

Appendix 1. Search strategy and summary search.

Database used	Search terms/search string	Filters applied	Results
Embase, PsycInfo and Ovid MEDLINE	Exp nursing student/ OR (nurs\$ adj5 student\$.mp OR exp nursing education OR (undergraduate adj5 nurs\$) AND exp decision making/ OR nursing adj5 career\$ OR exp career/ OR (career adj5 choice\$.mp OR choice\$.mp OR (career adj5 select\$) AND exp motivation/ OR motivate\$.mp AND exp coronavirus disease 2019/ OR covid.mp OR exp coronavirus infection/ OR exp pandemic/	2020 – present Peer-reviewed English only	PsycInfo (n=213) Ovid MEDLINE (n=211) Embase (n=187)
CINAHL(via EBSCOhost)	(MH “Student, Nursing+”) OR TX nurs* N5 student* OR (MH “Education, Nursing+”) OR (MH “Education, Nursing, Baccalaureate+”) OR TX undergraduate N5 nurs* AND (MH “Career in Nursing”) OR (MH “Career Planning and development”) OR (TX career N5 choice*) OR “choice*” OR “choos*” OR TX career N5 select* AND (MH “motivation+” OR “motivate*” AND (MH “COVID-19+”) OR (MH “COVID-19 Pandemic”) OR “covid-19” OR “coronavirus 19”	2020 – present Peer-reviewed English only	384
Scopus	(“undergraduate nurs* students” AND “Motivation” OR aspiration OR intention OR interest) AND (“choos*” OR “pursue” OR select* OR aspir* AND ”nurs*” AND “career” OR occupation) AND (“COVID-19” OR “pandemic” AND “influence” OR effect OR consequence OR result)	2020– present Peer-reviewed English only	79

Appendix 2. Detailed characteristics and findings of included studies.

Author	Design	Country	Sample	Data Analysis	Factors related to the outcome of interest (Motivational factors)	Key Findings
(Öncü et al., 2022)	Cross-sectional survey	Turkey	349 nursing students	Descriptive statistics, t-test, chi-square, correlation and ANOVA. Logistic regression analyses	<p>Gender: Female students are more likely to choose nursing as a career compared to male students ($P < 0.001$), suggesting a gender influence on career choice.</p> <p>Social influence: Being affected by social perspectives impacts the decision to pursue nursing ($P < 0.001$), indicating that societal views can be a significant motivator.</p> <p>Perception of success: Students with a moderate to very good perception of success in nursing are more inclined to pursue the career (P values ranging from 0.018 to 0.047), suggesting that expectations of success influence motivation.</p> <p>Chronic disease: Nursing students with a chronic disease are slightly more likely to choose nursing ($P = 0.015$), indicating that personal health experiences can contribute to career choice.</p> <p>Volition: Choosing the profession willingly is a highly significant factor ($P < 0.001$), highlighting the importance of personal desire in career selection.</p> <p>Reason for choosing nursing: Idealistic reasons and ease of finding a job are strong motivators (P values 0.031 and < 0.001 respectively), while family wishes and sufficient entry points show varied levels of influence on the decision to pursue nursing.</p>	These results suggest that gender, societal perceptions, success expectations, and intrinsic motivations such as personal desire and idealistic reasons, are significant drivers for students in choosing and retaining nursing as a career.
(Subu et al., 2022)	Qualitative	United Arab Emirates (UAE)	30 male student nurses	Content analysis	<p>Positive perceptions of the nursing profession as kind, respectful, knowledgeable, patient, caring, and tolerant.</p> <p>Awareness of the shortage of local nurses and pride in contributing to the local workforce as a nurse.</p> <p>Economic incentives, including job security, a variety of employment opportunities, and financial security associated with nursing.</p> <p>Influence of family members, friends, or other role models already in the nursing profession.</p> <p>Perception of nursing as a field with potential leadership opportunities for local nurses.</p> <p>Acknowledgment of the role of male nurses in challenging stereotypes and acting as role models for future generations.</p>	<p>Male nursing students generally hold positive views of the nursing profession, associating it with qualities such as kindness, patience, and a range of professional skills.</p> <p>Students are drawn to nursing by its practical nature and the opportunity to help others, viewing it as a profession that resolves physical and psychological problems with compassion.</p> <p>Economic factors, such as job variety, security, and good salaries, are</p>

