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BASELINE STUDY OF THE PSYCHOLOGICAL DIMENSIONS OF THE INFLUENCE OF MULTIMEDIA TECHNOLOGIES ON THE MOTIVATION OF ADOLESCENT TERTIARY STUDENTS TO LEARN FOREIGN LANGUAGES

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Purpose. This study explores how adolescent tertiary students perceive the motivational impact of multimedia technologies in foreign language learning. By identifying which multimedia elements are considered most engaging and effective, the study aims to provide baseline insights for curriculum redesign that enhances student motivation through digital integration. **Methods.** A mixed-methods, survey-based design was employed, involving 537 students from six Ukrainian universities. The primary data collection tool was a validated questionnaire comprising 16 items across closed- and open-ended formats, covering attitudes toward multimedia use, its influence on motivation, integration with traditional methods, and perceived challenges. Quantitative data were analysed using descriptive and correlation statistics in *Jamovi*, while open responses were processed through thematic analysis. **Results.** Descriptive findings indicated that 68.7% of students believe multimedia significantly increases their motivation to learn foreign languages, while 64.2% and 70.4% reported positive impacts on intrinsic and self-motivation, respectively. Key motivational features identified included interactivity, gamified content, and real-time feedback. Correlation analysis showed moderate to strong positive associations between multimedia use and motivational indicators (r=0.45–0.73). Thematic analysis reinforced these findings, revealing students' appreciation for practical relevance, emotional safety, and their call for structured curriculum integration of multimedia tools. **Conclusions.** The findings confirm the students' positive perception along with the psychological and pedagogical relevance of multimedia technologies in enhancing motivation among digital-native learners. This study offers a Ukrainian-context baseline and supports the feasibility of implementing a motivation-centred foreign language curriculum that integrates multimedia in a developmentally appropriate and pedagogically sound manner.

Key words: *intrinsic motivation, multimedia integration, digital learning tools, gamification, self-paced learning, educational psychology, reshaping foreign language curriculum.*

КОНСТАТУВАЛЬНЕ ДОСЛІДЖЕННЯ ПСИХОЛОГІЧНИХ АСПЕКТІВ ВПЛИВУ МУЛЬТИМЕДІЙНИХ ТЕХНОЛОГІЙ НА МОТИВАЦІЮ СТУДЕНТІВ ЮНАЦЬКОГО ВІКУ ДО ВИВЧЕННЯ ІНОЗЕМНИХ МОВ

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Мета. У цьому дослідженні вивчається, як студенти підліткового віку сприймають мотиваційний вплив мультимедійних технологій у вивченні іноземних мов. Визначивши, які мультимедійні елементи вважаються найбільш цікавими та ефективними, дослідження має на меті надати основні ідеї для переробки навчальної програми, що підвищить мотивацію студентів за допомогою цифрової інтеграції. **Методи.** У дослідженні було застосовано змішаний підхід, заснований на зборі кількісних та якісних даних, із використанням анкетування, у якому взяли участь 537 студентів із шести українських університетів. Основним інструментом збору інформації стала валідована анкета, що містила 16 запитань як закритого, так і відкритого типу. Анкета охоплювала питання щодо ставлення до використання мультимедійних засобів, їхнього впливу на мотивацію, інтеграції з традиційними методами навчання та сприйманих труднощів. Кількісні дані були проаналізовані за допомогою описової та кореляційної

