

Motivation for studying midwifery, educational satisfaction, and sense of purpose in life among female midwifery students: A cross-sectional study¹

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Abstract: *Introduction:* Motivation, educational satisfaction, and psychosocial resources of midwifery students may be significant for their engagement in the educational process and preparation for their future professional practice. *Aim:* The study aimed to assess motivation for choosing the field of study and pursuing education, educational satisfaction, career plans, subjective preparedness for work under high-stress conditions, and the presence and search for purpose in life in midwifery students. *Material and methods:* A quantitative cross-sectional study was conducted using the CAWI technique. The study included 140 first- and second-cycle female midwifery students. An original questionnaire, a modified version of the Questionnaire on Motivation in Education, and the Polish version of the Meaning in Life Questionnaire (MLQ) were used. Descriptive statistics and the Friedman's test were applied in the analysis. *Results:* The highest-rated reasons for choosing the field of study included the willingness to help others ($M = 4.61$; 93.6% of positive responses) and the belief in the great social significance of the midwifery profession ($M = 4.50$; 90.0%). Satisfaction with the choice of the major was declared by 84.0% of the respondents. The highest-rated reason for learning was its usefulness in achieving career goals ($M = 4.59$; $SD = 0.80$). The average score in the Search for Meaning in Life subscale was 26.87 ($SD = 4.21$), while in the Presence of Meaning in Life subscale, it was 24.05 ($SD = 4.88$). The lowest-rated element of the educational process was preparedness for work under high-stress conditions ($M = 3.20$; $SD = 1.28$). *Conclusions:* Midwifery students were characterized by high declared professional motivation and a high level of satisfaction with their choice of the major. The lowest-rated area of education was the preparedness for work under high-stress conditions. The results indicate the validity of further research into the needs of students in this regard and the effectiveness of educational interventions aimed to support coping with the emotional demands of clinical practice.

Keywords: academic motivation; midwifery students; satisfaction with studies; sense of purpose in life; stress; midwifery education

1. Introduction

Midwifery is a medical profession of considerable importance for the care of women and newborns at various stages of life and during the perinatal period. Practicing as a midwife requires both specialized knowledge and clinical skills, as well as developed interpersonal skills, the ability to regulate one's emotions and readiness to provide support to patients. A midwife's scope of competences includes

providing care to women at various stages of life, with a particular focus on reproductive health, pregnancy, childbirth and the puerperium. The tasks of a midwife include taking care of a woman with a physiological pregnancy, during childbirth and puerperium as well as of newborns in their first weeks of life. The scope of professional practice also includes preventive and educational activities,

¹ Article in Polish language: https://stowarzyszeniefidesetratio.pl/fer/67p_Dere.pdf

and women's health promotion, in accordance with applicable legal regulations (Rozporządzenie Ministra Zdrowia, 2025).

Educating midwives in Poland is carried out at the academic level and is subject to national and European standards of vocational education. The curriculum includes theoretical, practical and clinical preparation, aimed at developing competences necessary to practice the profession independently. Clinical training is an essential component of the curriculum. Clinical instruction takes at least half of the required number of training hours. The aim of education is to acquire knowledge, clinical skills and social competences necessary to practice the profession of a midwife safely and independently. After completing their studies, the graduates may continue their professional development through postgraduate programs or further academic education. Graduates of second-cycle studies may continue their education in doctoral schools or develop professional competences as part of specialization and other forms of postgraduate education, in accordance with applicable legal regulations (Rozporządzenie Ministra Nauki, 2024; Ustawa o zawodach pielęgniarstwa i położnej, 2026).

In recent years, the number of institutions providing medical programs, including midwifery, has increased (Ministerstwo Zdrowia, 2026). The growing availability of education may provide more opportunities to train new medical professionals. As access to higher education is wider, ensuring a comparably high quality of instruction across different academic institutions becomes particularly important. The development of medical education requires a systematic evaluation of the quality of education, learning outcomes and compliance of curricula with current standards and needs of the healthcare system (Ministerstwo Zdrowia, 2025). The quality of medical education is subject to external accreditation procedures conducted by competent national institutions.

Reports on the quality of education in medical professions indicate the need for the special control of professional training standards of the graduates (Wasilewski et al., 2023). The quality of professional training is important for patient safety and the quality of care provided. The quality

of education may be important not only for the safety and quality of care, but also for the subsequent professional functioning of female graduates. The external evaluation of the quality of education is supplemented by the analysis of students' experiences and opinions regarding the teaching process. Students' opinions may constitute an important source of information used to improve educational programs. The education of future midwives should include both theoretical and clinical preparation, as well as the development of psychosocial competences important in professional work (Lukasse et al., 2017; Wanot et al., 2020).

