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The Analysis of Impacts on Portrait-Based Social-Media Content on Adolescents' Mental Health

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Abstract. Adolescents are heavily exposed to portrait-based visual content on social media, which brings complicated psychological consequences amid rising youth mental-health concerns. This paper, through the method of literature review together with questionnaire, explores the mixed mental-health impacts of three categories of portrait-based content among Chinese adolescents, as well as moderating factors including gender, family background, and personal traits. Based on 87 valid survey responses, this paper finds that portrait-related content generates both negative risks and positive functions for adolescents. Female adolescents experience significantly stronger psychological pressure than males, yet depressive symptoms are not directly intensified at the sample level. The author concludes that individual differences shape adolescents' responses to portrait-based content, and media literacy and diversified self-concepts are essential for youth to mitigate online psychological risks.

Keywords: adolescents, social media, portrait-based content, mental-health

1. Introduction

In the contemporary era, social media brings considerable convenience and opens up new possibilities for adolescents, defined as individuals aged 10 to 19 [1]. Nevertheless, excessive use can also give rise to numerous potential risks. Globally, rising adolescent depression prevalence exhibits observable gender differences, and this trend may be associated with greater social-media exposure. Research from the WHO Regional Office for Europe [2] indicates adolescent females report more depression symptoms linked to social media use compared with males.

Within social media, compared with written text, it is the most readily accessible form of information. It can exert greater emotional impact and profoundly shape online users' perceptions. Furthermore, portrait-based content generates particularly strong effects on adolescents: it translates abstract symbols into concrete human figures, thereby evoking more intense emotional responses. Accordingly, portrait-based visual content warrants closer scholarly examination of its psychological effects on adolescents.

This study adopts the methods of literature review and questionnaire survey to investigate the impacts of portrait-based content on adolescents' mental health. It categorizes portrait-based content into three types: selfie-related content, individual-lifestyle content, and group-gathering content. Selfie-related content consists of portrait-focused visual images or videos centered on personal

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appearance or body shape, with minimal background detail. Individual-lifestyle content refers to person-centered photos and videos documenting everyday life; unlike selfies, it emphasizes surrounding settings while still featuring human portraits. Group-gathering content includes photos and videos taken alongside other people to represent interpersonal bonds. The significance of this study lies in helping adolescents gain a better understanding of social media use, as well as offering suggestions for parents and schools.

2. Methodology

The survey was released online for anonymous participation by teenagers across China, drawing respondents from multiple provincial-level regions to improve diversity. Offline random distribution in public spaces and through teachers was added to reduce online sampling bias. In total, 87 valid questionnaires were collected from adolescents aged 10 to 19. There were 48 female and 39 male respondents. More than 70 percent used social media for at least two hours daily.

On a five-point Likert scale, the audience perspective mean was 3.34, the creator perspective mean was 3.57, the depressive tendency mean was 2.94, and the overall negative influence mean was 3.29. Female respondents scored higher than males on all three dimensions. Item comparisons showed female means higher on all items except Q4. The largest gaps were Q8 about concern over low likes and comments, Q1 about social comparison after viewing selfies, and Q14 about appearance inferiority. Independent samples t-tests found significant gender differences on all three dimensions. One-sample t-tests showed the audience and creator perspectives were significantly above the neutral midpoint of 3, while depressive tendency did not differ significantly from 3.

The findings indicate that respondents tended to agree that social media portrait content has negative influence both as audiences and creators. Female adolescents reported greater comparative pressure, evaluation anxiety, and psychological distress. However, the overall depressive tendency did not deviate from neutral, suggesting effects mainly involve cognitive comparison and concern rather than clinical depressive symptoms. The final hypothesis is that frequent engagement with portrait content links to heightened depressive feelings in adolescents, with complex causes. The study aims to explore how three categories of portrait-based visual content influence adolescent mental health positively and negatively, identify factors explaining varying impacts, and discuss practical strategies to protect adolescent well-being.

3. Negative impacts of portrait-based social-media content on adolescents' mental-health

3.1. Receivers — the negative impacts of selfie-related content

Social-media algorithms prioritize idealized selfie-related content consistent with dominant beauty standards, increasing adolescents' exposure to polished online imagery. Repeated exposure may lead them to internalize narrow beauty norms, as platform algorithms prioritize the distribution of currently trending and highly similar content. This process may ultimately foster aesthetic homogenization and further trigger upward social comparison—in which individuals compare themselves with others whom they perceive as superior [3]. Comparing one's real-life appearance with filtered, digitally-altered online ideals can generate appearance-related anxiety, inferiority, and jealousy among adolescents [4].