статистики в програмі *Jamovi*, тоді як відкриті відповіді оброблялися методом тематичного аналізу. **Результати.** Результати описового аналізу показали, що 68,7% студентів вважають, що використання мультимедіа суттєво підвищує їхню мотивацію до вивчення іноземних мов, тоді як 64,2% і 70,4% респондентів зазначили позитивний вплив на внутрішню мотивацію та самомотивацію відповідно. Серед ключових мотиваційних чинників було визначено інтерактивність, ігровий контент та зворотний зв'язок у режимі реального часу. Кореляційний аналіз засвідчив помірний і сильний позитивний зв'язок між використанням мультимедійних засобів та мотиваційними показниками (r=0.45–0.73). Тематичний аналіз підтвердив ці результати, виявивши, що студенти високо оцінюють практичну значущість, емоційну безпеку, а також активно висловлюють потребу у структурованій інтеграції мультимедійних інструментів у навчальні програми. **Висновки.** Отримані результати підтверджують позитивне сприйняття студентами, а також психологічну й педагогічну доцільність використання мультимедійних технологій для підвищення мотивації у здобувачів освіти цифрової епохи. Це дослідження слугує базою для українського контексту та обґрунтовує доцільність упровадження мотиваційно орієнтованої навчальної програми з іноземної мови з інтеграцією мультимедіа у спосіб, що відповідає віковим особливостям та педагогічним засадам.

Ключові слова: *внутрішня мотивація, інтеграція мультимедіа, цифрові навчальні інструменти, гейміфікація, самостійне навчання, освітня психологія, удосконалення навчальних програм з іноземних мови.*

Introduction. The rapid digitalisation of education and the pervasive role of multimedia technologies in learning environments have created an urgent need to explore their psychological impact on learner motivation, particularly among adolescent tertiary students studying foreign languages. This study addresses a significant research gap by analysing how multimedia tools influence cognitive, emotional, and social dimensions of motivation during the critical developmental stage of 17–21 years, a period recognised for the formation of professional identity, autonomy, and socio-emotional stability (Erikson, 1968; Arnett, 2000; Santrock, 2020). Motivation in this age group is especially sensitive to the perceived relevance and practical utility of educational content, making the integration of multimedia technologies both timely and necessary (Plaza-Casado et al., 2020; Guay, 2022). Psychological literature underscores motivation as a multidimensional construct involving internal drives and external incentives, which align with the self-determination theory emphasising autonomy, competence, and relatedness (Ryan & Deci, 2020; Vansteenkiste et al., 2018). These principles are particularly pertinent in digital learning contexts, where gamification, interactivity, and immediate feedback can foster intrinsic motivation and engagement (Fakieh, 2021; Figueroa, 2015). Ukrainian and international scholars alike have emphasised the need to align pedagogical strategies with the cognitive and emotional maturation of students in this age group, advocating for personalised, adaptive multimedia learning environments (Bulakh, 2020; Kuzio, 2019; Олейник, 2018; Yang et al., 2025; Finn, 2020). However, despite extensive research on student youth motivation and multimedia use, there still remains a lack of comprehensive, this age-specific empirical studies revealing their intersection within the foreign language learning context. This baseline study, therefore, aims to bridge this gap by investigating students' motivational responses to multimedia integration, with the goal of informing evidence-based educational strategies that resonate with the psychological characteristics of adolescent learners.

1. Theoretical Justification of the Problem. The integration of multimedia technologies into foreign language curriculum is justified by several psychological theories that can be viewed as being potential to enhance student motivation, engagement, and cognitive processing. From a psychological perspective, adolescent learners (aged 17–21) are at a developmental stage marked by increased self-awareness, identity formation, and the pursuit of autonomy and social belonging. Given the above, that student population is especially responsive to interactive, customised, and emotionally engaging learning environments. First, the cognitive theory of multimedia learning (Mayer, 2014; Finn, 2020; Yang et al., 2025) states that learning is most successful when information is delivered through both visual and aural channels without overwhelming working memory. This dual-channel approach is especially valuable in foreign language learning, where learners must absorb and process new linguistic and cultural input simultaneously. Second, self-determination theory (Ryan & Deci, 2020; Guay, 2022) explains that intrinsic motivation is fostered when learners feel autonomous, competent, and connected. Multimedia technologies meet these psychological demands by providing various learning routes, quick feedback, and social engagement, which are especially appealing to language learners traversing difficult subject. Third, Gardner's theory of multiple intelligences (1985) offers a differentiated perspective of learner cognition, arguing that students interact more successfully when resources are tailored to their own learning styles – visual, aural, kinaesthetic, or interpersonal. Multimedia

technologies naturally enhance this diversity by combining images, text, music, and interactivity. Fourth, Keller's ARCS Model (2010) highlights four important drivers of motivation: attention, relevance, confidence, and satisfaction. Modern multimedia solutions solve all of these issues by gamifying learning, simulating real-life communication settings, and providing unambiguous success indicators (Figueroa, 2015; Wong & Hughes, 2023). Together, these ideas show that multimedia is more than just a technological advancement; it is a psychologically grounded instrument that engages essential motivational and cognitive processes. Nonetheless, there is little empirical study on how adolescent students (aged 17–21) perceive and respond to these traits in the context of foreign language acquisition.

