FRI-2.101-SSS-HC-26

"GROWTH MINDSET" IN THE TRAINING OF HEALTHCARE STUDENTS IN UNIVERSITY OF RUSE "ANGEL KANCHEV" [18]

Assist. Miroslava Ilieva, PhD Student
Department of Health Care,
"Angel Kanchev" University of Ruse
Phone: +359896773005
E-mail: milieva@uni-ruse.bg

Prof. Ivanichka Serbezova, PhD
Department of Health Care
University of Ruse "Angel Kanchev"
Phone: +359 888 731 063
E-mail: iserbezova@uni-ruse.bg

Abstract: Learning how to think in humans correlates with learner success at all educational levels. A growth mindset would be successfully implemented in the training of health care professionals. This pilot study assessed 104 students from the Department of Health Care, majoring in Nursing and Midwifery, regarding their thinking perspective and learning styles.
Keywords: growth mindset, commitment, belonging, nursing, health care

INTRODUCTION

The importance of intellectual talent to achievement in all professional domains is well established, but less is known about other individual differences that predict success (Duckworth, A., Peterson, et all., 2007).

In her book "Mindset: The New Psychology of Success", Carol Dweck, a professor of psychology at Stanford University, offers groundbreaking research on the difference between a "growth mindset" and a "fixed mindset."" (Dweck, C., 2006)

For the healthcare students, embracing a growth mindset instead of a fixed mindset can significantly contribute to didactic and clinical career success.

The aim of the current study is to explore the attitudes of students from Health Care, Nursing and Midwifery majors regarding their sense of belonging and commitment to academic learning in the Health Care major and their desire for continuous learning and development.

EXPOSITION

Undergraduate healthcare curricula are academically rigorous, requiring students to accept new learning strategies to apply theory to clinical practice and succeed academically. Some of them adapt well to the challenge of academic education, while others fail (Lewis, L., Milner, A., Willingham, T., 2018). Health care educators use many strategies to academically support their students with varying outcomes.

Innovative teaching and learning models are needed to reach and engage all health care students. It is very important that educators of future health care professionals use models that cultivate health care students' self-regulation, metacognition, freedom of action and intrinsic motivation to learn. One such model, known as Carol Dweck's "mindset," demonstrates the

---

academic success of students in disciplines other than health care (Lewis, L., Williams, C., Dawson, S., 2020).

This article, describing an innovative study in nursing and midwifery education, proposes a pilot study to reflect student attitudes towards continuous learning and development. Carol Dweck first described the mindset and notes that people with a growth mindset tend to be more successful academically than those with a fixed mindset (Dweck, C., 2006). A growth mindset is a belief that intelligence and other abilities develop through hard work and persistence, while a fixed mindset is a belief that intelligence, talent, or other similar ability are permanent: a person is born with a certain level of them, and this level will not change with time. People with a fixed mindset usually believe that they are either inherently intelligent or inherently incompetent.

Many disciplines have adopted the growth mindset into their teaching models. As shown in a literature review by a team of researchers from the US and Australia, teachers and students who have adopted a growth mindset are more engaged, they have a stronger sense of belonging, they are more resilient and ultimately they have greater academic success (Wolcott, M., McLaughlin, J., Hann,A., 2021). Health care professional education has not incorporated a growth mindset into its teaching philosophy, and this may be to the detriment of students who could be more academically successful.

According to Glenda Stump of the University of Arizona, a highly developed sense of commitment is possessed by those students who believe that intelligence increases and it can be improved (i.e., growth mindset). They are associated with active learning strategies, self-efficacy, peer collaboration and knowledge building behavior (Stump, G., Husman, J., Corby, M, 2014).

In his publication, Mark Hoyert of Indiana Northwestern University defines learners' belonging as students who feel they belong in their environment, feel secure and have greater engagement and persistence in their learning (Hoyert, M., Ballard, K., Odell, C., 2019).

