional eating among college students^[17] did not explicitly define the

concept, but concluded that social evaluations influenced students' body confidence, leading to anxiety, which negatively impacted eating behaviors. However, this situation has evolved as the concept of emotional eating gained wider recognition in China, with domestic scholars developing more refined research approaches. A study^[18] investigated the relationship between career anxiety and emotional eating among impoverished college students. Through a two-phase tracking survey conducted over one academic year with 322 participants, researchers found significant positive correlations between career anxiety and emotional eating in both measurements. Subsequent detailed analysis revealed that in the female group, initial anxiety levels positively predicted subsequent anxiety levels, further demonstrating gender-specific differences in the positive correlation between career anxiety and emotional eating.

A study investigating factors influencing emotional overeating among college students was conducted with 2,045 participants from five cities across Anhui Province^[19]. Researchers developed a questionnaire framework based on social ecosystem theory, covering personal factors, interpersonal dynamics, physical environment, and macro-level influences. Their findings revealed correlations between emotional overeating behaviors, distorted eating attitudes, personal emotions, and close friends' attitudes. However, other variables like gender, living expenses, urban-rural birthplace, and parental attitudes showed no significant connections. The results clearly demonstrate that incorrect eating attitudes and personal emotions promote emotional overeating behaviors, while close friends' supportive attitudes significantly reduce the risk of such behaviors.

The root causes of emotional eating behaviors among contemporary college students often lie within their own circumstances. Fluctuating emotions, inadequate knowledge of healthy eating habits, and improper emotional management methods collectively contribute to the prevalence of such behaviors. To prevent emotional eating, students must acquire essential nutritional knowledge. Research reveals a significant knowledge gap: over 60% lack a clear understanding of protein, vitamin, and mineral requirements, fewer than 40% can accurately identify nutritional components and calorie content in common foods, and only 25% grasp dietary balance principles^[20]. This corresponds to widespread mental health issues. Studies indicate 15–30% of students experience varying degrees of psychological distress, with approximately 8% requiring professional intervention^[21]. Current psychological support primarily relies on counselors and peers, lacking specialized mental health professionals^[22]. This inadequacy leaves students with severe psychological issues without proper guidance, often allowing emotions to dictate behavior—a key factor contributing to the prevalence of emotional eating.

4. Suggestions related to college students' emotional eating behavior

The concept of emotional eating refers to the act of consuming food to relieve negative emotions such as stress and loneliness rather than physiological hunger. Among contemporary college students, who generally lack knowledge about healthy eating, suffer from a high incidence of psychological issues, and receive insufficient professional guidance, emotional eating often occurs frequently. This negatively impacts both their physical and mental health. Therefore, minimizing emotional eating behaviors in daily life is crucial for the comprehensive and balanced development of college students, and also serves as an important process in promoting the implementation of the Healthy China strategy.

For college students, understanding emotional eating and healthy eating habits is crucial. As educated individuals, we should proactively learn about these topics through various channels, actively taking charge of our physical well-being and emotional states. By doing so, we can truly embody the spirit of modern youth who lead

with confidence and vitality.

Schools should organize more health lectures on emotional eating to enhance students' health literacy. They should actively promote the latest research findings on emotional eating and guide students to develop healthy eating habits. Additionally, schools should recruit professional psychological practitioners to provide guidance on proper emotional management techniques for students.

5. Conclusion

As a special social group, college students bear various pressures from academic and daily life. How to reduce emotional eating behaviors caused by various factors among college students is of great significance for improving their health levels and implementing the Healthy China strategy. Although college students possess high levels of knowledge and cultural literacy, they have relatively low mastery of healthy eating knowledge closely related to their own health, compounded by mental health issues, which leads to frequent occurrences of emotional eating behaviors. Therefore, strengthening health education on healthy eating for college students and paying attention to their mental health are crucial measures to alleviate emotional eating behaviors. This not only contributes to the personal health development of college students but also serves as a reference for addressing societal emotional eating issues through the example of students' emotional eating problems, thereby promoting the overall development of societal health and truly implementing the Healthy China strategy.

Disclosure statement

The authors declare no conflict of interest.

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