The *purpose* of this article is to present the findings of a baseline study aimed at exploring adolescent tertiary students' perceptions of how multimedia technologies influence their motivation to learn foreign languages. By identifying which elements of multimedia are viewed as most engaging and motivating, the study seeks to provide initial insights that can guide the refinement of foreign language curricula. The ultimate goal is to identify how multimedia tools and strategies can be more effectively incorporated into classroom practice to enhance student motivation. This study seeks to address these research questions:

1. How do adolescent tertiary students perceive the impact of multimedia technologies on their motivation to learn foreign languages?
2. Which specific multimedia elements do students find most motivating and potentially beneficial for inclusion in foreign language instruction?

2. Methodology and Methods. This research employed a baseline survey-based mixed-method design, combining both quantitative and qualitative approaches to explore the perceptions of adolescent tertiary students regarding the motivational impact of multimedia technologies in foreign language learning. The study involved a sample of 537 students from six Ukrainian universities: Mykhailo Drahomanov Ukrainian State University, State University of Trade and Economics, Borys Grinchenko Kyiv Metropolitan University, Hryhorii Skovoroda University in Pereiaslav, Pavlo Tychyna Uman State Pedagogical University, and Bohdan Khmelnytsky National University of Cherkasy.

The primary data collection tool was a structured questionnaire titled *"Student Survey on the Impact of Multimedia Technologies on Motivation and Learning Effectiveness."* It was administered in Ukrainian via Google Forms and distributed online to ensure accessibility across multiple institutions. Participation was entirely voluntary, and students were informed that their responses would remain anonymous and used solely for research purposes. The study employed a random distribution approach, beginning with formal permission requests to the dean's offices of each participating university. Once approval was granted, the survey link was disseminated by university administrators through student group chats on Viber, Telegram, and WhatsApp.

The questionnaire consisted of 16 items, combining both closed-ended and open-ended questions to capture a comprehensive picture of students' perceptions. The questionnaire was divided into five thematic sections: 1) *demographics* – included age, academic specialisation, and self-assessed level of multimedia proficiency; 2) *attitudes toward multimedia use in learning* – examined frequency of use, preferred multimedia formats (video lessons, gamified tasks, educational platforms), and overall motivational impact; 3) *motivational aspects* – assessed students' perceptions of how multimedia technologies influence intrinsic motivation (subject interest, desire for deeper understanding) and self-motivation (autonomous study habits, goal-setting); 4) *integration with traditional (conventional) teaching methods* – evaluated how students perceive the balance between multimedia and conventional teaching practices, and how multimedia could enhance them; 5) *effectiveness and challenges* – focused on whether students felt multimedia improved comprehension, and what barriers they encountered (technical issues, information overload, lack of guidance); and 6) suggestions and general impressions – open-ended questions allowed students to express ideas on which multimedia features should be improved or integrated, and their overall attitudes toward multimedia in education. The questionnaire used a combination of Likert-scale, multiple-choice, and open-response formats, allowing for quantitative measurement as well as thematic exploration of qualitative responses. It was pre-tested and validated, achieving strong reliability scores being Cronbach's α=0.907 and McDonald's ω=0.911 with M=0.482; SD=0.127 indicating a high level of internal consistency across the motivational and perceptual constructs being measured. All quantitative data were processed using *Jamovi (Version 2.2.5),* an open-source desktop statistical software (https://www.jamovi.org/). Descriptive statistics were used to summarise frequencies, percentages, and central tendencies. Correlation analysis was applied to examine relationships between perceived motivational effects and different types of multimedia elements. Qualitative data from open-ended questions were analysed using thematic analysis, allowing for the identification of recurring

themes, patterns, and nuanced insights into students' attitudes and suggestions regarding multimedia integration. This multi-dimensional approach allowed for a comprehensive understanding of student perceptions and their implications for enhancing motivation in foreign language instruction through multimedia.