						significant motivators for students to enter nursing. Despite the positivity, there remain societal barriers, including stigma and stereotypes, that suggest nursing is a profession more suited for females, which the students recognize and are motivated to change.
(Yang et al., 2022)	Cross-sectional survey	China	565 nursing students	Descriptive statistics, Kolmogorov–Smirnov test, Harman’s single-factor test,	Professional Identity (PI) and Professional Calling (PC) scores were at a medium level, with means of 126.49 and 40.16, respectively. Furthermore, 69% reported a positive impact of COVID-19 on their views of the nursing profession. Correlations: Significant positive correlations were found between Professional Calling and Career Self-Efficacy (CSE) ($r = 0.359, p < 0.01$) and between Professional Identity and CSE ($r = 0.479, p < 0.01$). Mediation Effect: Professional Identity fully mediated the relationship between Career Self-Efficacy and Professional Calling, with a significant indirect effect of 0.288 and a non-significant direct effect of CSE on PC (95% CI [-0.021–0.113]).	Overall, the findings suggest that for nursing students, the formation of professional identity is a key motivational factor influencing their perceived calling to the profession, which is enhanced by their level of career self-efficacy, especially in the context of the COVID-19 pandemic.
(Lin et al., 2021)	Cross-sectional survey	Taiwan	362 student nurses	independent t-tests, Descriptive statistics, confirmatory factor analysis, regression analysis	Correlations with Career Decision-Making Attitude: There was a positive correlation between career decision-making attitude and career decision-making behavioural intention ($r = 0.416, p < 0.01$), career decision-making perceived control ($r = 0.628, p < 0.01$), and COVID-19 attitude ($r = 0.414, p < 0.01$). However, no correlation was found with career decision-making subjective norms. Subjective Norms: Career decision-making subjective norms negatively correlated with career decision-making behavioural intention ($r = -0.130, p < 0.01$), but no correlation with career decision-making perceived control or COVID-19 attitude. Perceived Control and COVID-19 Attitude: Both career decision-making perceived control and COVID-19 attitude were positively correlated with career decision-making behavioural intention ($r = 0.412$ and $r = 0.223$, respectively; $p < 0.01$).	Overall, these results suggest a complex interplay between attitudes, perceived control, and subjective norms in shaping career decision-making among individuals. Notably, attitudes related to COVID-19 appear to have a significant indirect effect on career decision-making behavioural intentions, primarily through their influence on career decision-making attitude and perceived control.

					<p>Regression Analysis: The regression analysis showed positive associations of career decision-making attitude ($\beta = 0.25$) and perceived control ($\beta = 0.25$) with career decision-making behavioral intention, both statistically significant ($p < 0.001$).</p> <p>Conversely, subjective norms were negatively associated ($\beta = -0.12$; $p < 0.001$).</p> <p>Interestingly, COVID-19 attitude did not show a significant direct association with behavioral intention ($\beta = -0.01$; $p > 0.05$) but did positively influence career decision-making attitude and perceived control ($\beta = 0.41$ and $\beta = 0.40$, respectively; $p < 0.001$).</p>	<p>These factors collectively explain 23% of the variance in career decision-making behavioural intentions.</p>
(Santos, 2020)	Qualitative	Japan	49 nursing students	Phenomenological analysis	<p>Desire to aid underserved populations, particularly in rural and suburban areas.</p> <p>Civic responsibility to improve public health performance and knowledge.</p> <p>Personal calling to contribute to the national effort in the face of a pandemic.</p> <p>Commitment to personal sacrifice in favor of national developments in healthcare.</p> <p>Drive to support and advance the medical and nursing professions during a health crisis.</p>	<p>The COVID-19 pandemic significantly reinforced the experiences, sense of belonging, and decision-making processes of Japanese nursing students, highlighting a strong connection between their motivation in nursing and a heightened sense of patriotism and community involvement influenced by collective behaviors traditional to Japanese culture..</p>
(Zhao et al., 2021)	Cross-sectional survey	China	2,999 nursing students	Descriptive statistics, t-Test or one-way analysis of variance, Pearson's correlation coefficient, Multiple linear regression analysis	<p>Academic Performance \uparrow ($P < 0.001$)</p> <p>Freshman Year Status \uparrow ($P < 0.001$)</p> <p>Class Leadership \uparrow ($P < 0.001$)</p> <p>Personal Interest in Nursing \uparrow ($P < 0.001$)</p> <p>Family in Nursing Field \uparrow ($P < 0.001$)</p> <p>Moderate COVID-19 Area Impact \uparrow ($P < 0.001$)</p> <p>Stress Coping \downarrow ($P < 0.01$)</p> <p>Problem-Solving Coping \uparrow ($P < 0.01$)</p>	<p>Overall, the results indicate that motivation for nursing students to choose a nursing career is multifaceted, including personal interest, academic achievement, leadership involvement, family influence in the nursing field, and the lived experience of their community during the COVID-19 pandemic. Coping strategies and</p>

