

Physical Health Improvement in First Year Undergraduate Students Under Mentoring Scheme

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Abstract - For first-year undergraduate students, making the move from high school to college entails major changes in their academic, social, and personal lives. The preservation of physical health frequently takes a backseat among these modifications. Many academic institutions have implemented mentorship programs designed to help students completely in order to solve this issue. This study examines whether mentorship programs may improve the physical health of first-year college students. This study uses a mixed-methods approach to evaluate the association between mentorship programs and improvements in physical health by combining quantitative surveys and qualitative interviews. Through the use of a questionnaire, information was gathered to assess changes in physical health-related behaviors including exercise frequency and nutritional preferences. Results show that mentorship programs have a beneficial impact on first-year undergraduate students' physical health. Data from the survey show that participants' participation with healthy lifestyle choices has significantly improved, including their frequency of exercise and dietary habits. Mentorship may improve one's quality of life while also helping first-year undergraduate students succeed by boosting their physical wellness.

Index Terms - Mentor, Mentee, NEP 2020, SDGs, Physical Health, Undergraduate Students

I. INTRODUCTION

For young individuals, the journey from high school to college is a turning point in their life. In addition to academic difficulties, first-year undergraduate students go through major changes in their general well-being throughout this time. Their physical health is a crucial component of their well-being since it may have a significant influence on their capacity to learn, their emotional stability, and their general quality of life [1].

A rising number of people are interested in determining how mentorship programs affect students' life in general, including their physical health. A viable approach to address these issues and advance the physical wellbeing of first-year students is the use of mentorship programs.

This study intends to investigate and assess the value of mentorship programs in enhancing first-year undergraduate students' physical well-being. Through a thorough examination of current mentorship initiatives and their effects on students' physical health. This study will look at the many elements and tactics used in mentoring programs that lead to good physical health results. We will think about important issues as we explore this study to see how mentorship might support first-year students' healthy lifestyles [2].

II. HYPOTHESIS

- Hypothesis 1 (H1). Mentoring positively and significantly affects students' food habits in context to physical health.
- Hypothesis 2 (H1). Mentoring positively and significantly affects students' physical health awareness.
- Hypothesis 1 (H1). Mentoring positively and significantly affects students' exercise habits in context to physical health.

III. MENTORING SCHEME

The phrase "mentor" has been around for over 250 years. Levinson, Darrow, Klein, Levinson, and McKee (1978, p. 97) highlighted the significance of a mentor as "an individual with greater experience and prestige." a professor, advisor, or patron" in their ground-breaking work on professional development. A life coach is a person who can guide, advice and educate you. They often invest the time to learn about you and the difficulties you're experiencing before using what they've learned and their own experiences to assist you. An excellent mentor is conscious of the significance of being dependable, concerned, genuine, and sensitive to the expectations of the mentee. It is possible for mentors to develop into lifelong companions [3].

Mentors are those who work with their mentees to help them grow and who have greater knowledge or expertise in a certain field. The mentor provides assistance to the mentee as they work together to create and accomplish their goals. A mentor may be very helpful for enhancing one's abilities in the areas of interpersonal communication and professional development [4].

For research purpose, a study is to be conducted with undergraduate students studying in first year of college. The process starts with allocation of mentor. Once mentor is assigned, each referencing students will be interviewed one by one personally in a friendly environment. Mentor tries to develop a comfort so that mentees can talk freely. Interview will be conducted in multiple phases including survey, observation and personal meetings. During each phase, mentor will try to improve bond with mentee and hence can guide him/her to a desired direction in a progressing manner. During data collection, students will be asked for problems they are facing in having nutritional food along with difficulties in maintaining physical well-being. Based on the data collected, mentor will guide the students for acquiring better stage in both the aspects. As a part of mentorship, the

mentor will keep records of all allocated students in order to track the progress throughout the whole first year.

IV. QUALITIES OF MENTOR

Some crucial traits are present in the finest mentors. Anyone with whom you are considering forming a mentor-mentee relationship should exhibit these qualities.