3. Results and Discussions. The results are presented below in alignment with the two research questions guiding this study, beginning with students' perceptions of multimedia technologies and followed by their preferences for specific multimedia elements. Overall, the findings reveal a strongly positive perception among students, with the majority reporting that multimedia tools significantly enhance their motivation and engagement in learning foreign languages.

RQ1. Perceptions of the Impact of Multimedia Technologies on Motivation to Learn Foreign Languages

As can be drawn from descriptive statistics presented in Table 1, a majority of students aged 17–21 perceive multimedia technologies as having a positive impact on their motivation to learn foreign languages. Specifically, 68.7% of respondents reported that multimedia "significantly increases" their motivation, while an additional 21.6% indicated that it "partially increases" motivation. Only 7.8% observed no impact, and a minimal 1.9% felt it reduced their motivation. These findings suggest a strong alignment between students' motivational needs and the engagement offered by multimedia content. Further analysis of intrinsic and self-motivation revealed similarly encouraging trends. 64.2% of participants agreed that multimedia tools "greatly help" develop intrinsic motivation – such as curiosity, interest, and enjoyment in language learning – while 70.4% affirmed that these tools enhanced their self-motivation for independent study, goal-setting, and self-regulated learning.

RQ2. Multimedia Elements Students Find Most Motivating

Descriptive and thematic analyses presented in Table 2 that follows provide insights into which specific multimedia features students find most motivational and beneficial for foreign language learning. As reflected in the responses, the most frequently selected elements were interactive tasks (68.5%), gamified learning activities (62.9%), and instant feedback mechanisms (54.1%). These were followed by visualisations of complex concepts (49.3%) and the ability to learn at one's own pace (44.7%), as captured through closed-ended survey items. This distribution points to a clear preference for multimedia features that enhance engagement, offer autonomy, and provide immediate reinforcement – all of which are closely tied to motivation-enhancing principles. Figure 1 supports these patterns through correlational analysis. A moderate to strong positive correlation was observed between multimedia use frequency and perceived motivation (r=0.56), as well as between multimedia proficiency and both intrinsic (r=0.46) and self-motivation (r=0.44). The highest interrelation was between intrinsic and self-motivation (r=0.73), indicating that multimedia tools fostering personal interest and autonomy are strongly associated with self-regulated learning behaviours.

The thematic analysis of open-ended responses revealed several key patterns that align with and expand upon the quantitative findings. Students expressed clear preferences for multimedia tools that offer real-world relevance, emotional support, and engaging interactivity, as well as a consistent desire for structured integration into their regular coursework.

These qualitative findings reinforce the quantitative data, illustrating that students are not only receptive to multimedia use but are actively requesting its expanded and formalised inclusion in their foreign language education. Their

Table 1

Key Findings Drawn from Descriptive Analysis of Student Responses on Multimedia and Motivation (n–537)

#	Variable	Response Options	Most Frequent Response (%)	*M*	*SD*
1	Perceived impact of multimedia on motivation	Significantly increases – Not at all	Significantly increases (68.7%)	3.61	0.74
2	Use of multimedia tools for learning	Daily – Rarely	Several times/week (54.3%)	2.85	0.91
3	Perceived influence on intrinsic motivation	Strongly agree – Strongly disagree	Strongly agree (64.2%)	3.57	0.70
4	Perceived influence on self-motivation	Strongly agree – Strongly disagree	Agree (70.4%)	3.64	0.68
5	Multimedia proficiency	Low – High	Medium (49.8%)	2.49	0.64

Note: Higher scores reflect stronger agreement or frequency where applicable.