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3.2. Receivers — the negative impacts of individual-lifestyle content

3.2.1. Normative social influence, cultural insecurity and peer-status anxiety

Repeated exposure to individual-lifestyle content can impose strong normative social influence on adolescents. Algorithmically amplified idealized lifestyles may foster perceptions of cultural homogenization, producing two psychological outcomes. One is that adolescents may develop feelings of inferiority toward their native culture as online values and aesthetics become dominant reference points, weakening cultural self-esteem. Yet acceptance of native culture can coexist with such inferiority. Another is that homogenized online norms may encourage blind pursuit of mainstream social media culture. To gain acceptance, young people conform to widely shared standards spread through lifestyle content, blending personal preference with social recognition. For instance, popular teen-dating norms can merge romantic desire with status concerns, making romance a public marker of mainstream alignment. Heavy reliance on external benchmarks increases social-evaluative anxiety and emotional exhaustion. Whether adolescents meet these benchmarks or not, they remain vulnerable to disappointment and emptiness, harming mental well-being.

3.2.2. Preoccupation and negative emotional responses

Creators tend to present their highlight-reel moments online rather than mundane everyday experiences. That is, they are more likely to post content around significant life events or selected aspects they wish to display [7]. This results in partial, one-sided self-disclosure online. The selectively idealized nature of such content may foster preoccupation among some adolescent viewers [8]. Beyond casual browsing, some users fixate closely on post details and dig for real-life social information online. This heightened attention is particularly strong toward peers who trigger strong real-world feelings, such as romantic interests and rivals. Repeated exposure to polished individual-lifestyle content may stir feelings of jealousy within adolescents. Comparing themselves to this selective online portrayal fills them with dissatisfaction toward everyday life and a sense of inferiority.

3.3. Receivers — the negative impacts of group-gathering content

Heavy exposure to group-gathering content on social media may trigger fear of missing out (FOMO), a pervasive apprehension that peers are enjoying rewarding social experiences without oneself [9]. This FOMO-related unease may further generate loneliness and anxiety among adolescents. In some cases, adolescents who already experience real-world loneliness or social disconnection may turn to social-media browsing as a coping strategy. Upon encountering peers' group-gathering posts online, their pre-existing loneliness intensifies, forming a self-reinforcing cycle of social exclusion. Such a cycle of loneliness prevents adolescents from forming and maintaining offline relationships, instead plunging them into greater emotional burnout.

3.4. Senders — the negative impacts of portrait-based content

3.4.1. Negative feedback and psychological distress

Receiving negative feedback after posting portrait-related content can trigger feelings of inferiority and low mood among adolescents. They may even experience intimidation from online harassment.

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As a result, adolescents become increasingly hesitant to express themselves and avoid interpersonal interaction both online and offline, which is highly detrimental to their physical and mental well-being.

3.4.2. Insufficient feedback and self-doubt

Psychological harm stemming from receiving little or even no feedback after posting portrait-based content on social-media platforms can, under some circumstances, exceed the distress caused by explicit negative feedback [10]. When adolescents put considerable effort into creating portrait-based posts, feedback that fails to meet their expectations may trigger self-doubt. Since these posts show personal physical appearance, low-engagement outcomes are easily interpreted as personal judgement rather than merely responses to content.

3.4.3. Self-objectification and appearance-based anxiety

Self-objectification describes an internalized social tendency whereby individuals judge their physical appearance from an external observer's perspective [11]. When adolescents share portrait-based content on social media, they constantly consider how other users will perceive and evaluate their posts. This preoccupation with others' viewpoints further reinforces self-objectification. They start to view themselves through the eyes of an outside audience, placing excessive emphasis on their physical look rather than their inner qualities. As a result, appearance-based anxiety is intensified. Their sense of self-worth becomes heavily contingent on others' judgments of their appearance. Positive feedback such as likes and favourable comments may temporarily boost their self-esteem, while negative remarks can easily trigger feelings of inferiority and distress.

3.4.4. Escapism and emotional emptiness

Frequent posting of portrait-based content on social media may relate to adolescent escapism. Following digital-media scholarship, this study broadly defines escapism as psychological disengagement from everyday offline experiences, not merely avoidance of hardship [12]. Some users fixate on constructing idealized online personas to detach themselves from reality, which can result in emotional emptiness.

