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Social comparison and its role in the formation of problematic internet use in adolescents (literature review)

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Abstract

Context and relevance. The widespread use of social media among adolescents has led to a significant increase in problematic internet use; however, the psychological mechanisms underlying this relationship remain poorly understood. In particular, the question remains open as to what role social comparison plays in the development of problematic Internet behavior among adolescents who are in the process of identity formation and are highly sensitive to external evaluations. **Objective.** The aim of this review is to systematize and critically analyze current scientific data on the role of social comparison as a psychological mechanism in the development of problematic Internet use among adolescents, including an evaluation of existing psychometric instruments, the identification of key areas of empirical research, the determination of the role of the educational environment in the prevention of destructive patterns, and the identification of prospects for further research. **Methods.** A systematic search of scientific publications was conducted in international databases including PubMed, Web of Science, Scopus, PsycINFO, and Russian databases eLIBRARY.ru and CyberLeninka.ru for the period 2013–2025. Original empirical studies, systematic reviews, meta-analyses, and methodological works devoted to the validation of psychometric instruments for assessing social comparison were included in the analysis. Retrospective analysis of reference lists of selected publications was performed to identify relevant sources. **Results.** It was established that upward online comparisons are directly associated with decreased subjective well-being, increased depressive and anxiety symptoms, development of eating disorders, and formation of problematic Internet use among adolescents. The role of the educational environment in preventing destructive patterns of social comparison is demonstrated. **Conclusions.** Social comparison is a systemic predictor of problematic Internet use among adolescents in the digital age. Further longitudinal studies of causal relationships, development of integrative models and new psychometric instruments both adapted to the digital environment are needed, as well as implementation of educational pro-

grams aimed at developing critical thinking, media literacy, and stable self-esteem in adolescents.

Keywords: social comparison, problematic Internet use, adolescents, digital environment, social media, psychometric diagnostics

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Социальное сравнение и его роль в формировании проблемного использования интернета у подростков (обзор литературы)

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Резюме

Контекст и актуальность. Массовое распространение социальных сетей среди подростков привело к значительному росту проблемного использования интернета, однако психологические механизмы, опосредующие эту связь, остаются недостаточно систематизированными. В частности, остается открытым вопрос о том, какую роль социальное сравнение играет в формировании проблемного интернет-поведения у подростков, находящихся на этапе становления идентичности и высокой чувствительности к внешним оценкам. **Цель.** Цель настоящего обзора — систематизация и критический анализ современных научных данных о роли социального сравнения как психологического механизма формирования проблемного использования интернета у подростков, включая оценку имеющихся психометрических инструментов, выявление ключевых направлений эмпирических исследований, определение роли образовательной среды в профилактике деструктивных паттернов и обозначение перспектив дальнейших исследований. **Методы.** Проведен систематический поиск научных публикаций в международных базах данных PubMed, Web of Science, Scopus, PsycINFO и российских базах eLIBRARY.ru и CyberLeninka.ru за

период 2013–2025 гг. В анализ включались оригинальные эмпирические исследования, систематические обзоры, метаанализы и методологические работы, посвященные валидации психометрических инструментов оценки социального сравнения. Проводился ретроспективный анализ списков литературы отобранных публикаций для выявления релевантных источников. **Результаты.** Установлено, что восходящие онлайн-сравнения напрямую связаны со снижением субъективного благополучия, усилением депрессивной и тревожной симптоматики, развитием расстройств пищевого поведения и формированием проблемного использования интернета у подростков. Показана роль образовательной среды в профилактике деструктивных паттернов социального сравнения. **Выводы.** Социальное сравнение является системным предиктором проблемного использования интернета у подростков в цифровую эпоху. Необходимы дальнейшие лонгитюдные исследования причинно-следственных связей, разработка интегративных моделей и новых психометрических инструментов, адаптированных к цифровой среде, а также внедрение образовательных программ по развитию критического мышления, медиаграмотности и устойчивой самооценки у подростков.