						personal challenges also contribute to shaping their professional identity.
(Grande et al., 2022)	Cross-sectional study	Saudi Arabia, Philippines and Thailand	1187 nursing students from 3 different countries	Descriptive and inferential statistics, ANOVA. binary logistic regression	Desire for learning ↑ (P < 0.001) Intrinsic motivation - Gender differences (Female > Male) ↑ (P < 0.001) Amotivation - Year level differences (1st and 4th Year > 2nd and 3rd Year) ↑ (P = 0.016, P = 0.003) Access to resources - Amotivation ↓ (P < 0.003)	Nursing students' extrinsic drive is significantly larger than their intrinsic motivation. Female nursing students were more intrinsically driven than their male counterparts.
(Hua et al., 2022)	Cross-sectional study	China	513 nursing students	Hierarchical regression analyses	Belief in goals and values of nursing ↑ (Mean = 15.96, SD = 2.72) Desire to stay in the profession ↑ (Mean = 23.98, SD = 5.36) Intrinsic positive value of work ↑ (Mean = 14.40, SD = 3.18) Willingness to make an effort ↓ (Mean = 45.81, SD = 11.00)	Overall, the factors influencing nursing students' professional commitment could explain 47.6% of the variance in their commitment levels. This commitment was most influenced by their belief in the goals and values of nursing, followed by their desire to stay in the profession, the intrinsic positive value they find in their work, and their willingness to exert effort. Individual factors, family attitudes, educational background, and social perspectives significantly predicted professional commitment in nursing students, demonstrating the multi-faceted motivation behind choosing a nursing career.
(Kells & Jennings Mathis, 2023)	Cross-sectional study	United States	161 nursing students	Descriptive analysis, Linear regression, thematic analysis (open-ended questions)	Current stress level ↑ (Mean = 56.6/100, no significant difference by class year) Grades as expected mostly by juniors and seniors ↑ (62.5% and 61%, respectively, p = .040) Life satisfaction despite unsettled and overwhelmed feelings ↑ (67.7% satisfied currently, 96.9% anticipate future)	Overall, nursing students are experiencing a moderate level of stress and are satisfied with their lives despite the challenges posed by