Motivation to choose a field of study and to engage in educational activities is an important aspect of students' functioning in the educational process. Motivation includes processes conditioning the choice of the goal, the direction of action, the level of involvement and perseverance in the implementation of educational tasks. According to research, intrinsic factors often play an important role among the motivations for pursuing a medical degree. Autonomous and internally well-established motives may include interest in the field, compliance of the choice of profession with personal values and the need to help others. Some studies showed that external factors, such as the prestige of the profession, the expectations of the environment or financial considerations, played a smaller role than autonomous and pro-social motives (Cullen et al., 2016; Makowska, 2025; Sim-Sim et al., 2022). The motives for choosing midwifery vary depending on the social and cultural context, but often include interest in caring for women and newborns, willingness to help and the possibility of pursuing one's own career plans (Al Hadid et al., 2018; Kraja et al., 2022). Motivation may be related to the level of student engagement, learning outcomes and readiness to undertake future professional roles (Jendrysik et al., 2020). International research indicated that students' experiences during the educational process, especially clinical education, were important for their perceived professional preparedness. Particular importance is attributed to the quality of clinical education, support from experienced midwives and interpersonal relation-

ships in the clinical training setting (Baird et al., 2022; Bass et al., 2020; Vermeulen et al., 2023). High levels of stress, insufficient support and undesirable behaviors during the training may be associated with lower satisfaction with studying, poorer assessment of clinical experiences and a lower sense of being prepared for future work (Capper et al., 2021; Seyedi et al., 2025).

The quality of the educational environment and access to social support are also important elements of students' learning experiences. Mentoring, peer support and positive relationships with clinical training supervisors may be associated with maintaining motivation, a stronger sense of professional belonging and a greater willingness to continue education and work in the profession (Vasilevski et al., 2022).

Satisfaction with studies is an important subjective indicator of students' educational experience and may be related to their commitment and career plans. Higher levels of student satisfaction are associated with greater engagement, stronger professional identification, and greater declared readiness to pursue a career after graduation (Carter et al., 2022; Patterson et al., 2019). The analysis of students' opinions may help to identify areas for improvement and constitute one of the sources of information used in the modification of curricula (Carter et al., 2022; Neiterman et al., 2023; Vasilevski et al., 2022).

Previous research was more often focused on students' motivation, educational satisfaction, clinical experience and psychosocial resources as separate notions. Relatively few analyses combined those areas in one model of describing the experiences of female midwifery students, especially comprising the sense of purpose in life. An analysis of the experiences of female midwifery students may provide information useful in identifying the strong and weak areas of the educational process. The present study aimed to analyze the motivation for choosing midwifery and education, satisfaction with education, career plans, perceived preparedness for work and the presence and search for the meaning in life in midwifery students. The study is exploratory in nature and provides a starting point for further analyses of the determinants of educational experiences and career plans of female midwifery students.

2. Own research

2.1. The main aim of the study

The primary aim of the study was to analyze the motivations for choosing midwifery and education, satisfaction with education, career plans, perceived preparedness for work and the presence and search for the meaning in life in midwifery students.

2.2. Research questions and hypotheses

The following questions were posed, along with the corresponding research hypotheses:

- Q1. What motives are most important when choosing to study midwifery?
- H1. Prosocial and autonomous motives are rated higher than economic and external motives.
- Q2. What learning motives are highest rated by female students?
- H2. Motives related to the achievement of professional goals and the development of competences are rated higher than the motive of learning for the sake of pleasure only.
- Q3. What is the declared level of satisfaction with their choice of major and how do the students assess individual areas of education?
- H3. Being prepared for working in high-stress environment is rated lower than the other areas of the educational process under review.
- Q4. What is the level of the presence and search for meaning in life in the study group?

2.3. Material and methods

A quantitative cross-sectional study was carried out using the CAWI (Computer-Assisted Web Interview) technique in the years 2024-2025. All participants gave their informed consent to participate in the study. The study was a non-invasive opinion survey conducted using a fully anonymous questionnaire administered to adult, voluntary participants (students). The study did not constitute a medical experiment, nor did it interfere with the physical or mental integrity of the subjects (no approval of the

Bioethics Committee was requested). Non-probability convenience sampling was used. The inclusion criterion was the active status of a first-cycle or second-cycle student in midwifery. Participation was possible if informed consent was provided. Incomplete questionnaires and responses that did not meet the inclusion criteria were excluded from the analysis. The study was conducted in students of midwifery at a medical university in Warsaw. Participants were recruited by sharing a link to the survey on social media and in the communication groups of individual years of midwifery. The recruitment was open and voluntary. The analysis included 140 female students. There were no men in the analyzed sample.

