Research Article



Ice Breakers to De-stress College Students

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ABSTRACT

An experimental study aimed to evaluate the effectiveness of ice breaker course in reducing the perceived stress of 1st year GNM students at VISWAS School & College of Nursing, Bhubaneswar with objectives to assess the perceived stress & reduction of perceived stress by intervention of ice-breaker course & also to find out the association of perceived stress with socio-demographic variables. The conceptual framework was developed based on Sister Callista Roy's (1968) Adaptation model & an extensive review of related literature has been undertaken. Total 60 no. of students participated in the study which has been selected by random sampling. The tool consisted of self-structured socio-demographic data; modified Cohen's perceived stress scale and self-structured ice-breaker course for intervention & reliability of the tool was 0.85. Descriptive and inferential statistics was used for data analysis. Majority of the sample in both experimental and control group were in age group 18-23 years, Hindu community, living in hostel & secured 40-50% percentage in higher secondary with family income 5001-10000 whereas, equal samples were from joint and nuclear family. Pre-test score showed no significant difference in level of perceived stress at P value 0.5479 but post test result considered to be extremely significant at P value < 0.0001. The study concluded that ice breaker intervention was very much effective in reducing the stress of 1st year GNM students. Nursing teachers should utilize these findings in promoting the quality of nursing education programs and improving the psychological health of the nursing students.

Keywords: Life stressors; stress; life; Mental aspects; emotional aspects.

INTRODUCTION

ursing education and profession remain challenging and stressful with stress arising secondary to role conflict, role demand and role transition. Persistent stress from various sources could affect coping mechanisms which may lead to psychological distress and disorders identifying stressful situations and to deal with that are very much important that can help the teens for the rest of their life.

Students have the pressure to study new subjects, excel in their examination, getting practical experience in caring for patients with various disease conditions, as well as face other challenges which are similar to those experienced by college students.¹

Several published articles. explored the perceived stress level, and the coping strategies among the first year medical and nursing students.²⁻⁶

Students undergoing training in nursing are not always prepared to deal with the challenges of the classroom and the clinical practice settings. They have the pressure to study new subjects, excel in their examination, getting practical experience in caring for patients with various disease conditions, as well as face other challenges which are similar to those experienced by college students.

They may use healthy or unhealthy methods to cope with stress. $\!\!\!^4$

On 2009, Roselin Dhar, Indarjit Walia, Karobi Das was conducted a descriptive study in the National Institute of

Nursing Education PGIMER, Chandigarh to assess the causes of stress and the ways of coping with stress. Total Forty-three Basic B.Sc. Nursing 1st year students were selected purposely for collection of data.

The questionnaire consisted of two parts of checklist, 1st part is for causes of stress and 2nd part is the coping strategies. Result revealed that 21 (48.83%) students were having the mild stress and 5 (11.62%) were having moderate stress. Academic stress ranked highest among the stresses perceived by the nursing students. Factors of little concern were financial area which was perceived as least stressful. Most of the nursing students, perceived "difficulty in participation in social life because of long college hours," as most stressful followed by "shortage of time for self-study" and "problems in getting log book completed."

Majority of the subject tend to use more of healthy coping strategies as compared to negative or unhealthy ones. "Positive thinking" and listening to music/radio were used.⁵

Clinical sources of stress include working with dying patient, interpersonal conflict with other nurses, insecurity about clinical competence and fear of failure and interpersonal relations with patients, work care given to the patient.

Other potential sources of stress are assignment submission, excessive homework, assessment deadlines, unclear assignments, uncomfortable classrooms and relations with faculty members.⁷ Depression is usually



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related to work and stress these people undergo because of the pressure to perform better, compete with other colleagues and meet tight deadlines.

Icebreakers are most commonly used early in the group process or at early stages of team development, for example, at the first class or at the beginning of a team meeting.