Fig. 1. Qualities of Mentor

A. Openness to receiving and providing feedback:

A quality of a good mentor is someone who shows openness towards receiving positive or negative feedback from students/mentees. Not only receiving but also providing appropriate feedback to students / mentees wherever and whenever required, which can improve the communication bridge between students and mentees, and also leads to the growth of students in career and life [5].

B. Excellent communication and listening abilities:

In order to effortlessly interact with students and advise them appropriately regarding the issue, mentors must maintain exceptional communication skills within themselves. Communication skills are necessary, but so are listening skills. If the mentor doesn't pay attention to and comprehend the issue raised by the pupils or mentee, it could result in bad advice and a poor solution to the issue [6].

C. Sound counselling techniques:

As was already established, a mentor's main responsibility is to help, encourage, and counsel pupils whenever and wherever they need it. Among the most crucial characteristics that a mentor must possess are effective counselling techniques if they are to offer advice, support, and assistance. For them to be able to offer appropriate guidance and assistance, mentors should also be able to counsel students extremely well [7].

D. Trustworthiness:

To build trustworthiness in their students, mentors must be effective. The types of topics a mentee wants to discuss will alter as the mentor and mentee's level of trust increases. Frequently, the problems get more complicated, demanding, or persistent. This development is frequently an indication to a mentor indicating trust has grown to the point where the

mentee feels confident bringing up these more delicate topics during mentoring discussions [8].

E. Empathy:

Although a mentor had already been in the protégé's position, protégés wanted empathy from mentors. Because they have shared a comparable experience in the past, a mentor can relate to a mentee's current feelings by connecting with a period when they felt the same way. The ability of mentors to genuinely empathize with a mentee can help to solidify their relationship [9].

V. PROCESS

A. Allocation of mentor

When a student takes admission in the first year, it takes about 15 days to allocate a mentor to them. The mentor should first give his/her introduction. After that, the general talks to the student to become more familiar. They talk about their own nature and try to know the nature of the student. Try to spend time with the student more often.

B. Relationship development

There are both interpersonal and professional interactions between the mentor and the mentee. Every mentor-mentee relationship has a certain function that varies depending on the situation. However, the main objective is to help the mentee accomplish his or her personal and professional objectives.

There are some characteristics that any mentor-mentee relationship should have:

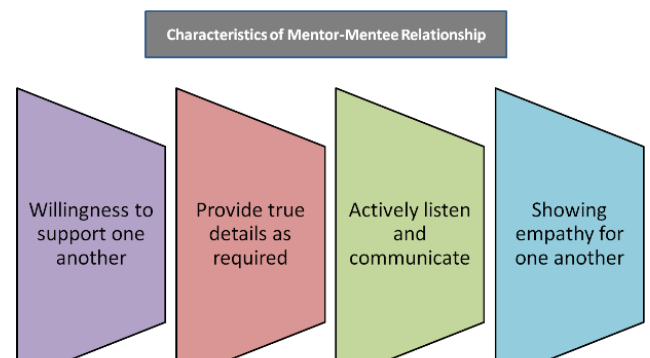


Fig. 2. Mentor – Mentee Relationship

1) Willingness to support one another:

An important component of mentor-mentee interactions in the educational field is the willingness to help one another. This calls for a shared commitment on the part of the mentor and mentee to foster each other's personal and professional development, as well as a readiness to devote time, energy, and resources to the partnership. The mentor is person who is eager to impart the information and abilities they have to the mentee, offering advice on career development, classroom leadership, and successful instructional and educational strategies. The mentee, on the opposite hand, is someone who is eager to pick up knowledge from the mentor and proactively looks for chances to advance professionally. They are open to using the mentor's advice and suggestions for improvement in their educational and instruction methods. With this dedication, mentor-mentee partnerships in educational institutions can be quite successful in fostering educators' career growth [10].

2) *Provide true details as required:*

Giving accurate information is a crucial component of mentor-mentee partnerships in the educational field. This entails being open and truthful with one another about one's objectives, areas of progress, and strengths and limitations. It's critical to give your mentee honest comments on their methods of instruction and learning as a mentor within the educational field. This entails pointing out potential improvement areas and providing helpful feedback to aid in their development [11]. Giving accurate information also entails being upfront and truthful regarding your personal achievements and domains of expertise, and communicating what you know and have learned to the person you are mentoring in a simple and easy-to-understand manner.

