Demographic Profiling of the Understandability of Curricular Materials among Nursing Students

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ARTICLE DETAILS	ABSTRACT
	Understanding curricular materials is vital for the academic and professional development of nursing students. This study investigates the demographic determinants of material understandability (MU) among 91 B.Sc. Nursing students in West Bengal using a purposive sampling method. The research aimed to identify whether age, parental education, and income levels influence how well students comprehend their educational content. Data were gathered through a self-constructed demographic questionnaire and a Material Understandability Scale, analyzed using descriptive statistics and one-way ANOVA in SPSS v26. The findings revealed that age is a significant factor influencing MU, while mother's education, father's education, and income showed no statistically significant association. These insights underscore the importance of considering age-based learning adaptations in nursing curricula to enhance comprehension. The study also emphasizes the need for training programs that equip nurses with the skills to assess and utilize readable academic materials, thereby improving educational outcomes.

Introduction

Material understandability (MU) is a critical factor in knowledge. It involves the ease with which information can be comprehended and utilized by the students (Dewi & Adijaya, 2022).

However, many nurses are found to lack the training in assessing the readability of these materials, which can lead to the use of inappropriate resources (Serxner, 2000; Wang et al., 2020).

Hence, there is a need for systematic approaches and training programs to improve nurses' ability to evaluate and create suitable patient education materials (Cant & Cooper, 2010).

Objectives of the study: The study attempts to determine the demographic variables associated with course material understandability among the trainee nurses.

REVIEW OF LITERATURE

A research on 197 nurses revealed that higher educational achievement and basic computer knowledge positively influence nurses' understanding of modern information systems (Ifinedo, 2016).

Communication skills among nurses were found to be significantly related to marital status, employment background, department, work shift, and type of employment (Zangeneh et al., 2019).

Non-white students felt less intellectually stimulated and less satisfied with the availability of information about their modules.

Also, disabled students indicated lower satisfaction levels, although the differences were not statistically significant (Ansari et al., 2002).

This way, the gap in the research literature is realized and the rationale of the study has been established.

HYPOTHESES

H1: Material Understandability significantly varies across the age of the nurses
H2: Material Understandability significantly varies across their mother's education level of the nurses
H3: Material Understandability significantly varies across their father's education level
H4: Material Understandability significantly varies across the income of the nurses

METHODS

Participants

A total number of 91 B.Sc. Nursing students from West Bengal were included in the research. A purposive sampling was utilized for this purpose.

Tools

1) The Demographic Questionnaire was self-prepared to assess the socio-demographic variables among the nurses.

2) The Material Understandability Scale was prepared to assess how well the nurses understood their educational materials.

<<Add Psychometric properties

Procedure

The nursing students were approached and as per appointments taken, they were met for the data collection on their convenient time. Rapport was established and the instructions were properly given. All ethical standards of research were maintained.

Statistical Analyses

The data collected were then properly tabulated in statistical software.

The Descriptive Statistics and one-way ANOVA was conducted to determine the group differences in terms of material understandability.

All analyses were done using SPSS v26.

RESULTS

Table 1: Demographics and ANOVA analysis for the age groups across MU

Variable	Age Group	N	M	SD	F	p
Material Understandability	18	28	47.5	7.17	3.391*	0.013
	19	43	50.14	7.44		
	20	14	47.86	5.08		
	21	4	49.25	2.99		
	22	2	65	0		

With an increase in age of the nurses, the mean MU is seen to increase gradually. There exists a statistically significant difference between age groups ($F_{(4, 86)} = 3.391$, $p = 0.013$), indicating that age has an impact on how participants perceive material understandability.

Hence, H1 has been accepted.

RESULTS

Table 3: Demographics and ANOVA analysis for father's education across MU

Variables	Education Level	N	M	SD	F	p
Material Understandability	8th	5	51.2	3.11	0.238	0.87
	10th	17	49.53	5.91		
	12th	22	48.36	5.58		
	Graduation	47	49.38	8.64		

With an increase in age of the nurses, the mean MU is seen to be stable overall. There exists no statistically significant difference across the different education levels of the fathers (F(3, 87) = 0.238, p = 0.870).

Hence, H3 could not be accepted.

RESULTS

Table 4: Demographics and ANOVA analysis for the income of the nurses across their MU

Variables	Income Level	N	M	SD	F	p
MU	0 to 25k	38	49.18	6.51	0.056	0.983
	25k to 50k	28	49.25	8.83		
	50k to 75k	12	50	6.45		
	Above 75k	13	48.85	6.94		

With an increase in age of the nurses, the mean MU is seen to be stable overall. There exists no statistically significant difference among the income groups for Material Understandability (F(3, 87) = 0.056, p = 0.983).

Hence, H4 could not be accepted.

RESULTS

Table 2: Demographics and ANOVA analysis for mother's education across MU

Variables	Education Level	N	M	SD	F	p
Material Understandability	8th	9	49.67	2.45	0.071	0.976
	10th	19	49.79	5.17		
	12th	37	49.19	6.12		
	Graduation	26	48.85	10.64		

With an increase in age of the nurses, the mean MU is seen to be stable. There exists no statistically significant difference across different education levels of the mothers (F(3, 87) = 0.071, p = 0.976).

Hence, H2 could not be accepted.

DISCUSSION

Concurring to the current findings, older nurses are more willing to continue working until and beyond the official retirement age, which suggests higher level of material understandability and adaptability with age (Nurmeksela et al., 2023).

Similarly, Gaki et al. (2013) found age to be a significant predictor of motivation among nurses, which is again strongly linked with MU.

Lower levels of parental education are significantly associated with an increase in the age of nurses (Brownie et al., 2018).

Sufficient income promotes the willingness of nurses to continue working, which may indirectly relate to their ability to understand and engage with educational materials (Nurmeksela et al., 2023). CONCLUSION

The demographic profiling revealed that only age is associated with material understandability among the B.Sc. nursing students. Other factors like parental education levels and income of the nurses did not play a significant role in their MU.

The findings of the research shall contribute to introducing or improving the upcoming curricula in nursing studies.

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