Three research tools were used in the study:

1. A proprietary questionnaire included socio-demographic questions and items concerning the motives for choosing a major, satisfaction with studies, assessment of the educational process and career plans. The items were rated on a 5-point Likert scale, from 1 ("completely disagree") to 5 ("completely agree"). The scope of the questionnaire was developed on the basis of an overview of existing tools regarding satisfaction, professional interests, empathy and job satisfaction; items from these scales were not used directly. When developing the content of the questions, the concepts present in the tools concerning satisfaction with life, professional interests, empathy and job satisfaction were used. The scope and method of using these sources are described in the tool construction procedure. The accuracy of the questionnaire was assessed by three experts representing medical didactics, public health and midwifery. All the experts considered the items adequate in terms of the content. The internal consistency of the items of the analyzed scales was assessed using the Cronbach's alpha coefficient. The Cronbach's alpha coefficient was $\alpha = 0.90$ for the George and Mallery scale.
2. The Questionnaire on Motivation in Education by Gózdź (2015) was used to assess motivation to learn. For the purposes of this study, a short-

ened version of the questionnaire was used. As regards the context of higher education, 22 items were deemed unsuitable and were removed. The items were rated on a 5-point Likert scale, from 1 ("completely disagree") to 5 ("completely agree"). In the tested sample, the internal consistency of the abridged version of the questionnaire was $\alpha = 0.97$.

3. The Meaning in Life Questionnaire (MLQ) (Steger et al., 2006; Polish adaptation: Kosakowska et al., 2013). The questionnaire consists of 10 items rated on a 7-point Likert scale, from 1 ("definitely not") to 7 ("definitely yes"). The MLQ measures two dimensions: the Presence of Meaning and the Search for Meaning. The inclusion of this construct was justified by the specific nature of a midwife's work, which involves dealing with both childbirth and situations that are clinically and emotionally stressful. The measurement of both dimensions of the MLQ made it possible to characterize the study group in terms of the presence and search for the purpose of life. The importance of these constructs for functioning in care professions may be subject to further analyses. The internal consistency of the items of both MLQ subscales was assessed using the Cronbach's alpha coefficient. In the tested sample, the Cronbach's alpha coefficient was $\alpha = 0.66$ for the Presence of Meaning subscale and $\alpha = 0.80$ for the Search for Meaning subscale.

Statistical analysis: The data were subjected to statistical analysis including descriptive statistics and non-parametric tests. Arithmetic means (M) and standard deviations (SD) were calculated for items assessed on the Likert scales, and numbers and percentages for categorical variables. The Friedman's test was used to compare the ranks of several related positions or dimensions within the same group. In the case of a significant Friedman's test result, post hoc comparisons were made with a correction for multiple testing. The level of statistical significance was assumed at $\alpha = 0.05$ in all analyses. The analyses were carried out in Excel, Microsoft Office 365.

3. Results

The analysis covered the data of 140 female students of midwifery. Most of the participants were aged 19–23 (89.3). The mean age of the participants was $M = 21.8$ years, the standard deviation of the age of the participants was $SD = 4.3$ years, and the median was $Me = 21$ years.

First-cycle female students accounted for 74.5% of the sample. First-year students made up 12.8% of the group, second-year – 31.9%, and third-year students – 29.8%. Second-cycle students accounted for 25.5% of the sample, including 19.9% of first-year and 5.6% of second-year students. A total of 92.2% of the participants were enrolled in full-time programs, and the remaining 7.8% in part-time ones. As regards the marital status, 95.7% of the participants declared to be unmarried, and 4.3% were married. The largest groups lived in towns with up to 50,000 inhabitants (46.1%) and from cities with over 500,000 inhabitants (32.6%).

The highest-rated reasons for choosing midwifery were the desire to help others ($M = 4.61$; 93.6% of positive answers) and the belief in the high social importance of the midwifery profession ($M = 4.50$; 90.0%). Both motives were among the highest rated in both first-cycle and second-cycle students. Both groups chose “completely agree” the most frequently when responding to the statement regarding the willingness to help others in their future professional work (79.8% of first-cycle and 66.7% of second-cycle students). A total of 73.1% of first-cycle and 69.4% of second-cycle students completely agreed with the statement that the profession of a midwife is of great value and social importance. The interest in midwifery was also highly rated ($M = 4.40$; 87.0% of positive responses), i.e., 67.3% of first-cycle and 75.0% of second-cycle students completely agreed with the statement. Willingness to work with women also obtained high rates ($M = 4.37$; 86.0% of positive responses). The response “completely agree” to the statement was selected by 61.5% of first-cycle students and 52.8% of second-cycle students. Interest in medicine was another highly rated aspect ($M = 4.36$; 89.0% of positive responses). Fondness for children