4. Contributing factors for negative mental-health outcomes among adolescents

4.1. Gender differences

Existing research notes that adolescent females are disproportionately targeted by appearance-related online harassment when posting portrait-based content and tend to experience stronger emotional fluctuations in response to negative or minimal feedback. Therefore, girls may be more vulnerable to anxiety, inferiority, and social comparison triggered by engagement with portrait-based online content [13]. Nevertheless, adolescent males, constrained by societal norms of masculinity that emphasize emotional stoicism, are less likely to disclose negative feelings outwardly and tend to suppress inner distress [14]. This pattern may create a misleading perception that adolescent males suffer less harm. Chronic emotional suppression may bring more severe adverse consequences than the initial stressor.

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4.2. Family-related factors

Family-related factors, including family structure, parenting styles, parent-child attachment, adverse domestic events, and family values, may moderate the extent to which adolescents suffer negative psychological impacts brought by portrait-based content [15].

Growing up in a broken or authoritarian parenting style family characterized by high expectations yet insufficient emotional communication may lead adolescents to seek validation externally. Consequently, they may be more vulnerable to feelings of low self-worth and status anxiety when exposed to portrait-based content. In comparison, some adolescents live within an intact household with authoritative parenting. Their parents validate their emotions while setting reasonable expectations. Accordingly, they are far less reactive toward online evaluation, and exposure to portrait-based posts barely threatens their self-esteem.

These two cases demonstrate that family environments operate either as risk or protective buffers. Supportive family backgrounds reduce adolescents' psychological vulnerability, whereas stressful domestic contexts amplify sensitivity toward online portrait-based content.

4.3. Racial-ethnic background

Racial-ethnic background acts as an important moderator shaping adolescent psychological responses to portrait-based social-media content. Ethnic-minority adolescents often endure amplified negative psychological impacts. Torn between conflicting aesthetic standards and cultural norms, they may crave external acceptance and assimilation into dominant local culture. Under such cultural-identity pressure, they may experience heightened stress both when posting and consuming portrait-based content. Ethnic-cultural tensions can generate subjective feelings of non-belonging, raising susceptibility to feelings of inferiority.

4.4. Dispositional-trait differences

Personality shapes adolescents' emotional responses to portrait-based content, according to the differential susceptibility to media-effects model [16]. Adolescents who exhibit high sensitivity toward others' judgement experience more intense emotional shifts. Such dispositional traits render them susceptible to affective fluctuations induced by online portrait-based content. Adolescents who have a positive attitude toward negative feedback, however, are less vulnerable to this content. Overall, personality may moderate the relationship between adolescents' emotional reactions and portrait-based online feedback.

5. Positive impacts of portrait-centered social-media content on adolescents' mental-health

Portrait-based social-media content may also yield multiple positive outcomes for adolescents [17].

First, such content facilitates interpersonal bonding and belonging [18]. It sustains pre-existing friendships and creates common topics among young people. When adolescents enter different colleges, they can maintain connections through viewing and exchanging social-media posts, an activity that preserves peer-relationship quality and promotes adolescent emotional well-being.

Second, portrait-based posts serve as vital self-expression outlets. Adolescents can frequently publish party group photos, daily snapshots and travel-related material online. These face-bearing posts allow adolescents to present themselves and express personal identities. This outward form of self-expression can enhance their life satisfaction.

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Third, this content delivers real-world opportunities that foster role-identity development. For example, gaining online exposure from self-focused photographs and short-video posts, an adolescent who is interested in performing may receive an email from a talent agent with audition opportunities. These professional prospects can support career aspirations and accelerate the formation of the adolescent's role identity as a performer. Such positive feedback can strengthen adolescents' self-efficacy and future-oriented confidence.

6. Conclusion

This study investigated how portrait-based social-media content influences adolescents' mental health. The findings indicate mixed psychological outcomes: adolescents experience comparative pressure and appearance-related anxiety when consuming and creating portrait-centered content, with female participants reporting significantly stronger negative responses. These findings support the hypothesis that frequent engagement with portrait-based content is associated with heightened depressive feelings.

This study contributes to existing research by categorizing portrait-based content into three subtypes and comparing their distinct mental-health impacts. It also provides empirical evidence of gender differences in psychological responses to social-media visual content, with practical implications for adolescent mental-health education and social-media literacy.

A limitation is that the study does not address passively shared portraits, such as secretly taken photos or personal image leakage. In addition, self-report questionnaires may introduce response bias and limit generalizability. Future research could examine the psychological harm caused by non-voluntarily disseminated portrait content and adopt mixed-method approaches combining interviews with objective behavioral data.

Overall, this study highlights both the risks and benefits of portrait-based social-media content and underscores the importance of promoting healthy social-media use among adolescents.

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