They can also be used with great success whenever the group energy is low and people need re-energizing, or when members join or leave the group. Icebreakers work best when they are fun and engaging, and they draw out information or qualities of the participants that aren't obvious or on the surface, such as hidden talents, attitudes, or previous experiences.⁸

Icebreakers create a positive group atmosphere, help people to relax, break down social barriers, energize and motivate, help people to think outside the box, help people to get to know one another.⁹

Icebreaker should meet the following criteria:

- Minimal time: take an average of 5 to 20 minutes to complete
- Active: require all attendees to participate as active members of the group
- Creative: require members to solve a problem, answer a question, perform mental or physical gymnastics, etc.
- Simple to implement: don't require prior substantive knowledge, or a lot of setup, materials or supplies.¹⁰

Research indicates that adult training needs special attention, particularly at the beginning of training programs.

Adults learn more when they are part of the program and participate with their colleagues from the beginning of the training process.

In 2000, McInnis, James, & Hartley Trotter conducted study of first year students both in Australia and the UK "icebreaking" activities to create a vibrant, inclusive learning environment and develop enthusiasm in order to "hook" students into the university environment and discipline area.

"Icebreaker" to cover activities designed to help students meet each other and transition to their new learning environment when they start at university or when they move to a new learning environment.¹¹

Because the stress experienced during school could negatively impact patients in the future, the need for effective stress management among undergraduate nursing students is apparent.¹²

MATERIALS AND METHODS

Quantitative research approach is considered in order to assess the effect of ice-breaker course in reducing

perceived stress. Keeping the view, the objective of the study, the design of the present study is true experimental.

Total 60 students of 1st year GNM participate in this study.

Among them 30 were in experimental group and 30 were in control group.

Systematic random sampling was used to move the study which was done by odd-even method.

Participants of the study were 1st year General Nursing and midwifery students of VISWAS School & College of Nursing, Bhubaneswar.

All the 60 samples were systematically randomised as even roll numbers to control group and odd roll numbers to experimental group.

They were given the demographic questionnaire and assessed for their socio demographic data.

The eligibility criteria for the study participants were, 1st year GNM students of VISWASS School & College of Nursing. (i) Who was willing to participate. (ii) Who were present in the day of intervention. (iii) Who have no physical or mental disturbances.

The present study was true experimental study and randomized control trial pre-test post-test only design was used in 60 samples in Viswass college of nursing among two different groups i.e. experimental group and control group.

Parallel type randomization was used in 1:1 ratio.

Modified Cohen's perceived stress scale was used for data collection along with 1 month follow up.

The study design was pre-determined and the randomization ratio was 1:1. There were no changes done in the study design or in the eligibility criteria of the participants.

The main setting of the study was Viswass college of nursing and the study participants were 1st year GNM students who were randomly selected.

The module was planned for 10days with 17 items. Onehour intervention was given in two sessions (4days in 1^{st} session and 6 days in second session) with two days interval in between.

Time of giving intervention was 9.30 to 10.30 except 1^{st} day.

On that day course has been started from 10.30am to 11.30 am.

Students were very much enthusiastic and interested about study and researcher did not find any difficulty in applying the module on the participants.

RESULTS

Distribution of the study population of experimental and



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control group according to socio-demographic variables

s by using frequency and percentage.

Table 1: Frequency and percentage distribution of age, sex and type of family of both experimental (n_1) and control (n_2) group. N $(n_1+n_2) = 30+30=60$

Items		Experimen	tal Group(n ₁)	Control Group(n ₂)	
		Frequency	Percentage	Frequency	Percentage
Age in years	18-23	25	83.33%	26	86.67%
	24-29	5	16.67%	4	13.33%
	30-35	0	0%	0	0%
Sex	Male	4	13.33%	4	13.33%
	Female	26	86.67%	26	86.67%
Type of family	Joint	16	53.33%	17	56.67%
	Nuclear	14	46.67%	13	43.33%

Table 2: Frequency and percentage distribution of marks in (+2) in percentage (%), occupation of parents and average monthly income of both experimental (n_1) and control (n_2) group. N $(n_1+n_2) = 30+30=60$.