($M = 4.21$; 82.0%) and the belief that studies help to better understand oneself and others ($M = 4.16$; 81.0%) were rated relatively high. The percentage of the highest rates for fondness for children differed numerically between first- and second-cycle students. The percentage of “completely agree” responses was 60.6% in the first-cycle and 38.9% in the second-cycle study group. Prior knowledge of the midwifery profession was rated lower as a motive for choosing a major ($M = 3.97$; 76.0% of positive answers). In both groups, prior knowledge of the midwifery profession was rated lower than prosocial and interest-related motives. Lower rates were assigned to the opportunity to work in various settings ($M = 3.68$; 60.0%) and the expected good remuneration ($M = 3.31$; 44.0%). The “completely agree” response to the statement concerning work in various settings was selected by 34.6% of first-cycle and 16.7% of second-cycle students. The “completely agree” response to the statement concerning expected good remuneration was indicated by 17.3% of first-cycle students and 11.1% of second-cycle students. The statement that midwifery was the first-choice major received the mean of 3.64 and 62.0% of positive answers. The statement “I wasn’t accepted into another degree program” received low rates ($M = 1.84$; 18.0% of positive answers). Midwifery as the first-choice major was declared by 71.1% of first-cycle and 80.6% of second-cycle students. The lowest rates were assigned to the influence of having a midwife in the family or environment ($M = 1.76$), not being accepted into another program ($M = 1.84$) and persuasion by family or the environment ($M = 1.94$). Persuasion by family was completely denied by 73% of first-cycle and 77.8% of second-cycle students. The dominant response to the question regarding the ease of working abroad was “difficult to say” in both groups. The respective percentages were 37.5% in first-cycle and 38.9% in second-cycle students. Means (M) and standard deviations (SD) were calculated for individual motives. The values were then used to present the relative rank order. The hierarchy of the importance of motives is presented in Table 1. In addition, the percentages of selected categories of responses in groups of first- and second-cycle students were presented.

Table 1. Hierarchy of factors motivating to study midwifery (N=140)

No.	Czynnik motywacyjny	Mean (M)	Standard deviation (SD)
1.	I want to help others in my professional work	4.61	0.91
2.	I believe that the midwifery profession is of great value and social importance	4.50	1.02
3.	I am interested in midwifery	4.40	1.00
4.	I would like to work with women	4.37	0.95
5.	I am interested in medicine	4.36	1.02
6.	I like children	4.21	1.14
7.	I believe that this field of study helps to better understand oneself and others	4.16	1.09
8.	Before starting my studies, I knew what a job of a midwife entailed	3.97	1.10
9.	After graduation, I will have the opportunity to work in various settings	3.68	1.20
10.	Studying midwifery is my first choice	3.64	1.62
11.	My studies provide me with a good income	3.31	1.13
12.	My studies allow me to easily take up a job abroad	3.27	1.12
13.	I thought about studying midwifery even as a child	2.28	1.23
14.	Someone from my family/ environment encouraged me to pursue this major	1.94	1.32
15.	I wasn't accepted into another degree program	1.84	1.38
16.	Someone from the family/ environment is a midwife	1.76	1.45

Explanation: Friedman's ANOVA test $\chi^2(15) = 1553.12$; $p < 0.001$

The Friedman's test was used to assess the differences between the ratings of individual motives. The Friedman's test showed significant differences in the ratings of individual motives, $\chi^2(15) = 1553.12$; $p < 0.001$; the Kendall's $W = 0.74$. The result indicated that the level of ratings of individual motives differed significantly within the study group.

Tabela 2. Poziom satysfakcji oraz plany edukacyjno-zawodowe respondentów (N = 140)

Lp.	Analyzed aspect (statement)	Mean (M)	Standard deviation (SD)
1.	After completing my first-cycle studies, I want to pursue second-cycle studies	4.45*	1.04*
2.	After completing my first-cycle studies, I want to start my professional career	4.47*	0.95*
3.	I am satisfied with the choice of a major	4.29	0.92
4.	After completing my first-cycle studies, I want to start working at a hospital	4.14	1.17
5.	I would decide to study midwifery again	4.10	1.24
6.	I intend to study a different field of medicine	2.48	1.23
7.	I intend to study a different field, one outside the medical sciences	2.01	1.27

Explanation: Friedman's ANOVA test $\chi^2(6) = 663.48$; $p < 0.001$, *values calculated only for a subgroup of first-cycle students (N=104)

Satisfaction and educational and career plans were assessed using the 5-point Likert scale. This allowed to determine the means (M) and standard deviations (SD) for each of the analyzed statements (Table 2).

The Friedman's test was used to compare the level of agreement with individual statements about satisfaction and career plans. The Friedman's test showed significant differences in the level of agreement with the analyzed statements, $\chi^2(6) = 663.48$; $p < 0.001$; the Kendall's $W = 0.79$. The result indicated that the level of agreement varied across individual statements regarding satisfaction, and educational and career plans.