Ключевые слова: социальное сравнение, проблемное использование интернета, подростки, цифровая среда, социальные сети, психометрическая диагностика

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Introduction

In contemporary socio-psychological research, considerable attention is devoted to the psychological construct of social comparison in adolescents, particularly in connection with changes in communication patterns driven by digitalization and the mass penetration of social media (Samoylenko, 2010; Garanyan, 2015). Social comparison theory, which originated in the mid-twentieth century, has in recent years acquired renewed grounding and relevance specifically in the context of adolescence, when the search for external benchmarks and models for self-evaluation becomes a leading motive of behaviour and personality formation

(Festinger, 1954; Caliskan et al., 2024). In the era of digital media, social comparison processes extend beyond offline interactions, acquiring a new intensity and new forms that substantially affect the psychological well-being of contemporary adolescents (Ruan et al., 2023; Liang, 2024).

Social comparison theory posits that the formation of the self, the level of aspiration, and self-evaluative judgements are largely governed by the constant comparison of oneself with others — be they peers, significant adults, or even abstract images presented in the information environment (Mustafa et al., 2024). According to the traditional tenets of the theory, three types of social comparison

are distinguished (Wills, 1981; Collins, 1996; Malloch et al., 2023):

Upward social comparison occurs when we compare ourselves with others whom we consider to be superior to us in some respect. As a result of upward comparison, we often feel inadequate.

Downward social comparison occurs when we compare ourselves with others whom we consider to be worse off than ourselves; in this way, we seek to feel better about our situation, assets, or skills.

Lateral social comparison is the comparison of oneself with someone whom we regard as our “equal” across various domains. This person is most often a peer, since we tend to compare ourselves with people of the same age.

Thus, according to social comparison theory, upward comparisons make us feel insufficiently adequate relative to social standards and less inclined to pursue goals of personal growth, whereas the other comparisons (downward and lateral) confer confidence and enhance self-esteem. All three types may have both positive and negative psychological effects; however, upward social comparison far more often than the others leads to unfavourable consequences for the individual. Adolescents and young adults are especially sensitive to the negative effects of upward social comparison, since their identity is not yet sufficiently stable, and the desire to conform to group standards and ideals frequently prompts an underestimation of their own abilities or appearance (Irmer, Schmiedek, 2023; Palupi, Pratitis, 2025; Ganyan, Shchukin, 2014).

The situation is considerably complicated by the mass spread of digital technologies and social media, which act as new arenas of comparison, providing adolescents with virtually limitless references for evaluating their own status and success (Ahmad et al., 2024). The structure of online commu-

nication entails not only an expansion of the circle of those being compared but also a predisposition to upward comparisons — that is, comparing oneself with “more successful”, “more attractive”, and “more popular” peers — which lowers self-esteem, intensifies feelings of inadequacy and insufficiency, and increases psycho-emotional risks (McCarthy et al., 2023).

The age factor merits particular attention in the analysis of social comparison, since in adolescents comparative analysis is built upon reference groups of a different kind than in adults. Adolescents, who are at the stage of active identity formation, tend to select as objects of comparison peers who display signs of success, popularity, or physical attractiveness (Islam et al., 2018). Social media not only expands these reference groups, rendering them virtually unlimited, but also intensifies the fragmentation of the perception of one’s own position in the social hierarchy (Manago, 2015; Vidal, Wissow, 2023). The typical adolescent tendency toward upward comparisons is aggravated by the influence of “curated content”, since most users prefer to share exclusively positive events and successes, creating a general informational backdrop that fosters a sense of one’s own inadequacy.

The educational environment of the contemporary school is one of the key contexts in which social comparison processes unfold among adolescents. Research shows that the digitalization of education and the ubiquitous use of social media in academic communication create new opportunities for comparative processes that extend beyond traditional academic rivalry (Kornienko et al., 2025). Adolescents compare not only academic performance and achievements but also digital popularity, representation in the online space of the class or school, the number of followers, and social engagement. At the same time, teachers

and school psychologists note increased anxiety and reduced academic motivation among students who display a high propensity for upward social comparisons in the digital environment (Zheng, Peng, 2025). This underscores the need to incorporate into educational programmes components of media literacy and the development of critical thinking aimed at forming stable self-esteem and reducing the negative impact of online comparisons on the academic success and psychological well-being of schoolchildren. Despite a growing body of empirical evidence attesting to the link between social comparison in the digital environment and the deterioration of adolescents' psychological well-being, a comprehensive synthesis of research findings that would allow a holistic understanding of the mechanisms of this process — from psychometric assessment to educational interventions — is still lacking.

