DOI 10.31489/2023BMG1/130-134

UDC 612.1.8

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Overview of health-saving skills developing technologies

The article reviews and compares the diversity of health-saving skills developing technologies in different studies of educational process, that provide knowledge and skills to maintain well-being of students. First year students face challenges that are threatening their physical and mental health, and undergo the new self-destroying habits like smoking, drinking, alcohol, depravation of sleep, bad nutrition etc. First year students' adaptation should be followed with attention to develop independent health-saving skills. The technologies developing health-saving skills, like researched-based programs, theoretical base and skills are reviewed and widely examined. The article contains analyzed information on health-saving skills, methods of developing health-saving skills, socioeconomic status and health-related quality of life, and use health-related quality of life (HRQOL) as criteria to differentiate level of impact on academic success of students. The role of efficient and promising technologies of developing health-saving skills on changing attitude about wellbeing and health, bringing understanding among freshman students about influence of health on academic success and other aspects of life is overviewed. Compared technologies developing health-saving skills affect academic success of students on the different level of approach, and it concludes that for a great change, it is better to use skill-based method.

Keywords: health-saving skills, skilled-based education, research-based programs, theory-based education, physical and mental health, first year students.

Introduction

Young people of age 16 to 21-year-old have to face life-changing transitions, between the two most important educational institutes – school and university. Provided with huge stress from the new environment, studying processes, and change in social status, high school graduates are going through a lot of difficulties. Studying at the university opens opportunities that were closed to first-year students, due to status and age. The opportunities not only include new social encounters, more traveling and working, but also easier access to smoking, drinking alcohol, and other self-destructing activities, that before were prevented by parental supervision, for example, daily regime, constant both mental and physical examination, nutrition, etc. In research of USA Mid-Western youth by M. Nichter, students in their first year of college start smoking and drinking alcohol, even though the majority of first-year students hadn't reached the legal age to buy cigarettes or alcohol. They have fewer physical activities, first exams, and the necessity of learning a big amount of information in a short time, resulting in stress, insomnia, and problems with mental and physical health.

The research was based on counting the number of times that students were exposed to cigarettes and alcohol, and the times they drink and smoke in a month. Reaching numbers, 60 % were students, part-time smokers, with the habit to drink when it's not necessary, revealing pressure not only from student mates but from the intense studying process too [1]. Health-saving technologies are one measuring system that connects factors in the educational environment. Health-saving technologies are methods that include a special function approach for physical and mental health, in the pedagogical process of the educational organizations.

As a result, students create critical knowledge about their health and how to maintain their well-being. But researchers who only focus on mental health are not providing full reasoning and outcomes of the stress and pressure that first-year students are going through. Excluding physical health damage often promotes specific mental health agenda. Braun-Lewensohn and Mayer's work, which specialized on the issue of stress and coping mechanisms provides salutogenesis strategies for educators to create the best socioeconomic status (SES) for students [2].

Chunyan Fan provides the studies about the measurement of physical health problems of young adults in China and concludes that examination of students' physical health over the long distance (800 m for women, 1000 m for men), compared to short distance run (20 m), negatively effect on the value of inhaled oxygen, within running measured data and physical health status. Given examples of Japan and Russia, Fan also

emphasized that these countries prioritize physical health over mental health by creating the best environment for physical activities [3].

The overall connection between students' health and academic success is very complex. The topic of studies highlights broad relations between health and academic success by the World Health Organization and many other official science groups. For example, associations between students' poor nutrition and unstable sleep regimes give quick and immediate results, and without extended aims and health-saving methods it could lead to obesity and sleep deprivation [4]. This paper will review different strategies for evaluating health-saving knowledge and skills to define the operated one.

Experimental

Analysis of strategies to evaluate health-saving skills included literature sources, scientific studies measured mostly in SES that indicates occupation measurement and physical health and in health-related quality of life (HRQOL) that affected by educational level on physical, mental, emotional, and social gratitude of young people [5, 6]. Reviewed methods: researched-based programs, theoretically based and skill-based, represent the most studied and researched strategies for developing health-savings skills in educational organizations.