Items	Experimer	ntal group(n ₁)	Control group(n ₂)		
Rema	Frequency	Percentage	Frequency	Percentage	
	40-50	16	53.33%	19	63.33%
Marks in (+2)in %	51-60	51-60 12		40% 9	
	>60 2		6.67%	2	6.67%
		9	30%	10	33.33%
Occupation of Parants	Private	9	30%	8	26.67%
Occupation of Parents	Business/farmer	12	40%	12	40%
	Unemployed	0	0%	0	0%
	<500-5000	2	6.66%	4	13.33%
Average monthly income in De	5001-10000	20	66.67%	10	33.33%
Average monthly income in Rs.	10001-20000	5	16.67%	13	43.34%
	>20000	3	10%	3	10%

Table 3: Frequency and percentage distribution of number of siblings, religion, head of the family, type of residence of both experimental (n_1) and control (n_2) group. N $(n_1+n_2) = 30+30=60$

Items		Experimen	tal Group(n ₁)	Control Group(n ₂)	
		Frequency	Percentage	Frequency	Percentage
No of Siblings	1	5	16.67%	3	10%
	2	15	50%	12	40%
	3	6	20%	7	23.33%
	>4	4	13.33%	8	26.67%
Religion	Hindu	28	93.34%	29	96.67%
	Muslim	1	3.33%	0	0%
	Christian	1	3.33%	1	3.33%
	Others	0	0%	0	0%
Head of the Family	Grandparents	3	10%	2	6.67%
	Father	25	83.33%	25	83.33%
	Mother	2	6.67%	3	10%
	Guardian	0	0%	0	0%
Type of Residence	In hostel	24	80%	27	90%
	With parents	5	16.67%	2	6.67%
	Others	1	3.33%	1	3.33%



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Item	Control Group		Paired "t" Test	df	n value	Inference
	Mean	SD	raned t rest	ŭ	pvalue	interence
Perceived stress	0.5	9.1	0.3	29	0.7663	Not significant

*p ≤0.05 is significant						
Table 5: Comparison of pre-test and post test score of experimental group n_1 =30						
Items	Experimental Group		naired "t" test	df	n value	Inference
	Mean	SD	paneo i test	u	pvalue	interence
Perceived stress	17.8	7.53	12.97	29	*0.0001	Extremely significant

*p ≤0.05 is significant

Table 1, 2 and 3 shows the demographic data that in both group majority of the samples age were included 18-23yrs, female from Hindu religion, secured 40-50% in higher secondary, parents having government job, family income 10001-20000, two siblings and father as head of the family, residing in hostel and equal number of students are from joint and nuclear family, which signifies that majority of the nursing students come from middle economic status family and majority are them.

Comparison of perceived stress of experimental and control group by using frequency and percentage n_1 =30







Figure 2: Pre-test and post test result of perceived stress of control group using frequency and percentage

Figure 1 shows the percentage distribution depicted that majority of the samples in pre-test experimental group, 10(33%) samples belongs to the criteria of moderate (score36-50) and 20(67%) samples belongs to the criteria of severe stress (score>50) and where as in the post test experimental group, 26 (87%) have mild stress (score 21-35) and 4(13%) have moderate stress (score 36-50).

Figure 2 shows the, pre-test control group reveals that, 12(40%) samples belong to the criteria of moderate (score36-50) and 18(60%) samples belong to the criteria of severe stress (score>50), and where as in post-test control group 14(47%) having moderate stress and 16(53%) having severe stress (score>50). No samples are found in the criteria of mild stress (score21-35) in both pre and post test result.

Effect of Modified Ice-breaker Course in Reducing Stress

Table 4, revealed that there is no significant difference in the pre-test and post test scores of control group regarding the reduction of perceived stress.

The calculated 'p' value = 0.7663 and 't' test value=0.3, by conventional criteria this difference is considered to be not significant. So null hypothesis is accepted.