3) *Actively listen and communication:*

In the field of education, effective mentor-mentee relationships depend on careful listening as well as interaction. Effective interaction requires attentive listening on both ends, articulating one logically, and being receptive to critiques and comments. It's crucial for mentors working in the education sector to pay close attention to their mentees in order to grasp their objectives, worries, and potential areas of need. This necessitates paying attention to what the mentee is saying, seeking clarification, and paying close attention to their physique expression and other behavioural indicators. Parallel to this, it is crucial for mentees in educational institutions to pay close attention to their mentors in order to understand their advice, suggestions, and observations. This necessitates being receptive to input and positive criticism as well as being ready to inquire about matters and request explanations when necessary [12].

4) *Showing empathy for one another:*

Establishing confidence, cultivating respect among peers, and creating a helpful and happy atmosphere for education are all dependent on mentor-mentee relationships in the educational field. Both mentors and mentees can build strong, lasting connections and collaborate to accomplish their educational objectives by demonstrating empathy [13].

The mentor can develop a relationship with the mentee by doing as much as possible meetings. In this meeting, mentor starts to know about the day-to-day activity of the student. Thus slowly the mentor knows daily schedule including what the student does for how many hours of the whole day. At last, mentor is a person who looks up to and respects individuals. The mentor can use their skills to help their mentee achieve their goal because they possess knowledge that the mentee doesn't really. A mentor is available to help their mentee at all times. They help the mentee generate ideas, get past challenges, accomplish career objectives, and enjoy victories [14].

VI. DATA COLLECTION METHODOLOGY

Data can be gathered using a variety of conventional (traditional) techniques, including as document examination, observation, surveys, one-on-one interviews, and focus groups. If the mentor mentee relationship is developed, then the data collection can be easier. The survey and observation of personal meeting for data collection can be taken into account. In this research survey method is used to collect data from undergraduate students.

A. Survey

The form for the survey can be filled after a little relationship of mentor with the student is good because only if the relationship is good then only student fills more correct data. Data is collected personally by survey from the students of undergraduate program. Different questions related to daily routine and food habits were asked to the students by their mentor. Some questions like when does student wake up in the morning? What and when student prefers in their breakfast or lunch? What is the routine life of a student?

B. Data analysis

Data were collected from 742 students in the form of survey. The following table shows questions which were asked to know basic routine life and food habits of students. Student has to fill all the answers either in yes or no. Here in the table, ration of yes and no is indicated in percentage for particular question filled by the students in survey.

TABLE I.

Sr. No	Questions	Answer (y) %	Answer (n) %
1	Are you staying in the hostel?	42.86	57.14
2	Do you wake up before 6 a.m. in the morning?	25.71	74.29
3	Do you exercise?	20.00	80.00
4	Do you drink milk, tea or coffee?	47.14	52.86
5	Do you have breakfast in the morning?	37.14	62.86
6	Do you have breakfast during break at college?	32.86	67.14
7	Do you bring breakfast from home?	14.29	85.71
8	Do you bring hard food for breakfast?	11.43	88.57
9	Do you eat everything for lunch?	42.86	57.14
10	Are you used to eat something in the evening?	30.00	70.00
11	Do you eat any fruit during the week?	15.71	84.29

It can be observed from the above table that percentage for NO is noticeably higher than YES. More percentage of NO shows that food habits and daily routine of students is not as good as it should be which can lead to more beneficial for their physical health.