Existing reviews, as a rule, focus on individual aspects of the problem (the impact on self-esteem, eating disorders, depression), whereas the task of an integrative examination of social comparison specifically as a factor in the formation of problematic internet use in adolescents remains unresolved. The aim of the present review is to systematize current scientific data on the role of social comparison in the formation of problematic internet use in adolescents by synthesizing the findings of original empirical studies, meta-analyses, and methodological works from 2013–2025 in the areas of (1) psychometric instruments for assessing social comparison, (2) the relationship between social comparison and problematic internet behaviour, and (3) the role of the educational environment in correcting destructive patterns, and also to (4) identify the limitations of existing research and promising directions for further work.

Contemporary psychometric studies show a clearly pronounced relationship be-

tween the frequency of involvement in appearance-based comparisons and the development of eating disorders, body-image disturbances, and reduced self-esteem, and these associations are statistically significant even when controlling for socio-demographic variables (So, Kwon, 2023). For example, a study by C.L. Dahlgren and colleagues showed that adolescents' active comparison of their appearance with that of others, especially on social media, is closely associated with eating-disorder pathology, the internalization of appearance ideals, and a high internal pressure to conform to these standards (Dahlgren et al., 2024).

In addition to appearance, parameters of success, popularity, and social engagement play an important role. Among adolescents, comparisons related to academic achievement and to the number of friends, likes, followers, and other indicators of status in the digital environment prove especially salient (J nsd ttir, Bl ndal, 2024). Such upward comparisons frequently lead to reduced life satisfaction and to feelings of envy and anxiety as well as intermittent episodes of depression. Notably, adolescents who exhibit a high level of social anxiety tend to perceive others' success on social media as evidence of their own inadequacy. Thus, E. Frison and S. Eggermont demonstrated a reciprocal (bidirectional) interaction between social comparison and life satisfaction in adolescents using social media (Frison, Eggermont, 2016): a two-wave longitudinal study with a representative sample of adolescents showed that negative comparison predicts a subsequent decline in life satisfaction, while a low level of life satisfaction promotes the intensification of such comparison. The authors emphasize the importance of understanding this bidirectional relationship for the development of preventive and intervention strategies, given the risks of diminished

well-being during the transitional period of adolescence.

In some cases, the negative emotional effects of social comparison may lead to more pronounced anxiety–depressive spectrum disorders and may even serve as a predictor of suicidal behaviour (Carballo et al., 2020). At the same time, empirical analyses of recent years indicate that the key threat to adolescents' mental health is not the fact of negative comparison itself but rather its regularity (the effect of psychological rumination), the “permanence” of media exposure, and a low level of critical perception of digital content (Flett et al., 2024).

To prepare this literature review, a systematic search of scientific publications was conducted in the international databases PubMed, Web of Science, Scopus, and PsycINFO and in the Russian databases eLIBRARY.ru and CyberLeninka.ru (for the period from 2013 to 2025). The search query included key terms in English and Russian: “social comparison”, “problematic internet use”, “internet addiction”, “social media”, “adolescents”, “mental health”, and “well-being”. The analysis included original empirical studies, systematic reviews, meta-analyses, and methodological works devoted to the validation of psychometric instruments for assessing social comparison. The selection criteria were relevance to the topic of the review, the presence of valid methodology and statistical data processing, and the availability of full texts. In addition, a retrospective analysis of the reference lists of the selected publications was performed to identify relevant sources. Analysis of the selected publications made it possible to identify several key research directions, which are systematized in the sections below. The logic of their presentation reflects the sequence of scientific analysis of the problem: from measurement instruments to substantive findings and practical recommendations. The first direction concerns the

psychometric support of social comparison research.

1. Psychometric instruments for assessing social comparison

To analyse social comparison, validated psychometric scales are used that afford the researcher the possibility of objectively monitoring the intensity, direction, and emotional effect of comparisons occurring in both offline and online contexts. Among the most widespread are the Social Comparison Scale (SCS) and the Iowa–Netherlands Comparison Orientation Measure (INCOM), which make it possible to measure the general propensity for comparison, as well as more specialized instruments — such as the Comparison Standards Scale for Appearance (CSS-A) (Morina et al., 2023), the Appearance-Related Social Media Consciousness Scale (ASMC) (Choukas-Bradley et al., 2020), and the Social Media Envy Scale (SMES) (Appel et al., 2016) — oriented toward assessing appearance and the relationship between behaviour on social media and self-evaluative attitudes, as well as the closely related psychological construct of social-media envy.