Results and discussion

Participation and learning about health is the traditional way to integrate health-saving skills and knowledge, democratic participation, and learning methods about health. Organize health-saving seminars and exercises to increase physical activity among students. Use agitation about mental health that focuses on the upfront connection from educational organizations (school, etc.) and students are not obliged to participate in the activities. Theoretical-based methods are used in the educational system very often, do not specify for smaller groups of students, and exclude the factor of "the participation tyranny". The token participation also was a result of obligatory participation, caused focusing participants on information about health, consequences, and effects of misconduct wellbeing, and made them ready to immediately change on lifestyle to healthier behavior only for some individuals. Instead, genuine participation made known the process behind the behavior, understood the personal meaning of the durable responsibility for health, and criticized social constructs of health in specific topics. L.M. Buffart studied the genuine participation in health-related events was different, depended on the theme of the event, and showed that general topics about health were the most participated in daily activities, such as homework, lectures, were preventing students to go to these events. And HRQOL of participants was low reached for men ($p = 0.04$) and for women ($p = 0.02$) is average for people 45–55 years old, and for young adults [7–10].

One of the newest technologies of the health-saving knowledge includes creating and programming research-based methods for one university campus, with students' medical data provided by admission papers, and additional medical data that will be updated in the future. Arranging and planning-based methods rely on information in the database but meet a shortage of qualified staff to work with a program. Information on the well-being and academic success of students should be saved, referenced, and divided into groups. This approach is very inclusive and targeted at specific groups of students with different health issues. The information should be saved in the database, calculated, and monitored, and after that, the department of health of a particular university should plan special events for these specific groups of students. Then, based on the university's recourses and professional ability to arrange those special events, it will change the SES of students. The organizers of the program should update the information regularly. But most of the time, an efficient way to program and model the setting of HQROL, is usually made by students as part of the research, and self-made databases and programs expire their novelty pretty soon for lack of professionally focused staff. The following advance requires data and instruments to supply the information to organizers for course adjustment and to record the effect. Whitman, in her review, emphasized that while being the new technology in the late 90s and early 2000s, programed base health-saving modeling was showing decreased saturated fat and cholesterol of both young men and women, but only focusing on the impact on physical health in HQROL [11–14].

The theoretical base for skills-based health education is focused on the implementation and creation of health-saving skills in the pedagogical process by creating an environment of need to learn communication, copping, self-management and critical thinking skills to prevent some self-destroying habits and provide for stoic knowledge of the importance of health, by regulating academic process (Fig.). The main goal of the theoretical base method is the development of student who can recognize self-destructing activities and con-

nect to not only their academic success but also long term health status. S. Nazarpour compares the skills-based education and practice randomize trial health study, notes that skill-based education was more progressing among participants and more viable than just addressing information. Observed groups of teenage girls in Tehran, showed a significant difference in the amount of knowledge, making the skill-based method more efficient. The following increase from p = 0.002 to p = 0.045 in the skill-based group and p = 0.002 to p = 0.034 of HQROL in the lecture-based group. After the experiment, it has shown that both methods were making progress in informing students, but with different periods and quality of gained skills. For example, small-focused tasks with specific involvement are more reliable than stated facts about the well-being of young people. The lectures were similar to the most of the previous examples of events, where information would be explained in facts and statements, resulting in some skill knowledge, yet weren't effective as non-direct learning seminars to teach about the health-saving skills [15–16].

Technologies developing health-saving skills	***Advantages***	***Disadvantages***
theoretical base	• classical organization of educational lectures • needed minimum resources • wide broad audience of listeners	• relied on genuine participation, that based on general image of health • loose amount of participants • uncertain method result
researched-based programs	• Creates a 4-5 year-long of an organize data-base, that contains medical information • Includes planned interactive events • Can be regulated by students themselves • Approach inclusive and targeted groups	• heavy relied on additional sponsorship • in need of qualified specialist to create programmed data-base; and constant examination of data-base • in need of specific accesses to the medical information
skill-based	• needed minimum resources • teaches self-management and critical thinking • develops critical thinking skills towards self-destructing behavior • exclusive involvement of specific groups of students	• heavy relied on methodical work of teachers • not effective with non-direct learning • ineffective with wide broad audience of listeners

Figure. Major advantages and disadvantages of the three developing health-saving skills technologies

In the deep dive of integration assessments for skill-based health education, Francisca Chika Anyanwu gave informal examples of bad and good assignments to promote better understatement of HIV/AIDS in Nigerian schools. She emphasized the importance of personal experience through the humanization questions that students answer with themselves and their close people in mind. But it should be short, without double-barreled meaning. Different types of assessments provide: involving, demonstration, observation, or conversation are necessary to create health-saving skills. But take into consideration that not every topic student can experience, so often teachers use self-report instruments or assessments of learning knowledge or attitude, mixing them up or using more than one. Developing attitudes and skills towards health importance is a complicated system, where primal is skill-based education. In consideration, the perception of one student about smoking can be revealing to his classmates, with acknowledgment towards the possibility of a compromised response. Though, shared experiences and information through conversations can give students a base for following behavioral choices [17–20].