METHOD

The object of this study is the growth mindset of health care students at the University of Ruse.

The subject of the study is the extent of their thinking, which would affect their performance in training.

The aim of the current study is to explore the attitudes of students from Health Care, Nursing and Midwifery majors regarding their sense of belonging and commitment to academic learning in the Health Care major and their desire for continuous learning and development.

The research is carried out by the following **methods**: research of information sources, A web-based survey of 30 questions entitled "Students' Sense of Belonging and Commitment to Academic Learning in the Department of Health Care and Commitment to Continuous Learning and Development", analysis of the empirical results of the study.

At the beginning of the questionnaire, the concepts of "fixed mindset" and "growth mindset" were clarified in advance.

The survey was distributed through e-mail to students from the first to the fourth year of training in the two majors "Nurse" and "Midwife". 104 healthcare students responded to the survey.

10 of the questions are based on Carol Dweck and adapted for healthcare students by tracking their mindset and determining their fixed, mixed or growth mindset.

11 questions taken from the Duckworth (2007) Grit Scale (Ducksworth, A., Peterson, C., Matthews, M., 2007).

4 questions are taken from the Student Belongingness, Engagement and Self Confidence Survey (Yorke, M., 2016).

These questions require the user to answer each, with possible answers ranging from "just like me" or "strongly agree" to "not at all like me" or "strongly disagree". Answers are rated on a scale of 1 to 5. Some of the questions were reversed. The results of these questions were summed, then divided by the number of questions to determine the mindset of the students. The
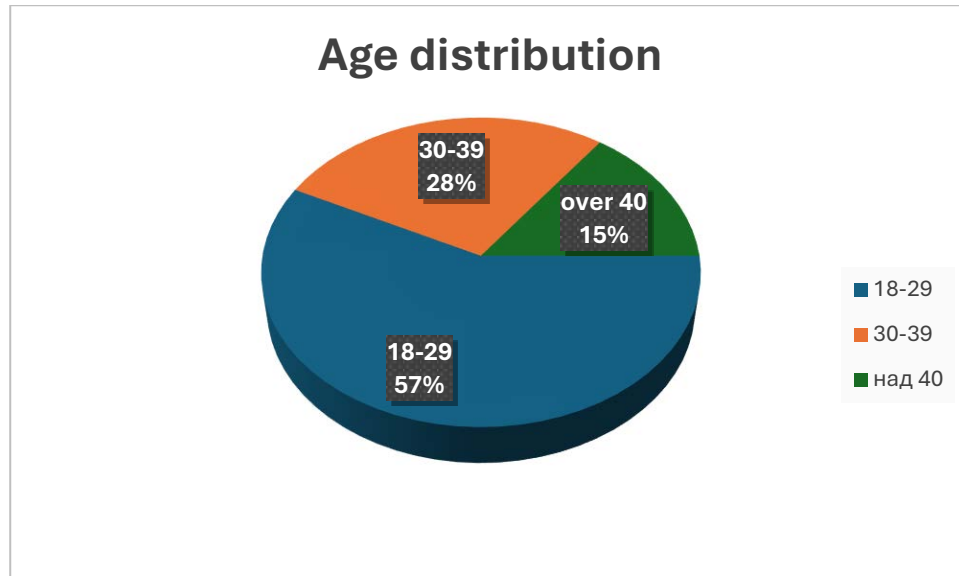
maximum number of points on the scales is 5 (growth mindset), the lowest possible score is 1 (fixed mindset).

5 questions that gather demographic data (i.e. gender, age, etc.).

Participants remained anonymous.

ANALYSIS AND ASCERTAINMENT

All 102 participants identified as female .