The SCS (Allan, Gilbert, 1995) has been adapted in various samples and has established itself as a reliable instrument for diagnosing the general tendency toward social comparison. It allows one to record not only the frequency but also the direction of comparisons (upward or downward), which is of fundamental importance for predicting their psychological consequences.

The INCOM comparison-orientation scale was developed for the direct assessment of the degree of people's involvement in activities related to social comparison. Its historical development included the creation of an extensive set of items, cross-cultural translation, and rigorous psychometric validation (Gibbons, Buunk, 1999). The authors applied this instrument to large samples from the USA,

the Netherlands, Germany, and the United Kingdom in order to ensure that it could function reliably across different cultural contexts. Subsequently, a short version of the INCOM questionnaire was validated (Schneider, Schupp, 2014), and versions adapted for assessing social comparison on social media were developed (Meier, Schäfer, 2018).

The adaptation and validation of the Russian-language version of the INCOM were first carried out by N.G. Garanyan and E.S. Pushkina (Garanyan, Pushkina, 2016). The Questionnaire of Orientation toward Types of Social Comparison (ROOSS), developed by E.S. Samoylenko and colleagues, is an original domestic instrument designed to measure orientation not only toward comparing oneself with other people but also toward comparing oneself at different points in time (Samoylenko, Savchenko, Korbuto, 2017). Studies demonstrate the possibility of the mutual complementarity of different instruments (INCOM and ROOSS) for a comprehensive measurement of the multifaceted construct of social comparison; this approach makes it possible to obtain a more complete picture of the individual characteristics of social comparison (Savchenko et al., 2019). The psychometric instruments reviewed here provide the methodological basis for the empirical study of the specific mechanisms by which social comparison is linked to problematic internet use. The following section presents an analysis of the research findings that directly elucidate this relationship.

2. Social comparison as a factor of problematic internet use

In the context of problematic internet use, social comparison acts as one of the central psychological mechanisms contributing to its formation. Adolescents who are regularly exposed to idealized images and successful role models on social media begin to fixate on a sense of their own inadequacy relative to these successful images, which provokes

destructive behavioural and emotional patterns, including compulsive online activity and escape from reality. Numerous studies have shown that social comparison on social media is negatively associated with subjective well-being, as confirmed by two meta-analyses (Yang et al., 2019; Yoon et al., 2019).

Empirical studies of recent years confirm a direct relationship between the intensity of upward online comparisons, reduced subjective well-being, and an increased risk of psychological problems and digital addiction (Appel et al., 2016; Feinstein et al., 2013; Utam et al., 2023). Thus, a recent large British study (N = 3340, aged 11–19 years) showed that adolescents with internalizing mental disorders engage significantly more often in social comparison on social media, which affects their mood and their satisfaction with online friendships. This underscores how social media provides constant and concrete opportunities for social comparison, amplifying the psychological risks for vulnerable adolescents (Fassi et al., 2025). A study of another representative sample (N = 2105, mean age 15 years) showed that adolescents' activity on social media is closely associated with the intensification of social comparison, which contributes to increased levels of depression and anxiety; this study emphasizes that the features of social media correspond to adolescents' interests in the domains of peer relationships and identity formation, which makes them especially susceptible to social comparison processes on the internet (Yang et al., 2025). The results of studies of two Austrian samples of young adults show that the propensity to compare one's abilities with those of others significantly predicts the formation of problematic social-media use and, through it, influences levels of stress and well-being, but not self-esteem directly. Emotions associated with social comparisons, such as envy and depression, mediate the relationship between

problematic social-media use and reduced self-esteem, whereas a sense of satisfaction following comparisons contributes to increased self-esteem and motivation to continue using social media (Kim et al., 2021). An integrative model has recently been proposed linking self-presentation, the characteristics of social comparison, the cognitive–emotional mechanisms of social-media use, and the influence of these components on subjective well-being (Derbaix et al., 2025).

At the same time, social comparison and envy on social media are complex phenomena that may have both positive and negative potential. Whereas most early studies emphasized the negative impact of social media on well-being, the most recent studies highlight the nuanced and varied nature of these experiences, which are influenced by individual differences, platform features, and user engagement (Meier, Johnson, 2022; Qiu, 2024). In particular, it has been shown that age and the level of media literacy are the main determinants of a user's response to social comparison and its consequences for mental health (Derbaix et al., 2025). Generational differences affect the consequences of social comparison: members of “Generation Z” and “baby boomers” display high self-esteem and media literacy with less involvement in comparison, whereas “millennials” and “Generation X” are more susceptible to social pressure and negative effects. Positive content and active use of social media (creating rather than passively consuming content) support a better mental state in users (Derbaix et al., 2025).

