



Original Research Article

Construction and Validation of the Health Hygiene Scale (HHS)

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Name of Author:

Thirugnanasambandam Ramanathan^{1*}
and Chockalingam Jayanthi¹,

Affiliation: Department of Education,
Annamalai University, Tamilnadu, India.

Corresponding Author:

T. Ramanathan

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Abstract: Health refers to a state of complete well-being, including physical, mental, and social aspects. Hygiene means keeping ourselves and our surroundings clean to avoid illness. Practicing hygiene helps us stay energetic, study well, and grow strong. Therefore, maintaining health and hygiene is everyone's responsibility for a happy life. Health and hygiene are the pillars of a meaningful and successful life. Community hygiene, such as maintaining clean streets, public toilets, and safe water supply, is equally important. Everyone bears the responsibility of keeping their surroundings clean. Schools, hospitals, and marketplaces should have proper sanitation to stop outbreaks of diseases. Without good community hygiene, even those who practice personal hygiene can suffer. To sum up, health and hygiene form the backbone of a thriving society. Through small, consistent actions, we protect ourselves, respect others, and create a happy, energetic environment. Start practicing good hygiene today for a brighter tomorrow. By integrating these practices into daily life, college students can significantly reduce the risk of illness and thrive in their academic and social lives. Thus, the scale namely Health Hygiene Scale (HHS) has been constructed and validated by the investigators. The reliability of the Health Hygiene Scale (HHS) was established by the test-retest method as 0.91 and the validity was established as 0.95. Thus, from the two coefficients, it has been inferred that this scale is highly reliable and valid.

Keywords: Health, Hygiene

INTRODUCTION

Health refers to a state of complete well-being, including physical, mental, and social aspects. Hygiene means keeping ourselves and our surroundings clean to avoid illness. Practicing hygiene helps us stay energetic, study well, and grow strong. Therefore, maintaining health and hygiene is everyone's responsibility for a happy life. Health and hygiene are the pillars of a meaningful and successful life. Community hygiene, such as maintaining clean streets, public toilets, and safe water supply, is equally important. Everyone bears the responsibility of keeping their surroundings clean. Schools, hospitals, and marketplaces should have proper sanitation to stop outbreaks of diseases. Without good community

hygiene, even those who practice personal hygiene can suffer. To sum up, health and hygiene form the backbone of a thriving society. Through small, consistent actions, we protect ourselves, respect others, and create a happy, energetic environment. Start practicing good hygiene today for a brighter tomorrow. By integrating these practices into daily life, college students can significantly reduce the risk of illness and thrive in their academic and social lives.

Physical health

- Eat a balanced diet
- Stay hydrated
- Prioritize sleep

- Exercise regularly
- Listen to your body

Mental health

- Manage stress
- Stay connected
- Be mindful
- Utilize campus resources
- Set boundaries

Maintaining health in college requires attention to key areas: physical well-being (nutrition, exercise, sleep, hydration), mental wellness (stress management, seeking support), and avoiding harmful habits (substance abuse, excessive screen time).

Avoiding Health Risks

- **Substance Use:** Be aware that alcohol misuse and substance use are significant health problems among college students. Limiting or avoiding alcohol and other drugs is crucial for long-term health and academic success.
- **Screen Time:** Limit non-essential screen time to avoid eye strain, disrupted sleep, and mental fatigue.

By integrating these healthy habits, students can better balance academic demands with overall well-being, leading to a more positive and successful college experience.

HYGIENE

College student hygiene includes daily personal care like showering and brushing teeth, along with regular handwashing to prevent germ spread. Maintaining a clean personal space, including laundry and sanitizing surfaces, is also crucial, as is managing body odor with deodorant and clean clothes.