Individual areas of the educational process in midwifery were rated. The mean (M) and standard deviation (SD) were calculated for each item (Table 3). The Friedman's test was used to compare the ratings of individual areas of education. The students allocated the highest rates to the practical (M = 4.01) and theoretical (M = 3.91) aspects of their studies. Statistically, preparation for work under stress was

Table 3. Evaluation of the educational process based on the students' opinions (N=140)

No.	Aspect of the educational process	M	SD	Interpretation
1.	Acquisition of necessary practical knowledge	4.01	0.98	Highest rating
2.	Acquisition of necessary theoretical knowledge	3.91	0.94	High rating
3.	Good preparation for the midwifery profession	3.67	0.97	Average rating
4.	Preparation in the area of interpersonal skills	3.61	1.07	Average rating
5.	Preparation for work in high-stress environments	3.20	1.28	Lowest rating (Deficit area)

Explanation: Friedman's ANOVA test $\chi^2(4) = 76.43$; $p < 0.001$

Table 4. Factors motivating to pursue education according to the scale by J. Gózdź (2015), (N=140)

No.	What are your reasons for studying? (Statement)	M	SD	Motivation type/ Rank
1.	It is necessary for achieving my career goals	4.59	0.80	Goal-oriented / Highest
2.	It promotes the development of competences needed in the profession	4.56	0.80	Autonomous / Very high
3.	It brings me closer to my chosen career goal	4.56	0.81	Goal-oriented / Very high
4.	It is necessary due to the chosen career path	4.52	0.81	Practical / High
5.	It is necessary for my life choices	4.44	0.84	Identity-based / High
6.	It provides preparation for the profession I dreamed of	4.30	1.03	Intrinsic / High
7.	It helps me better prepare for the chosen degree program	4.28	1.03	Adaptive / Moderate
8.	Because it gives me pleasure	3.72	1.13	Hedonic / Lowest

Explanation: The Friedman's ANOVA test $\chi^2(7) = 154.12$; $p < 0.001$

Table 5. Evaluation of the components of the sense of meaning in life based on the MLQ scale (N=140)

No.	Statement from the MLQ questionnaire	M	SD	Subscale
1.	I always look to find my purpose in life	5.79	1.05	Search for Meaning
2.	I understand the meaning of my life	5.66	1.37	Presence of Meaning
3.	I'm looking for something that makes my life feel meaningful	5.62	1.24	Search for Meaning
4.	I always look for something that makes my life feel significant	5.44	1.29	Search for Meaning
5.	I am looking for a purpose or mission in my life	5.30	1.45	Search for Meaning
6.	I have discovered a satisfying life purpose	5.16	1.58	Presence of Meaning
7.	I have a good sense of what makes my life meaningful	5.15	1.45	Presence of Meaning
8.	I'm looking for meaning in my life	4.72	1.77	Search for Meaning
9.	My life has a clear purpose	4.65	1.59	Presence of Meaning
10.	My life has no clear purpose (reversed)	3.43	1.91	Presence of Meaning

Explanation: The Friedman's ANOVA test $\chi^2(9) = 384.91$; $p < 0.001$

the weakest link in education ($M = 3.20$), where the distribution of rates showed the highest polarity and variability ($SD = 1.28$).

The analysis of motivation to study using a standardized tool allowed for the selection of an order of factors determining the students' cognitive engagement (Table 4). The applied Friedman's ANOVA

test confirmed that the structure of educational goals was significantly heterogeneous: $\chi^2(7) = 154.12$; $p < 0.001$. Midwifery students were characterized by mature motivation focused on a specific goal and professional profile ($M = 4.59$). Learning was viewed pragmatically and professionally, but less often as a direct source of spontaneous pleasure ($M = 3.72$). Un-

derstanding the main factors that motivate students to learn made it possible to identify a relationship between motivation to pursue higher education and factors that motivated students to learn. The result was statistically significant ($p < 0.001$), which indicates that an increase in motivation to pursue higher education was associated with an increase in motivation for learning and professional development.

The respondents were asked to assess the purpose in life based on the MLQ (Kossakowska et al., 2013). In order to fully implement the methodological assumptions, the raw results of the MLQ were standardized and grouped into two official subscales: *The Presence of Meaning in Life* (the existential aspect) and *The Search for Meaning in Life* (the motivational aspect). The mean results for individual statements are presented on a scale of 1 to 7 in Table 5. The Friedman's ANOVA test showed that the respondents were characterized by a non-random, structured architecture of the psychological profile: $\chi^2(9) = 384.91$; $p < 0.001$. Based on the psychometric key, total means were calculated for both subscales (range: 5 to 35 points). In the "Search for Meaning in Life" subscale, the overall mean was 26.87 points ($SD = 4.21$) in the group. In the "Presence of Meaning in Life" subscale, the overall mean was 24.05 points ($SD = 4.88$) in the group. This indicates a high motivational and existential foundation potential of future midwives.

4. Summary

The analysis of the results indicated both similarities and differences in the motivation of first- and second-cycle female midwifery students. What both groups primarily have in common is the strong influence of intrinsic and altruistic factors on their choice of major.

The most important motives for pursuing studies, indicated by both first- and second-cycle students, were willingness to help others and the belief in the great value and social significance of the midwifery profession. However, intergroup differences are notable in the intensity of individual motives.