It should be noted that the mechanisms of online and offline social comparison have both similar and specific properties (Faranda, Roberts, 2019). In traditional offline interactions, the comparison of “one's own” with “another's” is based on direct observation, bodily presence, and collective social norms; such comparisons may be more re-

alistic, situational, and often less dramatic than comparisons in the virtual environment. In the online space, a number of additional risk factors operate: the algorithmic delivery of content on social media, the “content-curation” effect, publicity, and the presence or absence of rewards (likes) for displaying one's own achievements. All of this can create an unfavourable environment in which frustrating upward comparisons are not the exception but a daily norm. Adolescents face constant pressure to conform to ideal standards, which not only lowers the level of positive self-esteem but also increases anxiety and depressive experiences, ultimately forming the preconditions for the development of problematic internet use with the corresponding negative psychosocial and somatic consequences (Kuss, Griffiths, 2017). For example, in an article by E.Yu. Kazarinova and A.B. Kholmogorova, it was shown that the main factors contributing to the rise of internet addiction in adolescents and students are the fear of negative social evaluation and a high interest in communication and self-presentation on the internet (Kazarinova, Kholmogorova, 2021).

On the basis of the empirical data, moments of perceiving one's own “lack of success” in comparison with other adolescents, together with the associated problematic use of social media, correlate with lowered mood, increased somatic complaints, and a heightened tendency to retreat into the virtual world as a way of avoiding the negative experience of real social interaction (Kostyrka-Allchorne et al., 2023; Tereshchenko et al., 2024; Tereshchenko et al., 2021; Yildirim Demirdöğen et al., 2024; Manchuk et al., 2024). Contemporary research indicates that the intensive viewing of content on social media and problematic internet use are associated with an increase in cases of depression and anxiety disorders in adolescents, as well as with a deterioration in academic

motivation and school success (Feinstein et al., 2013; Mathew, Krishnan, 2021).

Along with individual characteristics, structural and environmental factors are becoming increasingly significant in the context of internet addiction: the availability of support in the offline environment, the level of social capital, parenting style, and the cultural specificity of standards of success and beauty (Liu et al., 2025). Social media, playing the role of a “digital sociometer”, not only reflects but also shapes the normative basis for comparison — herein lies a substantial difference between the contemporary developmental environment of adolescents and that of previous generations (Angelini et al., 2024). The growing depersonalization of communication and the decline in the number of “live” supportive ties often lead to a shift in the emphasis of personality evaluation toward digital indicators, which is associated with identity fragmentation, anxiety, and psychological detachment (Butler, 2024; Flett et al., 2022).

3. The role of the educational environment in correcting destructive patterns of social comparison on social media in adolescents

The negative consequences of social comparison for adolescents’ psychological well-being established in the previous section naturally raise the question of the possibilities for the prevention and correction of these processes. One of the most accessible and effective contexts for such work is the educational environment.

Educational institutions play a critically important role in preventing destructive patterns of social comparison and the associated problematic internet use (Kamensky, Baranova, Evstafieva, 2023). The introduction into the school curriculum of systematic lessons on digital literacy, the critical analysis of media content, and the development of emotional-regulation skills can substantially reduce the risks of the formation of internet

addiction in adolescents. Of particular importance are educational interventions aimed at raising awareness of the mechanisms of social comparison, at an understanding of the phenomenon of “curated content” on social media, and at forming realistic conceptions of oneself and others. The experience of foreign and domestic preventive educational programmes shows that group sessions with elements of reflective practice, conducted by school psychologists, foster in adolescents a critical attitude toward idealized images in the digital environment and strengthen internal resources for coping with the negative emotions arising in the process of social comparison (Masih et al., 2025).

A multilevel model of the formation of problematic internet use in adolescents takes into account that a propensity for frequent online comparison, in combination with personal instability, low self-efficacy, and the absence of supportive offline ties, creates a negative spiral, leading to an intensified desire to attain a standard through increased digital activity, involvement in social media, and the avoidance of real social interaction (Kuss, Griffiths, 2011). A number of works have shown that even minimal interventions for the development of critical thinking, media literacy, and reflective practice — whether within group or individual psychotherapy — significantly reduce the tendency toward destructive comparison, enhancing adolescents’ resilience and reducing the severity of the symptoms of problematic internet use (Arigo et al., 2024).