Fig.1 Distribution of students by age

Fig. 1 summarizes the data for the participants divided into three age groups. The largest share was given by respondents under the age of 29 – 57,45%, followed by participants who fall into the 30-39 age range with a result of 27,66%. The group of students over 40 years of age is the smallest – 14,89%.
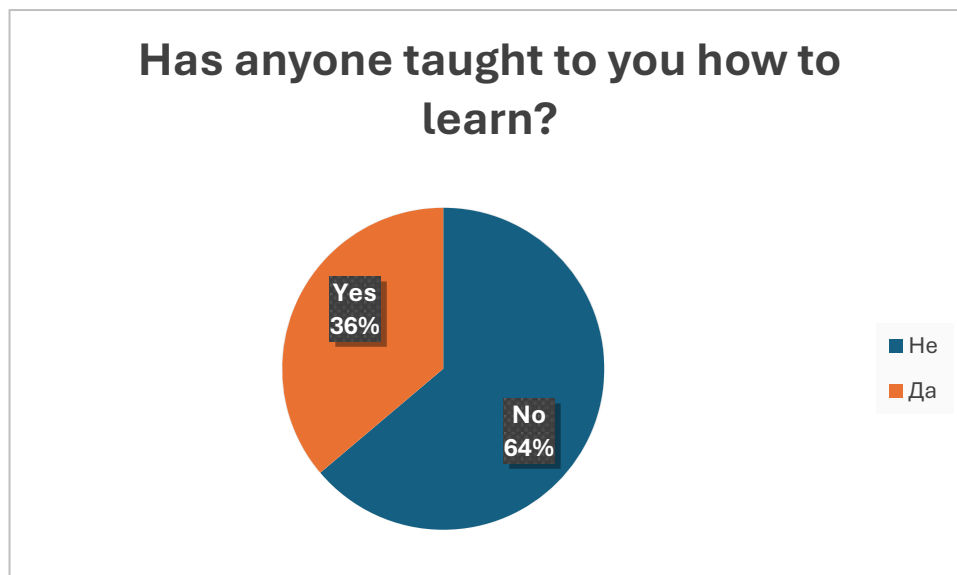
Fig.2 Has anyone taught ʻto you how to learn?

Fig.2 presents summarized results for effective students learning. 63,83% of them shared that they were never taught how to learn effectively. However, more than a third of respondents - 36,17% answer positively to the question asked.
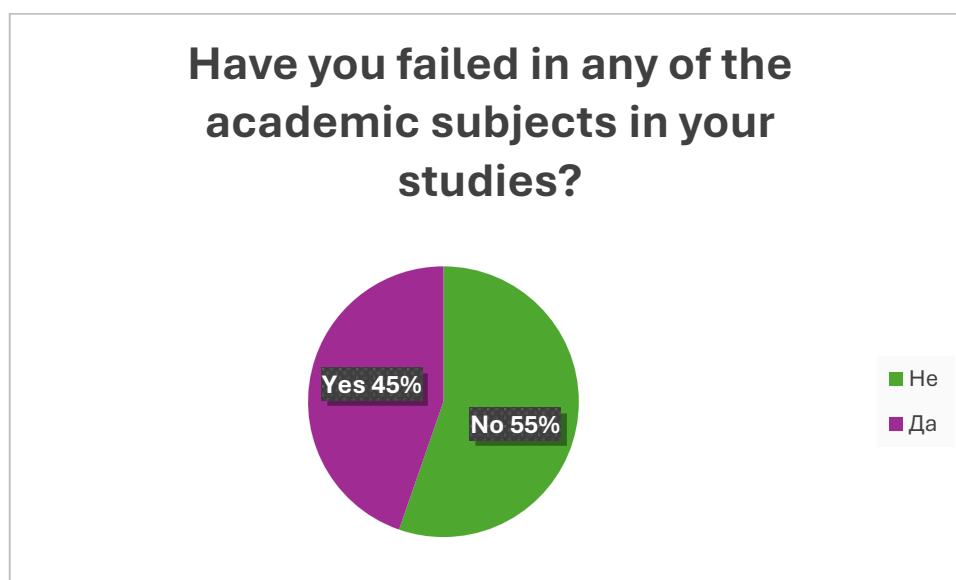
Fig. 3 Have you failed in any of the academic subjects in your studies?