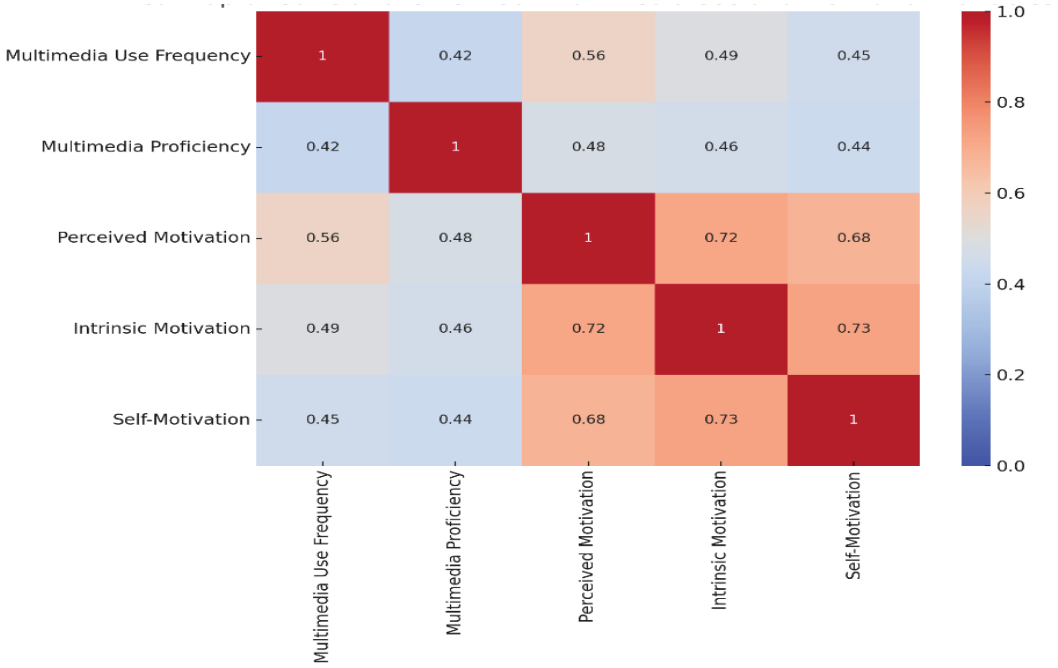

Figure 1. Heatmap of Correlations Between Multimedia Use and Motivation Variables

Note. Darker red shades indicate stronger positive correlations. Pearson's r values reported. $p < .001$ for all correlations.

Table 2

Thematic Analysis Summary of Open-Ended Responses

Theme	Description	Representative Quote (Edited)
1. Practical Relevance	Multimedia content was found more engaging when it was tied to real-world applications such as travel, communication, or job use. Students appreciated multimedia elements that presented language in authentic contexts, such as dialogue simulations and cultural content.	*"I feel more motivated when I see how the language is used in real life through videos and dialogues."*
2. Confidence and Reduced Anxiety	Multimedia allowed for private, self-paced practice, which made students more comfortable in speaking and listening tasks. Multimedia was frequently described as reducing anxiety by allowing repeated, self-paced practice outside classroom pressure.	*"I can repeat and practice without being afraid to make mistakes in front of others."*
3. Preference for Interactivity	Tools that involved active participation (games, quizzes, feedback) were seen as more stimulating and effective. Responses highlighted the importance of feeling "actively involved" through quizzes, games, and progress tracking tools.	*"Interactive quizzes keep me focused and help me remember vocabulary better."*
4. Call for Curriculum Integration	Many students expressed a desire for multimedia to be a structured part of the curriculum rather than an optional supplement. Surveyed students expressed a wish for multimedia tools to be regularly and systematically incorporated into their language courses, not used sporadically or as extra content.	*"I wish all language classes used apps or videos regularly – not just once in a while."*

perspectives affirm the psychological mechanisms identified in the theoretical framework – particularly autonomy, relevance, and confidence – and provide practical guidance for how to implement motivational enhancements through multimedia technologies.