Conclusion

It is important to create and develop health-saving skills for young adults, who are changing their environment, and social circles and have no access to alcohol, cigarettes, etc. The reviewed health-saving technologies in this paper have advantages and disadvantages in the organizational, practical, and theoretical

fields of the research. Some of them are outdated in the perspective of the renewed educational system we have right now. Comparatively, skill-based technology to programed and theory-base are sufficient to use with first-year students. It involves students in self-development and self-learning skills that were originally presented in unrelated topics to health but eventually create habits and beliefs that help students take care of their health. Therefore, educators should integrate skill-based technology into their pedagogical process to create a better understanding of health, especially among first-year students.

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Денсаулық сақтау дағдыларын қалыптастыру технологияларына шолу

Мақалада білім алушылардың әл-ауқаты мен оқу жетістіктерін қолдау үшін білім мен дағдыларды қамтамасыз ететін оқу үдерісін әртүрлі зерттеулерде біліктілік пен дағдыларды дамытуға арналған денсаулық сақтау технологияларының алуан түрлілігі талқыланған және салыстырылған. Оқуға келген кезде бірінші курс студенттері өздерінің физикалық және психикалық денсаулығына қауіп төндіретін мәселелерге тап болады, сонымен қатар темекі шегу, ішімдік ішу, ұйқының дұрыс болмауы, дұрыс тамақтанбау және т.б. сияқты өзін-өзі бұзатын жаңа әдеттерге ұшырайды. Зерттеу бағдарламалары, теориялық негіз және дағдылар сияқты денсаулық сақтау дағдыларын дамыту технологиялары қарастырылып, кеңінен зерттелген. Мақалада денсаулық сақтау дағдылары, денсаулық сақтау дағдыларын қалыптастыру әдістері, әлеуметтік-экономикалық мәртебе және денсаулыққа байланысты өмір сапасы, сондай-ақ білім алушылардың академиялық жетістіктеріне әсер ету деңгейін саралау критерийлері ретінде денсаулыққа байланысты өмір сапасын (HRQOL) пайдалану туралы талданған ақпарат берілген. Бірінші курс студенттерінде салауаттылық пен денсаулыққа деген көзқарасты өзгерту, денсаулықтың оқу үлгеріміне және өмірдің басқа да аспектілеріне әсері туралы түсінікті қалыптастыруда денсаулықты сақтау дағдыларын қалыптастырудың тиімді және перспективалы технологияларының рөлі қарастырылған. Салыстырылған денсаулық дағдыларын дамыту технологиялары студенттердің оқу жетістіктеріне көзқарастың әртүрлі деңгейінде әсер етеді және үлкен өзгерістер үшін дағдыға негізделген әдісті қолданған дұрыс деген қорытынды жасалған.

Кілт сөздер: денсаулық сақтау дағдылары, дағдыға негізделген әдістер, зерттеуге негізделген бағдарламалар, теориялық білім, физикалық және психикалық денсаулық, бірінші курс студенттері.

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Обзор технологий формирования здоровьесберегающих навыков

В статье рассмотрено и сравнено многообразие здоровьесберегающих технологий развития умений и навыков в различных исследованиях образовательного процесса, дающих знания и умения для поддержания благополучия и академического успеха студентов. Студенты-первокурсники сталкиваются с проблемами, которые угрожают их физическому и психическому здоровью, и подвергаются новым саморазрушающим привычкам, таким как курение, употребление алкоголя, лишение сна, плохое питание и т.д. Адаптация студентов-первокурсников должна сопровождаться вниманием к развитию самостоятельных здоровьесберегающих навыков. Технологии развития здоровьесберегающих навыков, такие как исследовательские программы, теоретическая база и навыки, рассматриваются и широко исследуются. В статье приведена информация о здоровьесберегающих навыках, методах формирования здоровьесберегающих навыков, социально-экономическом статусе и связанном со здоровьем качестве жизни, а также использование качества жизни, связанного со здоровьем (HRQOL), в качестве критериев дифференциации уровня воздействия, на академические успехи учащихся. Рассмотрена роль эффективных и перспективных технологий формирования здоровьесберегающих навыков в изменении отношения к благополучию и здоровью, формировании у первокурсников понимания влияния здоровья на успеваемость и другие стороны жизни. Сравниваемые технологии развития здоровьесберегающих навыков влияют на академическую успешность студентов на разном уровне подхода. Кроме того, сделан вывод о том, что для больших изменений лучше использовать метод, основанный на навыках.

Ключевые слова: здоровьесберегающие навыки, методы, основанные на навыках, программы, основанные на исследованиях, теоретическое образование, физическое и психическое здоровье, студенты-первокурсники.