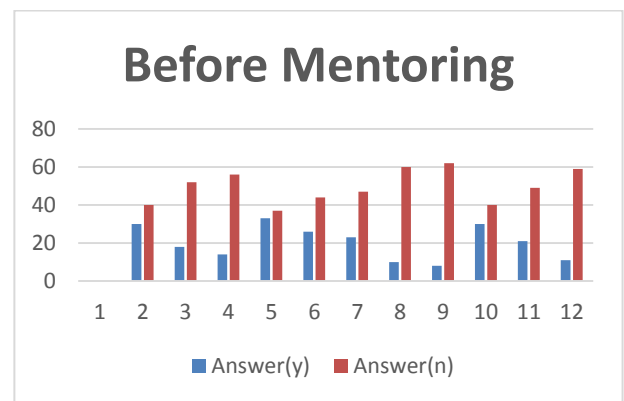


Fig. 3. Answers before mentoring

The above chart graphically represents data of the provided table. In this chart, result is clearly visible that before mentoring undergraduate students are not much conscious about their physical health. At this point one decision can be made that importance of physical health regarding mentoring is required in undergraduate students.

Applied Mann-Whitney U Test on the above data

$$U1 = n1n2 + n1(n1+1)/2 - R1$$

One tailed hypothesis

- The U-value is 0.
- The critical value of U at $p < .05$ is 34.
 - Therefore, the result is significant at $p < .05$.
- The z-score is -3.9399.
- The p-value is .00004.
 - The result is significant at $p < .05$.

C. Guidance

1) Initial guidance

With today's hurried lifestyle and electronic devices, maintaining a healthy lifestyle has become very challenging. A mentor has to give idea about the value of health and explains why it's crucial to remain healthy. Maintaining a healthy routine is essential to learners who must balance classes, sports, passions, and friendships.

A mentor guides students that lifestyle should include a commitment to good health. A healthy lifestyle can aid in the prevention of chronic diseases and debilitating conditions. Student's self-esteem and self-image depends on how mentor truly feel regarding mentees and how well mentee can take good care of their physical and mental well-being.

Nutritious eating is crucial for sustaining overall health and wellbeing, thus its significance cannot be understated. Food that is nourishing gives the body the vital nutrients, vitamins, minerals, and energy it needs to function properly [15].

The human body receives the nutrients it needs from healthy foods to perform at its best. Energy generation, tissue repair, and immune system function all depend on essential nutrients such carbs, proteins, lipids, vitamins, and minerals [16].

For students, nutritional eating is crucial since it promotes normal growth and development. Building strong bones, muscles, and organs diet of nutrients including calcium, protein, and vitamins [17].

2) Follow-up

During follow-up meet, mentor asks mentee about changed habits and can suggest solutions if any problem is being faced in implementation.

3) Record keeping with frequent personal meeting

The mentor maintains different records for each meeting from which the mentor realizes how many changes have taken place in the mentee and how many changes are still possible.

VII. RESULTS

A. Importance of Mentoring

The impact that mentoring has had on the healthcare industry is immense. This endeavor has been strengthened and people abilities have been improved thanks to the growth of mentorship channels.

Mentor gives initial guidance for better physical health to students then taking regular follow up for the same and also keep records to observe change in their routine.

TABLE II.

Sr. No	Questions	Answer (y) %	Answer (n) %
1	Are you staying in the hostel?	42.86	57.14
2	Do you wake up before 6 a.m. in the morning?	50.00	50.00
3	Do you exercise?	52.86	47.14
4	Do you drink milk, tea or coffee?	75.71	24.29
5	Do you have breakfast in the morning?	87.14	12.86
6	Do you have breakfast during break at college?	78.57	21.43
7	Do you bring breakfast from home?	74.29	25.71
8	Do you bring hard food for breakfast?	72.86	27.14
9	Do you eat everything for lunch?	75.71	24.29
10	Are you used to eat something in the evening?	47.14	52.86
11	Do you eat fruit during the week?	81.43	18.57

In the above table a rise can be noticed in ratio of YES as compared to percentage of NO. More percentage of YES shows that food habits and daily routine of students is changed by mentoring.