From the results presented in Fig. 3, it becomes clear that almost half of the respondents 44,78% admit that they have failed in their studies in at least one of the studied disciplines.

Of the questions scored from 1 to 5, the summed average score is 3,921 - this finding reveals more student orientation with expression towards mixed thinking.

An average score of 3.661 determines students' sense of engagement with the curriculum.

This study also showed that there was a slightly positive result of respondents on their sense of belonging - 3,687.

Limitations and Implications

- Limitations - Small sample size, electronic delivery, timing within school year, global pandemic, student mindset, social bias.

- Implications:

Re-administer the survey to a much larger sample size of nursing students.

Correlation between belonging and tendency to be growth mindset learner.

The research presents compelling evidence that the growth mindset model should be integrated into health care education.

CONCLUSION

Mindset training is a simple intervention that can increase success. The results of this study provide compelling evidence that the growth mindset model should be integrated into health education as well as considered for future research..

The model makes it possible to look at academic challenges in a different way. When students are faced with a particularly difficult task that requires a lot of time and intellectual energy, they should be able to see it as a rare learning opportunity. To learn not to be discouraged by the scale of the task. This challenge doesn't highlight their inabilities, it actually expands their future abilities, helping them focus on areas where they have the most opportunities for growth and making them more effective learners.

In addition to this, we can note a statement by Justin Hall and Cheryl Williams. In their post they share „Healthcare education is not easy. Late nights, looming deadlines, and loads of information can be quite overwhelming. When faced with these challenges, students should remember that a growth mindset recognizes the importance of learning and developing "what is needed" every day. Understanding this can change their entire way to becoming a good healthcare professional" (Hall, J., Williams, C., 2020).

REFERENCES

Duckworth, A., Peterson, C., Matthews, M., Kelly, D., (2007), Grit: Perseverance and passion for long-term goals, Journal of Personality and Social Psychology, 9, 1087-1101, 2007

Dweck, C., (2006), Mindset: The New Psychology of Success, New York: Random House, 2006

Dweck, C., (2012), Mindset: How You Can Fulfill Your Potential, Constable & Robinson Limited, 2012

Hall, J., Williams, C., (2020), The Growth Mindset in Nursing Education, http://hdl.handle.net/20.500.13013/1381, 2020

Hoyert, M., Ballard, K., Odell, C., (2019), Increasing Student Success through a Cocktail of Cognitive Interventions, Journal of the Scholarship of Teaching and Learning, 19(1), 128–134. doi: 10.14434/josotl.v19i1.26778, 2019

Lewis, L., Milner, A., Willingham, T., (2018), The incidence of student repeaters in pre-licensure nursing programs in North Carolina, Nursing, Catherine W. Wood School of. 128, https://cufind.campbell.edu/nursing_school/128 , 2018

Lewis, L., Williams, C., Dawson, S., (2020), Teaching and Learning in Nursing, Volume 15, Issue 2, Pages 123-127, Official journal of the Organization for Associate Degree Nursing, 2020

Stump, G., Husman, J., Corby, M., (2014), Engineering Students Intelligence Beliefs and Learning, Journal of Engineering Education, 103(3), 369–387. doi: 10.1002/jee.20051, 2014

Wolcott, M., McLaughlin, J., Hann, A., Miklavec, A., Dallaghan, G., Rhoney, D., Zomorodi, M., (2021), A review to characterise and map the growth mindset theory in health professions education, PubMed https://pubmed.ncbi.nlm.nih.gov/. 2021 Apr;55(4):430-440. doi: 10.1111/medu.14381, 2021

Yorke, M., (2016), Student Belongingness, Engagement and Self-confidence Survey, Retrieved from PsycTESTS, doi:https://dx.doi.org/10.1037/t48020-000, 2016