First-cycle students declared more often than second-cycle students that the choice of midwifery was associated with the willingness to help others – 79.8% of first-cycle students completely agreed with the statement compared to 66.7% of second-cycle students. Similarly, willingness to work with women was more important for first-cycle students (61.5% vs. 52.8%). Conversely, second-cycle students more often indicated a strong interest in midwifery and gynecology, i.e., 75.0% of them completely agreed that they were interested in this field compared to 67.3% of first-cycle students.

A clearer difference was also observed in the case of fondness for children. This motive was more important for first-cycle students – 60.6% of them completely agreed with this statement, while in the group of second-cycle students, the respective percentage was 38.9%. Furthermore, the possibility of working in a variety of settings and good income were more often indicated by first-cycle students, although in both groups financial factors and those related to employment opportunities were less important than motives related to helping, interest in midwifery and the social value of the profession. Both groups were also characterized by relatively high autonomy of the decision on the choice of major.

Midwifery was the first choice for the majority of the respondents, i.e., 71.1% of first-cycle and 80.6% of second-cycle students. At the same time, the persuasion of the family was of little importance among both first- and second-cycle students. Persuasion of the family was completely denied by 73% of first-cycle and 77.8% of second-cycle students. The dominant response to the question regarding the ease of taking up a job abroad was "difficult to say" in both groups.

To sum up, the students of both cycles of education shared the feeling of a calling to work as a midwife, based on the willingness to help others, a sense of a high social standing of the profession and interest in midwifery. First-cycle students more often emphasized the importance of altruism, working with women, fondness for children and the possibility of various employment options, while second-cycle students relatively more often highlighted

the mere interest in midwifery and gynecology and more often declared that midwifery was their first choice of major.

The results concerning the overall satisfaction with the major, assessment of the educational process, motivation to learn and sense of meaning in life were presented primarily for the entire study group. In the whole population, a high level of satisfaction with the choice of the major, strong professional motivation and a high level of search and the presence of meaning in life were demonstrated. At the same time, being prepared for work under high stress was the lowest rated element of education. Therefore, the obtained results indicate that, regardless of the level of education, female midwifery students presented primarily intrinsic and prosocial motivation for choosing a profession. At the same time, visible differences in the hierarchy of individual motives showed that the importance of some aspects of choosing a major might change with the level of education, from more general and related to helping and working with women in the group of first-cycle students to a stronger interest in the area of midwifery and gynecology in the group of second-cycle students.

5. Discussion

The study included a homogeneous group of 140 female midwifery students, mostly aged 19–23, studying full-time, mainly at first-cycle studies. Such a profile of the respondents corresponds to the characteristics of the population described in the literature, in which the midwifery program is most often chosen by young women who start their studies immediately after graduating from secondary school. This similarity allows us to relate the obtained results to previous reports, while taking account of a different cultural and systemic context of education in Poland.

The most important finding in the area of motivation is the clear, statistically confirmed by the Friedman's test ($p < 0.001$), predominance of intrinsic over extrinsic factors. The respondents indicated that the willingness to help others (93%; $M = 4.61$) and the belief in the high social value

of the midwifery profession (90%; $M = 4.50$) were decisive factors. This pattern is fully consistent with the results by Cullen et al. (2016), who conducted a study in young midwifery students and indicated altruism understood as the willingness to help and the perception of midwifery as a satisfactory career path to be dominant motives. Similarly, Sim-Sim et al. (2022) described the motivation of female students in terms of building a professional identity directly related to the caring nature of the profession. A similar picture, in which the choice of a medical major resulted directly from intrinsic factors, was also described in more recent Polish papers (Jendrysik & Knapik, 2020; Makowska, 2025; Wanot & Wanot, 2020) and analyses conducted in other healthcare systems (Al Hadid et al., 2018).

However, it is worth noting the sharp contrast with some international reports. Kraja et al. (2022) described a sample of female students in Albania and showed that the dominant reasons for the decision included pragmatic factors, such as job security or the possibility of working abroad. The present study revealed that financial and extrinsic motives were rated the lowest: the prospect of high income was confirmed by only 45% of the respondents ($M = 3.31$), and the ease of taking up a job abroad was indicated by 41% ($M = 3.27$). The differences between the results of Polish and Albanian research may partly reflect a different socio-economic context and the organization of the labor market. However, this hypothesis requires direct comparative research. In the sample studied, greater importance was attributed to motives associated with helping others and the social significance of the profession than to some financial motives or those related to the impact of the environment. The results indicates that motives related to the future professional role played a significant role in the study group.