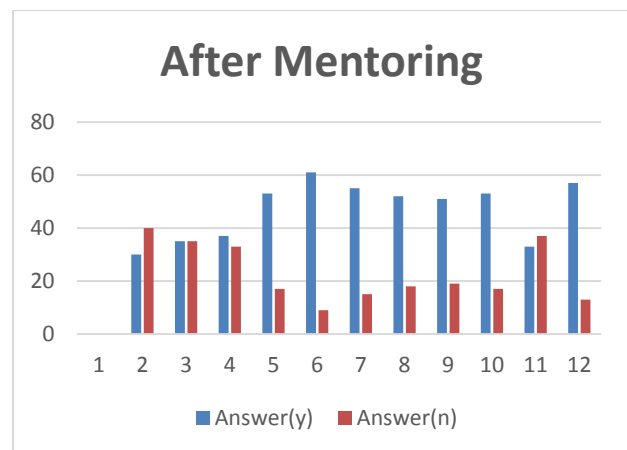


Fig. 4. Answers after mentoring

The above chart graphically represents data of the provided table. In this chart, result is clearly visible that after mentoring undergraduate students are somewhat more aware about their physical health. At this point one decision can be made that importance of physical health regarding mentoring can change routine life of undergraduate students.

As the relationship between the mentor and the mentee improved, the food habits gradually changed according to the survey questions. As the student became more conscious of physical health, the health became better which increased the urge to study.

Applied Mann-Whitney U Test on the above data

$$U1 = n1n2 + n1(n1+1)/2 - R1$$

One tailed hypothesis

- The U-value is 11.5.
- The critical value of U at $p < .05$ is 34.

- Therefore, the result is significant at $p < .05$.
- The z-score is 3.18475.
 - The p-value is .00074. The result is significant at $p < .05$.

VIII. DISCUSSION

Questionnaires were utilized in this research to evaluate the value of mentoring assistance, the mentoring relationship, and the mentoring procedure for first-year learners. In this study, review of 742 students were collected. Mentors get their responses through survey. Students are amused while receiving physical health mentorship. Regular follow up maintained by the allocated mentor of students. Mentors can help students for their psychological growth. Gradually mentor guides to students to change their food habits to improve physical health [18].

For mentees pursuing the SDGs, a mentor can serve as a guide or promoter for social transformation. Personal and societal poverty, a decent education, hunger, excellent health and well-being, gender equality, decreased inequality, sustainable cities and communities, peace and justice, and attaining climate justice are all issues that mentors may assist their mentees with addressing. All people of all ages are to enjoy healthy lifestyles and to promote wellbeing, according to Goal 3. At every phase of a person's life, beginning at birth, health and wellbeing are crucial.

According to National Education Policy 2020 1.9 health and family welfare, mentoring can help in student's health and also in the health of their family members. 4.44 point in the NEP 2020 states that teachers are responsible to develop students in different areas by their guidance. As students are more connected to their teachers, teachers can easily guide them for physical health. This can be helpful to the family of student and finally to the healthy society. So a role of a teacher is more significant towards the society.

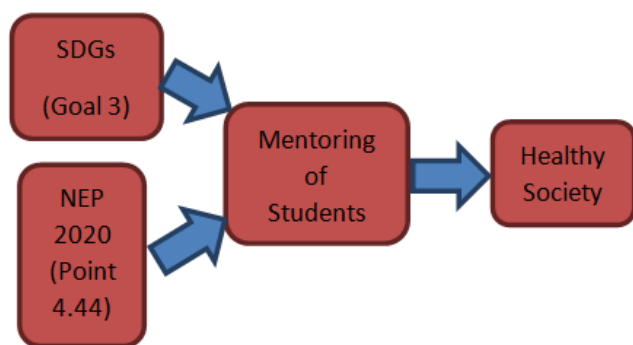


Fig. 5. Healthy society as per SDG and NEP 2020

IX. CONCLUSION

This study has shown that mentoring programs have a considerable favorable effect on first-year undergraduate students' physical health. The results highlight the crucial part mentoring relationships play in encouraging healthier lifestyles, lowering stress, and ultimately helping to improve academic achievement and general wellbeing. Mentoring programs designed to improve physical health are a significant resource for educational institutions working to offer their students all-around support. This study underlines how crucial it is to fund and scale up such programs in order

to guarantee the holistic development of first-year college students. A promising strategy for promoting a healthier and more successful student population is the relationship between mentorship and improvements in physical health among first-year undergraduate students. We can improve the student experience and contribute to the growth of healthier, more resilient, and academically successful people by including mentoring programs that prioritize physical well-being within the framework of first-year college students.

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