Together, these findings underscore the psychological validity and pedagogical necessity of integrating multimedia technologies into foreign language curricula for tertiary students. The strong positive perceptions and motivational impact revealed by the data suggest that multimedia is not just an accessory but a foundational tool in addressing the evolving needs of digital-native learners.

By aligning instructional methods with the psychological needs of youth – autonomy, competence, and meaningful social interaction – educators can foster deeper engagement and long-term motivation. This is consistent with

principles outlined in Self-Determination Theory (Ryan & Deci, 2000), the ARCS motivational model (Keller, 1987), and Gardner's theory of multiple intelligences (1985), all of which emphasise learner-centred, interactive, and emotionally resonant instruction. Similar findings in recent international studies (Figueroa, 2015; Fakieh, 2021) also support the motivational benefits of gamified, adaptive, and feedback-rich multimedia environments, affirming the theoretical foundation of this research. The statistically significant correlations between multimedia exposure and motivational outcomes further support the case for curriculum reform. These findings are aligned with prior research showing that digital tools can increase learners' intrinsic interest and confidence in language use (Plaza-Casado et al., 2020; Wong & Hughes, 2023). However, unlike many prior studies that focus on younger learners or general digital tools, this research provides a focused analysis of adolescent tertiary students, a group that is underrepresented in multimedia-motivation studies despite their critical developmental stage (Arnett, 2000; Santrock, 2020). Moreover, the students' feedback confirms the feasibility and urgency of reshaping language instruction to systematically incorporate multimedia as part of a broader program for fostering motivation. Their open-ended responses reflect a strong preference for interactive, culturally relevant, and emotionally safe learning environments – an area underlined but often insufficiently implemented in mainstream foreign language programs. These results provide a solid empirical foundation for the development and implementation of a targeted motivation-enhancing curriculum that integrates multimedia technologies as core components of foreign language learning. Importantly, this study contributes a Ukrainian context-specific perspective to the global discussion, offering valuable baseline data for further longitudinal and cross-cultural research in multimedia-supported language instruction.

4. Conclusions. This baseline study explored how adolescent tertiary students perceive the motivational impact of multimedia technologies in foreign language education and identified which multimedia elements are most valued. The results provide compelling evidence that students aged 17–21 view multimedia not as an accessory but as an essential part of the learning experience. Both descriptive and correlational analyses demonstrated that frequent and confident use of multimedia tools significantly correlates with higher levels of perceived, intrinsic, and self-motivation. Thematic analysis of open-ended responses further revealed that students appreciate the relevance, interactivity, and emotional safety that multimedia offers, and they consistently called for deeper integration of these tools into their curricula. These findings highlight a crucial and timely opportunity: reshaping the foreign language curriculum by systematically incorporating multimedia elements to foster student motivation. By aligning instructional practices with psychological principles – such as the need for autonomy, competence, and relevance – and leveraging students' familiarity with digital technologies, educational institutions can create more engaging, personalised, and effective learning environments. The data support the feasibility of such curricular changes and point toward the need for a structured, motivation-centred programme that integrates multimedia in a pedagogically sound and psychologically informed way. Future research should explore longitudinal effects, assess the impact of specific multimedia formats on language proficiency outcomes, and evaluate teacher readiness and support systems for effective integration.

REFERENCES:

1. Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480. https://doi.org/10.1037/0003-066X.55.5.469

2. Bulakh, I. (2020). Osobystisnyi rozvytok liudyny v konteksti naukovykh pozytsii ukrainskykh psykholohiv [Human personal development in the meaning of Ukrainian psychologists' points of view]. *Psykhologiya ta Psykhosotsialni Interventsii – Psychology and Psychosocial Interventions, 2*, 13–19. https://doi.org/10.18523/2617-2348.2019.2.13-19 [in Ukrainian]

3. Erikson, E. H. (1968). *Identity: Youth and Crisis.* New York: Norton. https://ia800101.us.archive.org/26/items/300656427ErikHEriksonIdentityYouthAndCrisis1WWNortonCompany1968/300656427-Erik-H-Erikson-Identity-Youth-and-Crisis-1-W-W-Norton-Company-1968.pdf