					<p>satisfaction) Interest in nursing career post-COVID-19 ↑ (Mean = 6.4/10, 54.4% reported increased interest) Pandemic-related media consumption predicts stress ↑ (p = .034, no significant impact on career interest or mental health scores)</p>	<p>the COVID-19 pandemic, which has increased the interest in nursing careers for a significant number of students. Academic performance stressors are common, but grades generally met expectations, especially among upperclassmen. While consumption of pandemic-related media correlates with increased stress, it does not significantly impact students' interest in a nursing career or their levels of anxiety and depression..</p>
(Bai et al., 2021)	Cross-sectional study	China	1,070 nursing students	Binary logistic regression analysis	<p>Male gender ↓ ($\chi^2 = 7.09$, $df = 1$, $P < 0.05$) Only child ↓ ($\chi^2 = 1.20$, $df = 1$, $P > 0.05$) Rural residence ↓ ($\chi^2 = 5.54$, $df = 1$, $P < 0.05$) Negative experiences during COVID-19 pandemic ↓ ($P < 0.05$) Good perceived health status ↑ ($\chi^2 = 28.36$, $df = 2$, $P < 0.001$) Interest in medicine before COVID-19 pandemic ↑ ($\chi^2 = 119.63$, $df = 2$, $P < 0.001$)</p>	<p>Students who had good perceived health status and a prior interest in medicine were more likely to choose nursing as a future career after the COVID-19 pandemic. Experiences during the pandemic, particularly negative ones, influenced the decision against pursuing nursing. The choice to pursue a nursing career was not significantly affected by economic perceptions or the frequency of social media use. Mental health factors such as anxiety and depressive symptoms were less severe in students who opted for nursing post-pandemic, although the effect of these symptoms on career choice was not clear in the</p>

						multivariate analysis..
(Rood et al., 2022)	A descriptive exploratory qualitative study	United States	24 nursing students	Thematic analysis	<p>Personal aspiration and a genuine interest in the nursing field.</p> <p>Familial influence, where family members who are nurses inspire the choice of profession.</p> <p>Desire to overcome challenges posed by online education and adapt to new modes of learning.</p> <p>Recognition of the need for competent nurses highlighted by the pandemic.</p> <p>Awareness of the evolving role of nurses in shaping health policy and public health responses.</p>	<p>A significant number of individuals were motivated to pursue nursing due to personal passion for the profession or family influences.</p> <p>The pandemic-induced shift to online learning and virtual clinical experiences has left some students feeling unprepared for actual nursing practice.</p> <p>The strain on personal relationships due to the conflict between professional obligations and social isolation guidelines emerged as an unexpected challenge.</p> <p>Students are grappling with how to effectively engage with and influence health policy, underscoring a gap in nursing education regarding policy advocacy.</p> <p>The crisis highlighted a sense of uncertainty but also galvanized a commitment to professional readiness and public health engagement.</p>
(Kołodziej et al., 2021)	Cross-sectional study	Poland	321 nursing students	Descriptive statistics, t-test and the χ^2 test,	<p>Interest in nursing profession before pandemic \uparrow ($P < 0.001$)</p> <p>Satisfaction with choice of major during pandemic \uparrow ($P < 0.001$)</p> <p>Influence of remuneration on major choice \uparrow ($P < 0.001$)</p> <p>Source of knowledge about studies from own research before pandemic \uparrow ($P = 0.005$)</p> <p>The influence of the COVID-19 pandemic on the choice of major NS ($P > 0.05$)</p>	<p>Overall, these findings suggest that students who started their nursing education before the pandemic were driven more by personal interest and independent research, while those who started during the pandemic were</p>

						<p>less influenced by the pandemic than one might expect.</p> <p>Satisfaction with the choice of nursing as a profession was high across both groups, but notably higher among those who started during the pandemic.</p> <p>The financial aspect was recognized as a factor that could increase interest in the nursing profession.</p>
(Dos Santos, 2020)	Qualitative	South Korea	58 nursing students	Thematic analysis	<p>Financial motivations as a primary reason for entering nursing.</p> <p>Personal aspirations for wealth and economic stability.</p> <p>Pursuit of a better financial situation for family support.</p> <p>Nursing seen as a pathway to improved social standing.</p> <p>Perception of nursing as one of the highest-status occupations in South Korea.</p>	<p>Increased enrollment in nursing programs due to financial incentives.</p> <p>Preference for nursing specializations known for higher earnings.</p> <p>Strong commitment to the profession for the sake of family economic well-being.</p> <p>Competitive educational environments with a focus on high-status healthcare careers.</p> <p>Investments in nursing education driven by the desire for social mobility.</p>