The low level of declared family influence and random selection indicates that the factors were of little importance for the majority of the respondents. The majority of the respondents declared that no one in their environment practiced the profession of a midwife (82%), no one encouraged them to pursue this major (73%), and factors such as family pressure ($M = 1.94$) or the case of not being accepted into an

other program ($M = 1.84$) obtained the lowest rates. Low rates for statements regarding random selection or preferences for other degree programs indicate that such motives were relatively rarely declared in the study group. The study group was also characterized by a high percentage of declared satisfaction with the choice of the major ($M = 4.29$), which was expressed by as many as 84% of the respondents. In total, 75% of the respondents would choose to study midwifery again ($M = 4.10$), and the vast majority planned to start working in the profession immediately after obtaining their diploma (85%; $M = 4.46$), indicating hospital as the preferred place of employment (76%). Moreover, as many as 75% of the respondents intended to continue their education at second-cycle level ($M = 4.55$). The high declared satisfaction with the choice of the major was accompanied by frequent declarations about continuing education and taking up a job in the profession after graduation (Carter et al., 2022; Patterson et al., 2019). Previous research in groups of female graduates revealed that positive experiences related to education might be related to the subsequent professional performance and the intention to remain in the profession (Patterson et al., 2019). The assessment of the quality of education may constitute one of the factors related to the future professional functioning of graduates (Lukasse et al., 2017).

The ratings of the individual elements of the educational process varied, with higher values being recorded for theoretical and practical preparation than for some psychosocial aspects. The results indicate differences between the assessment of theoretical preparation and the declared preparedness for some of the psychosocial requirements of future work. The respondents highly rated the acquired theoretical (82%) and practical knowledge (78%), while the general preparation for the profession (60%) and the development of interpersonal skills (61%) were rated lower. As regards the analyzed aspects of the educational process, being prepared for working under increased stress obtained the lowest rates. The result is consistent with previous reports indicating significant emotional and organizational burden associated with the clinical education of midwifery students. A systematic review by Seyedi et al. (2025) demonstrated that stressors accompanying

the clinical education of midwives included relational difficulties, insufficient support and structural burden related to the organization of practical training. The present study revealed that both preparedness for some interpersonal aspects and for work under stress were assessed lower than theoretical and practical knowledge. However, the relationship between these areas requires a separate analysis. Capper et al. (2021) highlighted the special contribution of relational and organizational conditions in the environment of clinical practical training. The issue gains additional significance in light of the observation by Cullen et al. (2016) that female students often started their education with an idealized image of the profession. According to the literature, the discrepancy between expectations of the profession and clinical experience may constitute an additional source of stress for female students and recent graduates. The relatively high diversity of responses ($SD = 1.28$) indicates that the subjective sense of preparedness for work under stress was not uniform in the study group. The sources of this diversity require further analyses.

A higher rating for practical preparation than for general readiness to work independently may indicate that the respondents assessed their mastery of practical skills and their own readiness to play a professional role differently. Some authors described various didactic solutions that might support the preparation of students for the requirements of clinical practice. Medical simulation makes it possible to practice complex clinical situations under controlled conditions, and research indicated that female students had a positive opinion concerning such a form of education (Vermeulen et al., 2021). Prolonged practical training implemented in models of the continuity of care are conducive to building self-confidence (Baird et al., 2022), working with structured models of reflection makes it possible to work through difficult experiences (Bass et al., 2020), and practice-oriented ethical education strengthens soft skills (Megregian et al., 2021). Mentoring and peer support were also identified in the literature as potentially relevant to learning experiences and student retention in academic programs (Neiterman et al., 2023; Vasilevski & Carolan-Olah, 2022). The results indicate that with high rates of numerous

professional motives, the subjective preparedness of students to function under emotional stress remained an important area requiring attention. The psychological profile of the study group is supplemented by the results obtained in the MLQ questionnaire, introducing an existential perspective to the analysis. The MLQ results supplement the characteristics of the study group with two dimensions of the sense of meaning in life: its presence and search. The majority of the respondents could see the meaning of their own lives (86%) and had clearly defined life goals (52%).

A relatively high score in the area of the search for meaning may be viewed in the context of the developmental processes characteristic of early adulthood. However, such an interpretation requires reference to appropriate normative or comparative data. The results indicate the availability of resources related to the sense of meaning of life in the study group, but their sources and relationships with the experience of midwifery education were not the subject of this study. A sense of meaning in life may be an important psychological resource in the context of functioning in emotionally demanding professions. However, determining its potential protective role against stress or burnout requires longitudinal studies.

5.1. Strengths of the study

The inclusion of 140 female students in the analysis and the simultaneous inclusion of several complementary areas related to motivation, assessment of education and sense of meaning in life constitute the strengths of the study. Such a multidimensional approach allows for the simultaneous analysis of several aspects relevant to the educational experience of midwifery students. The use of two standardized research tools of confirmed reliability and accuracy, i.e., the Polish adaptation of the Meaning in Life Questionnaire (MLQ) and the Questionnaire on Motivation in Education by J. Gózdź (2015) in addition to the proprietary questionnaire was an additional methodological advantage. The use of standardized tools enabled the assessment of selected constructs using methods with previously described psychometric properties. The obtained results may have practical applications, indicating areas of the

educational process that require further assessment and potential improvement. The set of tools may be used in future comparative studies covering subsequent years or other centers, after appropriate confirmation of the psychometric properties of the proprietary questionnaire.