4. Figueroa, F. J. F. (2015). Using Gamification to Enhance Second Language Learning. Digital Education Review, 27, 32-54. https://files.eric.ed.gov/fulltext/EJ1065005.pdf

5. Fakieh, A. (2021). The Influence of Autonomy-Supportive Teaching on EFL Students' Classroom Autonomy: An Experimental Intervention. *Frontiers in Psychology, 12*, Article 728657. https://doi.org/10.3389/fpsyg.2021.728657

6. Finn, B. (2020). Exploring Interactions Between Motivation and Cognition to Better Shape Self-Regulated Learning. *Journal of Applied Research in Memory and Cognition, 9*(4), 461-467. https://doi.org/10.1016/j.jarmac.2020.08.008

7. Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. Edward Arnold. https://publish.uwo.ca/~gardner/docs/SECONDLANGUAGE1985book.pdf

8. Guay, F. (2022). Applying Self-Determination Theory to Education: Regulations Types, Psychological Needs, and Autonomy Supporting Behaviors. *Canadian Journal of School Psychology, 37*(1), 75-92. https://doi.org/10.1177/08295735211055355

9. Keller, J. M. (2010). *Motivational Design for Learning and Performance: The ARCS Model Approach*. Springer. http://dx.doi.org/10.1007/978-1-4419-1250-3

10. Kuzio, L. I. (2019). Struktura parametriv navchalnoi motyvatsii osobystosti ta dynamika yii stanovlennia v studentskomu vitsi. [The structure of parameters of personality's learning motivation and dynamics of its development in the student's age]. *Zbirnyk naukovykh prats' "Problemy suchasnoi psykhologii" – Collection of Research Papers "Problems of Modern Psychology," (28).* https://doi.org/10.32626/2227-6246.2015-28.%25p [in Ukrainian]

11. Mayer, R. E. (2014). Cognitive Theory of Multimedia Learning. In R. E. Mayer (Ed.), *The Cambridge Handbook of Multimedia Learning* (pp. 43–71). chapter, Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139547369.005

12. Oleynyk N. O. (2018). *Vikova psykholohiia (z praktykumom): laboratornyi praktykumy [Age psychology (with training workshops): laboratory workshops].* Vydavnychyi Dim "Helvetyka" – Publishing House. https://surl.li/wanvpb [in Ukrainian]

13. Plaza-Casado, P., Escamilla-Solano, S., & Orden-Cruz, C. (2020). Student motivation in a real investment decision making case study. *Journal of Management and Business Education, 3*(3), 250–265. https://doi.org/10.35564/jmbe.2020.0016

14. Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology, 61,* Article 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

15. Santrock, J. W. (2020). *Adolescence.* McGraw-Hill Education. https://archive.org/details/adolescence-by-santrock-john-w.

16. Vansteenkiste, M., Soenens, B., & Waterschoot, J. (2018). Catalyzing Intrinsic and Internalized Motivation: The Role of Basic Psychological Needs and Their Support. In A. O'Donnell, N. C. Barnes, & J. Reeve (eds), *The Oxford Handbook of Educational Psychology*. https://doi.org/10.1093/oxfordhb/9780199841332.013.41

17. Wong, J. T., & Hughes, B. S. (2023). Leveraging learning experience design: digital media approaches to influence motivational traits that support student learning behaviors in undergraduate online courses. *Journal of Computing in Higher Education, 35*, 595–632. https://doi.org/10.1007/s12528-022-09342-1

18. Yang, C., Wei, M., & Liu, Q. (2025). Intersections between cognitive-emotion regulation, critical thinking and academic resilience with academic motivation and autonomy in EFL learners: Contributions of AI-mediated learning environments. *British Educational Research Journal, Online Version of Record* before inclusion in an issue. https://doi.org/10.1002/berj.4140

ЛІТЕРАТУРА:

1. Булах І. Особистісний розвиток людини в контексті наукових позицій українських психологів. *Психологія та психосоціальні інтервенції.* 2020. Вип. 2. С.13–19. https://doi.org/10.18523/2617-2348.2019.2.13-19

2. Кузьо Л. Структура параметрів навчальної мотивації особистості та динаміка її становлення в студентському віці. *Збірник наукових праць «Проблеми сучасної психології».* 2019. Вип. 28. С.13-19. https://doi.org/10.32626/2227-6246.2015-28.%p

3. Олейник Н. О. Вікова психологія (з практикумом): лабораторний практикум. Видавничий дім «Гельветика». 2018. 76 с. https://surl.li/wanvpb

4. Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480. https://doi.org/10.1037/0003-066X.55.5.469

5. Erikson, E. H. (1968). *Identity: Youth and Crisis. New York:* Norton. https://ia800101.us.archive.org/26/items/300656427ErikHEriksonIdentityYouthAndCrisis1WWNortonCompany1968/300656427-Erik-H-Erikson-Identity-Youth-and-Crisis-1-W-W-Norton-Company-1968.pdf

6. Figueroa, F. J. F. (2015). Using Gamification to Enhance Second Language Learning. *Digital Education Review, 27*, 32-54. https://files.eric.ed.gov/fulltext/EJ1065005.pdf

7. Fakieh, A. (2021). The Influence of Autonomy-Supportive Teaching on EFL Students' Classroom Autonomy: An Experimental Intervention. *Frontiers in Psychology, 12*, Article 728657. https://doi.org/10.3389/fpsyg.2021.728657

8. Finn, B. (2020). Exploring Interactions Between Motivation and Cognition to Better Shape Self-Regulated Learning. *Journal of Applied Research in Memory and Cognition, 9*(4), 461-467. https://doi.org/10.1016/j.jarmac.2020.08.008

9. Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. Edward Arnold. https://publish.uwo.ca/~gardner/docs/SECONDLANGUAGE1985book.pdf

10. Guay, F. (2022). Applying Self-Determination Theory to Education: Regulations Types, Psychological Needs, and Autonomy Supporting Behaviors. *Canadian Journal of School Psychology, 37*(1), 75-92. https://doi.org/10.1177/08295735211055355

11. Keller, J. M. (2010). Motivational Design for Learning and Performance: The ARCS Model Approach. Springer. http://dx.doi.org/10.1007/978-1-4419-1250-3

12. Mayer, R. E. (2014). Cognitive Theory of Multimedia Learning. In R. E. Mayer (Ed.), *The Cambridge Handbook of Multimedia Learning* (pp. 43–71). chapter, Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139547369.005

13. Plaza-Casado, P., Escamilla-Solano, S., & Orden-Cruz, C. (2020). Student motivation in a real investment decision making case study. *Journal of Management and Business Education, 3*(3), 250–265. https://doi.org/10.35564/jmbe.2020.0016

14. Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology, 61,* Article 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

15. Santrock, J. W. (2020). *Adolescence.* McGraw-Hill Education. https://archive.org/details/adolescence-by-santrock-john-w.

16. Vansteenkiste, M., Soenens, B., & Waterschoot, J. (2018). Catalyzing Intrinsic and Internalized Motivation: The Role of Basic Psychological Needs and Their Support. In A. O'Donnell, N. C. Barnes, & J. Reeve (eds), *The Oxford Handbook of Educational Psychology*. https://doi.org/10.1093/oxfordhb/9780199841332.013.41

17. Wong, J. T., & Hughes, B. S. (2023). Leveraging learning experience design: digital media approaches to influence motivational traits that support student learning behaviors in undergraduate online courses. *Journal of Computing in Higher Education, 35*, 595–632. https://doi.org/10.1007/s12528-022-09342-1

18. Yang, C., Wei, M., & Liu, Q. (2025). Intersections between cognitive-emotion regulation, critical thinking and academic resilience with academic motivation and autonomy in EFL learners: Contributions of AI-mediated learning environments. *British Educational Research Journal, Online Version of Record before inclusion in an issue*. https://doi.org/10.1002/berj.4140

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