In the area of practical applications, the psychometric scales for assessing social comparison mentioned above serve as a valuable tool for diagnosing risk groups among adolescents, for implementing psychoprophylactic programmes, and for monitoring the dynamics of psychological state within psychological and psychotherapeutic interventions. Such approaches are especially significant when working with

adolescents who display signs of internet addiction, low self-esteem, social anxiety, or depressive-spectrum disorders (Goodman et al., 2021).

Current educational practice is oriented toward integrating the results of assessment with methods of cognitive-behavioural therapy, which makes it possible to correct destructive patterns of social comparison and to develop a stable positive attitude toward oneself (Samra et al., 2022). According to the results of a number of empirical studies, psychometric support and personalized interventions (including the development of critical-thinking and media-literacy skills and the construction of positive reference attitudes) contribute to a significant reduction in the symptoms of internet addiction and to the strengthening of adolescents' psychological health (Arigo et al., 2024).

4. Limitations of current research and prospects for development

The limitations of current research practice in the field of social comparison in adolescents are associated, above all, with the predominance of cross-sectional designs, which entails a risk of confounding cause-and-effect relationships; with the insufficient objectification of data on adolescents' actual digital activity; and with the still weak integration of multidisciplinary approaches in the validation of new questionnaires. Particular attention is warranted by such aspects as the problem of social desirability in self-reports, the shortage of longitudinal studies, and the difficulty of accounting for changing cultural standards as the digital environment evolves.

The future of research in this direction is linked to the analysis of individual differences among adolescents: the role of personality traits (neuroticism, conscientiousness, self-efficacy), the nature of specific social networks and of the content consumed, and family and sociocultural influences. It is also

important to investigate the mechanisms of the formation of positive social capital and support that may counteract the negative consequences of destructive social comparison. The development and testing of new scales of self-esteem and digital communication will make it possible to go beyond the conventional methods and to ensure a broader coverage of the factors contributing to the development of problematic internet use and associated mental disorders in adolescents.

Conclusion

The systematic analysis of scientific publications presented in international (PubMed, Web of Science, Scopus, PsycINFO) and Russian (eLIBRARY.ru, CyberLeninka.ru) databases for the period 2013–2025 conducted in the present study has shown that social comparison serves not only as a key mechanism of identity and self-perception in adolescents but also as a systemic predictor of the formation of problematic internet use in the digital age.

The analysis of the psychometric support of research revealed the existence of a number of validated instruments — such as the SCS, INCOM, CSS-A, ASMC, and the domestic ROOSS — that allow a differentiated assessment of the direction, intensity, and emotional effects of social comparison in both offline and online contexts. At the same time, a need was identified for the development of new scales specifically adapted to the rapidly changing formats of digital communication.

A comparison of the various research strategies and lines of inquiry into the problem under examination has shown that upward online comparisons are directly associated with reduced subjective well-being, increased depressive and anxiety symptoms, the development of eating disorders, and the formation of problematic internet behaviour, and that these relationships

are confirmed by both large-sample cross-sectional studies and meta-analyses. The bidirectionality of these relationships has also been demonstrated: negative social comparison reduces life satisfaction, and reduced satisfaction, in turn, intensifies the propensity for destructive comparison, forming a vicious circle.

The most effective approach to the prevention and correction of these processes, according to the results of the review, is the integration of validated psychometric scales, methods of cognitive-behavioural therapy, and personalized preventive programmes implemented in the educational environment and taking into account the cultural, gender, and socio-age spectrum of diversity. Educational interventions that

include the development of media literacy, critical thinking, and reflective practice have demonstrated significant effectiveness in reducing destructive patterns of social comparison and strengthening adolescents' psychological health.

The tasks of further empirical work consist in conducting longitudinal studies to establish cause-and-effect relationships, in the detailed validation of new instruments, in accounting for individual (personality traits, self-efficacy) and contextual (type of social platform, cultural specificity) factors, and in the development and testing of preventive programmes that establish standards of healthy digital behaviour in adolescents under conditions of online and offline comparison.

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Novitsky I.A. — data collection and analysis; visualization of the study results.

All authors took part in the discussion of the results and agreed on the final text of the manuscript.

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