Personal hygiene

- Wash your body daily
- Practice good oral hygiene
- Keep hands clean
- Mind your nails
- Cover coughs and sneezes
- Use deodorant/antiperspirant

Environmental and social hygiene

- Wear clean clothes
- Maintain your personal space
- Avoid sharing personal items
- Ventilate your room
- Clean up eating messes

Staying healthy

- Don't pick at your face
- Wash your face before bed
- Be mindful of your diet
- Stay active

Maintaining good hygiene is essential for college students to ensure overall health, well-being, and social confidence, particularly in shared living and learning environments. Key areas of hygiene include personal, oral, hand, food, environmental, and mental health practices.

College students:

College students are individuals enrolled in the stage of higher education, typically spanning from age 18 onwards. This phase is crucial for developing academic and social skills, preparing students for future academic or professional paths, in India.

LITERATURE REVIEW

Akorede Seun Nurudeen and Atanda Toyin., (2020), studied about the knowledge of personal Hygiene among Undergraduates. The purpose of the study was to examine if under-graduates know about personal hygiene, investigate if undergraduates of University of Ilorin differ in personal hygiene knowledge based on age, and assess if there is a difference in knowledge of personal hygiene among undergraduates of University of Ilorin based on gender. A descriptive research design of using surveys was employed for this study. Multi-stage sampling techniques of simple random, proportionate, and convenient sampling techniques were used to select 398 respondents for the study. The researcher developed a questionnaire validated by three experts from the Department of Health Promotion and Environmental Health Education; University of Ilorin was used for the study. ANOVA and Independent t-test was used to test the hypotheses. All hypotheses were tested at 0.05 level of significance. The findings from this study revealed that undergraduates of University of Ilorin know about personal hygiene. There is a significant difference in knowledge of personal hygiene among undergraduates of University of Ilorin based on age. There is a significant difference in knowledge of personal hygiene among undergraduates of University of Ilorin based on gender. The study concluded that undergraduates of University of Ilorin know about personal hygiene.

Jenan M. Al-Rifai, et al., (2018), studied about the personal hygiene among college students in Kuwait. The aim of this study was to determine college student's knowledge and awareness of personal hygiene in Kuwait. A multi-dimensional health assessment approach was followed using a self-administered questionnaire that was distributed among students of two colleges (the College of Nursing and the College of Health Sciences). Item analysis was conducted on 33 items of the questionnaire and measure five types of hygiene practices: hand hygiene, body hygiene, special hair application, oral care, and clothes hygiene. The data collected in the questionnaires and results were analyzed using statistical software SPSS version 23.

Statistical analysis was performed using in hand hygiene, hair application, and body hygiene whereas, male students showed a better oral hygiene ANOVA and Student's *t*-test. Internal consistency, reliability was good, with an overall Cronbach's Alpha value of 0.749. Most respondents were female with 64%, while 80% of the college students were in the age of <20-year-old. Twelve items were underhand hygiene practices, and four items under body hygiene. Nine items were under oral care; three, items were under hair application. Three were under clothes hygiene. This study showed that female students had a better knowledge and were more hygienic practice. Nevertheless, this study shows that the hygiene questionnaire is an acceptable and reliable measure of awareness and practice among college students.

NEED AND IMPORTANCE OF THE STUDY

Health and hygiene are crucial for college students as they prevent illnesses, improve academic performance by enhancing concentration, and boost overall well-being, confidence, and social interaction. Maintaining good hygiene is essential to avoid the spread of germs in close living and learning environments, fostering a healthier community and promoting lifelong healthy habits. Maintaining good health and hygiene is vital for college students, directly impacting their physical well-being, mental health, social interactions, and,

importantly, their academic success. In the communal college environment, these practices are essential to prevent the rapid spread of illnesses. For college students, health and hygiene involve daily personal habits, maintaining a clean-living space, practicing food and hand hygiene, and incorporating healthy lifestyle choices like exercise and proper sleep. Key practices include showering daily, brushing teeth twice a day, and washing hands frequently with soap, especially before eating or after using the restroom. Keeping clothes and living areas clean, eating balanced meals, and prioritizing sleep are also crucial for overall well-being. Hence, the present study has the need and importance.