5.2. Limitations of the study

This study has several methodological limitations that should be comprised when interpreting the results and assessing the possibility of their generalization. Firstly, non-probability convenience sampling was used, and the participants were recruited in only one academic center. This limits the possibility of generalizing the obtained results to the entire population of individuals studying midwifery in Poland. Secondly, women aged 19–23, studying full-time at first-cycle studies constituted the majority of the sample. As a consequence, the results may only partially reflect the experiences of part-time students, second-cycle students and men enrolled in midwifery programs.

Thirdly, the study used only self-reporting tools, which may increase the risk of response errors characteristic of this type of measurement. The use of only self-reporting methods is associated with the risk of social desirability bias, which could lead to the selection of answers perceived by the respondents as more socially desirable, especially in relation to altruistic motivation. Moreover, the cross-sectional nature of the study means that the analyzed variables were assessed at one time point. Therefore, the obtained results do not allow for making conclusions regarding cause and effect relationships between the analyzed variables. Future research should include larger and more diverse samples recruited in numerous academic centers, which would enable the assessment of the repeatability of the obtained results. It would be advisable to include students recruited both from medical universities and from other universities providing midwifery education. Additional limitations include the lack of control of potential confounding variables, e.g., the year of study, previous professional experience in healthcare, family situation, previous clinical experience and limitations of the proprietary questionnaire.

5.3. Practical implications and directions for further research

From a practical perspective, the obtained results indicate a high level of declared motivation to study midwifery in the study group, with simultaneous difficulties in preparing for functioning in situations of emotional stress. The results suggest that educational programs should place greater emphasis on developing competences that support students in coping with the emotional burden associated with clinical practice. One possible direction for improving educational programs could be the introduction of evidence-based interventions that support mental resilience and coping skills, structured reflection on clinical experiences, and mentoring and peer support available to female students, whose potential importance for supporting medical students was also highlighted in previous studies (Bass et al., 2020; Neiterman et al., 2023; Vermeulen et al., 2021). In future research, it would be advisable to conduct longitudinal studies to assess whether the levels of motivation and satisfaction declared during the study period are associated with subsequent employment as a midwife and maintaining professional activity. It would also be valuable to conduct multicenter research using multivariate analyses, allowing the assessment of relationships between motivation to study, assessment of the educational process and a sense of being prepared for professional work while controlling for potential confounders. Another step should involve interventional research to assess the effectiveness of specific educational and psychological programs preparing students to perform under conditions of increased clinical stress. In the light of previous research, it also seems reasonable to develop organizational solutions that reduce the risk of undesirable behaviors in clinical practice settings and provide students with easy access to support in emotionally demanding situations (Capper et al., 2021; Seyedi et al., 2025). Such a solution would enable the systematic identification of areas for improvement and the assessment of the effects of the introduced program and organizational changes.

Conclusions

The following conclusions were drawn from the research:

- Predominance of intrinsic and altruistic motivation.

The most frequently declared motives for choosing midwifery in the study group were those associated with interest in the field of medicine, willingness to help others and a high rating of the social value of the midwifery profession. Extrinsic motives, such as suggestions from people around or a random choice of major, were declared much less frequently.

- A high level of satisfaction with the choice of major and declared intention to continue education and work in the profession.

The high declared satisfaction with the choice of the major was accompanied by frequent declarations about pursuing the second-cycle program and taking up a job in the profession.

- A sense of meaning in life as a potential personal resource of female students.

In the studied sample, we observed a relatively high level of both analyzed dimensions of the meaning of life: the presence of meaning and the search for meaning. The obtained results indicate that the sense of meaning in life may constitute an important area of psychological resources of the surveyed students. However, the importance of this resource for functioning in future professional work requires further research.

- Limited sense of preparedness for functioning under conditions of occupational stress.

The sense of inadequate preparedness for working under conditions of increased stress declared by a significant part of the respondents is a significant area requiring attention. Almost half of the respondents declared insufficient preparedness for working under conditions of increased stress.

• Application recommendation:

The obtained results indicate the need to consider incorporating more content and activities into midwifery curricula to prepare students to cope with stress related to clinical work. It is worth considering supplementing educational programs with more systematic activities designed to develop stress management skills and prepare female students for the emotional demands of clinical practice.

Possible actions may include evidence-based programs to develop stress management skills, elements of psychological preparation for crisis situations, and structured forms of support for female students during clinical education. The effectiveness of such activities in improving the psychological preparation of female students and their subsequent professional performance should be the subject of future interventional and longitudinal research.

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