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The role of motivation among dental students in the study of clinically oriented disciplines

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Abstract. *The article highlights the role of motivation among dental students in developing independence, clinical thinking, and readiness for continuous professional development. The importance of self-directed learning and the introduction of the elective course “Plastic and Reconstructive Surgery” at the Department of Oral and Maxillofacial Surgery and Surgical Dentistry is discussed. The significance of innovative pedagogical approaches in fostering professional autonomy and competitiveness among future dental practitioners is emphasized.*

Keywords: *self-directed learning, motivation, continuing education, dental students.*

Introduction. The modern system of higher medical education is aimed at training competent, proactive, and responsible specialists capable of independently making well-founded decisions in clinical practice [1, 4]. A crucial component of this process is students’ self-directed learning, as it ensures the assimilation of educational material, the development of clinical thinking, and the formation of professional maturity in future physicians [2, 5]. One of the key tasks of contemporary pedagogy in dental education is to enhance students’ motivation for independent activity [1, 3, 4].

Considering the complexity and multifaceted nature of dental practice, students must not only possess fundamental knowledge and practical skills but also feel an intrinsic need for continuous improvement, self-education, and professional growth [4, 5, 6]. The motivational domain largely determines the level of activity, responsibility, and initiative of learners [1, 3].

The teacher’s role is not only to transmit knowledge but also to create learning conditions that stimulate cognitive initiative, the search for new information, analytical comprehension, and creative application [2, 5]. The use of modern educational technologies, interactive methods, and problem-based approaches contributes to the development of intrinsic motivation and professional autonomy, which are essential prerequisites for the high-quality training of a modern dentist [4, 6, 7].

Objective. To analyze the impact of motivational factors on the development of independence, clinical thinking, and the readiness of dental students for continuous professional self-improvement during the learning process.

In the modern model of dental education, central importance is given to the understanding of lifelong learning as a fundamental principle of professional development [3, 4]. Future specialists are required to continuously improve their knowledge and practical skills, develop clinical reasoning, and be able to make decisions in complex situations [2, 4]. Preparing a competitive professional demands an active student role, well-developed skills for independent activity, and an understanding of the practical orientation of the educational process [5, 6].

Increasing demands for educational quality encourage universities to implement innovative pedagogical strategies and to develop a learning environment that fosters independence and intrinsic motivation [1, 2, 5]. Self-directed learning, which occupies a significant portion of study time, serves not only as a means of consolidating knowledge but also as an effective tool for developing clinical thinking, decision-making flexibility, and professional responsibility [2, 6, 7].

The educational process at Kharkiv National Medical University is implemented in accordance with modern educational standards and provides a wide selection of elective components that promote individualized professional development. Such courses help students consciously define their own development trajectory, cultivate clinical intuition, communication skills, critical thinking, and creativity.

In particular, the elective courses at the Department of Oral and Maxillofacial Surgery are practically oriented and contribute to the development of clinical thinking and professional reflection. During the learning process, special attention is given to integrating theoretical knowledge with practical aspects of treatment, which prepares students for clinical work.

The department has positive experience in organizing the educational process online, ensuring the continuity of learning during the pandemic and promoting the development of students' skills in self-organization, self-monitoring, and responsibility for their learning outcomes. Active involvement of instructors in stimulating students' inquiry-based activities transforms the learning process into conscious knowledge acquisition with elements of scientific analysis.

In the 2024–2025 academic year, we analyzed the academic performance of 5th-year students who chose the elective course “Plastic and Reconstructive Surgery” at the Department of Oral and Maxillofacial Surgery.

The relevance of the “Plastic and Reconstructive Surgery” course is determined by the growing societal need for specialists capable of performing reconstructive, restorative, and aesthetic interventions in the maxillofacial region. Mastery of this course contributes to the development of clinical thinking, practical orientation, and the ability to make optimal decisions in complex clinical cases, which is critical for the professional competence of a dentist.

During the course, students demonstrated a high level of independence, analytical approach, creative thinking, and initiative. The results obtained confirm the feasibility of expanding practically oriented elective courses that combine interdisciplinary knowledge and develop clinical reasoning.

Thus, the “Plastic and Reconstructive Surgery” course not only fosters professional competence but also enhances students’ motivational potential, promotes self-realization, and contributes to the formation of a new-generation specialist — capable of thinking creatively, acting independently, and working effectively in modern clinical settings.

Conclusions. Motivation of dental students for self-directed learning plays a leading role in the training of highly qualified specialists. It determines the depth of knowledge acquisition, the level of clinical thinking development, decision-making ability, and readiness for continuous professional improvement. The formation of stable motivation is possible only through an integrated pedagogical approach that combines traditional and innovative teaching methods, creates a supportive emotional environment, and actively involves students in practical, research, and creative activities.

Motivation for self-directed learning fosters in future dentists an active professional stance, responsibility, initiative, and professional maturity, ensuring the development of a competent, humane, and competitive specialist in the field of oral and maxillofacial surgery.

References

1. Orsini, C. A., Binnie, V. I., & Jerez, O. M. (2019). Motivation as a predictor of dental students’ affective and behavioural outcomes: Does the quality of motivation matter? *Journal of Dental Education*, 83(5), 521–529. <https://doi.org/10.21815/JDE.019.065>.
2. Orsini, C., Binnie, V., Wilson, S., & Villegas, M. J. (2017). Learning climate and feedback as predictors of dental students’ self-determined motivation: The mediating role of basic psychological needs satisfaction. *European Journal of Dental Education*, 22(2), e228–e236. <https://doi.org/10.1111/eje.12277>.
3. Almalki, S. A. (2019). Influence of motivation on academic performance among dental undergraduate students. *Open Access Macedonian Journal of Medical Sciences*, 7(8), 1374–1381. <https://doi.org/10.3889/oamjms.2019.319>.
4. Khalaf, M. E., Abubakr, N., Alenezi, H., & Ziada, H. (2021). The motivation and confidence in choosing dentistry as a career amongst dental students: A mixed methods study. *European Journal of Dental Education*, 26(1), 66–75. <https://doi.org/10.1111/eje.12673>.
5. Katebi, K., Ghaffarifar, S., Dehghani, G., & Pourabbas, A. (2024). Exploring the experiences of dentistry students of Tabriz University of Medical Sciences of academic motivation: A content analysis study. *BMC Medical Education*, 24, 245. <https://doi.org/10.1186/s12909-024-05237-0>.
6. Lestari, W., Ichwan, S. J. A., Yaakop, S. Z., Sabaznur, N., Ismail, A., & Sukotjo, C. (2022). Online learning during the COVID-19 pandemic: Dental students’ perspective and impact on academic performance, one institution experience. *Dentistry Journal*, 10(7), 131. <https://doi.org/10.3390/dj10070131>.
7. *Unraveling motives: Identifying the impact of university attendance motives on learning behaviors among dental students.* (2024). *BMC Psychology*, 12, 347. <https://doi.org/10.1186/s40359-024-01846-y>.