PILOT STUDY OF THE SCALE

To construct and validate a Health Hygiene Scale (HHS) a pilot study has been conducted with a sample of 100 college students studying in the Cuddalore district of Tamilnadu, India has been selected through random sampling technique. For the pilot study 43 statements positively worded were framed for the five point scale having the responses of Always, Often, Some Times, rarely and Never bearing the scores of the scores of 4, 3, 2, 1 and 0 for the statements. An Individual Score is sum of all the scores of the 43 items. Therefore, one can get maximum score of 172 and a minimum score of 0.

ITEM ANALYSIS

The validation of a Health Hygiene Scale (HHS) after the pilot study is to find out 't' value of each statement which forms the basis for item selection in order to build up the final scale. Health Hygiene Scale (HHS) scores for all the 100 college students were found out and they were arranged in descending order of scores from the highest to the lowest. Then 27 % of the subjects (upper group) with the highest total scores and 27 % of the subjects (lower group) with the lowest total scores were sorted out for the purpose of item selection. The upper and lower groups thus selected, formed the criterion groups and each group was made up of 27 secondary school students. Each statement was taken individually and the number of respondents who responded from "Always" to "Never" was found out in both the high and the low groups separately. A separate work sheet was prepared for each statement for the calculation of 't' values. The value of 't' is a measure of the extent to which a given statement differentiates between the high and low groups. The 't' value is equal to or greater than 1.75, it indicates that the average response of the high and low groups to a statement differs significantly (Edwards, 1957). The 32 statements having value greater than or equal to 1.75 were chosen in order to form the final scale. The items in the scale were randomized so that the statements were distributed throughout the scale.

Table-1

**Rank order of items in Health Hygiene Scale (HHS)
based on 't' values**

Statement. No	't' VALUE	SELECTED/NOT SELECTED
1	3.47	SELECTED
2	3.29	SELECTED
3	6.76	SELECTED
4	4.07	SELECTED
5	4.81	SELECTED
6	3.42	SELECTED
7	4.25	SELECTED
8	3.82	SELECTED
9	4.22	SELECTED
10	5.73	SELECTED

11	3.24	SELECTED
12	0.29	NOT SELECTED
13	10.23	SELECTED
14	0.67	NOT SELECTED
15	1.09	NOT SELECTED
16	1.5	NOT SELECTED
17	2.08	SELECTED
18	1.06	NOT SELECTED
19	3.96	SELECTED
20	1.91	SELECTED
21	2.55	SELECTED
22	2.86	SELECTED
23	2.09	SELECTED
24	0.91	NOT SELECTED
25	1.94	SELECTED
26	0.1	NOT SELECTED
27	1.49	NOT SELECTED
28	0.41	NOT SELECTED
29	3.73	SELECTED
30	3.92	SELECTED
31	2.98	SELECTED
32	5.03	SELECTED
33	5.47	SELECTED
34	3.37	SELECTED
35	4.01	SELECTED
36	2.84	SELECTED
37	3.84	SELECTED
38	2.69	SELECTED
39	3.53	SELECTED
40	4.44	SELECTED
41	1.46	NOT SELECTED
42	0.16	NOT SELECTED
43	3.19	SELECTED

The 32 statements having the highest ‘t’ values have been chosen in order to form the final scale (Table-1).

RELIABILITY AND VALIDITY OF THE SCALE

The reliability of Health Hygiene Scale (HHS) was established by the test-retest method as 0.91 and the intrinsic validity was established as 0.95. Thus, from the two coefficients, it has been inferred that this scale is highly reliable and valid.

CONCLUSION

Thus, the scale namely Health Hygiene Scale (HHS) has been constructed and validated by the investigators. Hence the contribution has been made by the investigators to the field of education.

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