Table 5 Revealed that the mean of the experimental group = 17.8, SD= 7.53 and at 29 degree of freedom, the 'p' value is less than 0.0001, which is extremely significant. So the research hypothesis is accepted.

Major Findings and Discussion

No direct previous similar studies on similar categories of respondents were found to be compared with the findings of the current study. Although all possible care was taken to increase the internal validity of the study by controlling variables that may affect outcomes, some personal factors such as participants' level of intelligence, personality type were not taken into account when selecting participants and may have had biased impact on the result. Comparison of the perceived stress of control group and experimental group before intervention of icebreaker course represents perceived stress in control group (60% severe & 40% moderate stress) and experimental group (67% severe & 33% moderate stress) among the 1st year students, which is supported to the study conducted by Priyanka Yohan Kale. M. Sc. Psychiatric Nursing, Sinhgad College of Nursing, Pune with 150 BSC nursing 1st year students of selected institute of Pune in the year 2011. Result revealed that 126 (84%) of students were having moderate adjustment problem and 24 (16%) of students were having severe adjustment problem.¹²

Findings of the study revealed the effectiveness of ice breaker course in reducing perceived stress among the nursing students. 't' test analysis of pre-test and post test score of experimental group revealed that there is significant effectiveness of ice breaker course in reducing perceived stress among the nursing students (t=12.97, df=29, p value=.0001).

This is supported to the study conducted by Moaddi M. Almeth-hib, student of Department of Management, College of Business Administration, King Saud University, and Riyadh on 2009 with two experimental groups (each group 18 participant) to find out the impact of ice breaking exercises on trainees' interactions during training, and skill acquisition at the end of training. Mean scores for the experimental groups were 77.4 and 81.1; the mean scores for the other two control groups were 55.7 and 61.3. Standard deviations varied moderately in all groups and ranged from 1.44 to 3.2 in post-tests. The first experimental and control groups (t = 25.4, df = 24, p value =.01); The second experimental and control groups (t = 21, df = 32, p value < .01); both of experimental groups and both of control groups (t = 28.6, df = 56, p value <.01). Compared to the control groups, findings of the study showed that both experimental groups were more interactive, and scored higher in the post-test with significant difference from the control groups. The study concluded that there that ice breaking has a positive impact on trainee interaction and skill acquisition. Results show significant increase in interaction in both experimental groups after intervention of ice-breaker course.¹³

This study is also supported by study conducted by Betty Gill, Lucie Ramjan, Jane Koch, Elizabeth Dlugon, Sharon Andrew and Yenna Salamonson University of Western Sydney on 2009 with 747 students of College of Arts, College of Business, College of Health & Science at the University of Western Sydney, to foster a sense of community and reduce stress among commencing students. Comparisons of students' perception of Orientation by College were 67%, 74%, 81% i.e., Student perception of the orientation within College of Health & Science was significantly more positive (Chi Sq.=16.11; DF=1; p=.003) than for the other two colleges where ice breaker activity has not been used.¹⁴

Socio-demographic data revealed that maximum students in GNM course are female (86.67%) and less number of

students are male (13.33%), age group 18- 23 years (83.33%), coming from middle income family (66.67%) which is supported the study conducted by Leodoro Jabien Labrague Associate Dean, College of Nursing & Health Sciences, Samar State University, Philippines in the year 2013.

Research data were collected utilizing the Perceived Stress Scale (PSS) and Physio-psycho-social Response Scale (PPSRS). Data analysis was performed with the statistical package for the social sciences (SPSS) version 16. 61 students were participated on that study, among them, 49 or 80.33% were female and 12 or 19.67% were male students with age ranges from 17 to 23 years with a mean of 20.1 years. Nearly half of the respondents (40.98%) belong to a family with middle income group.¹⁵

CONCLUSION

On the basis of the findings of the study it can be concluded that there is significant reduction of perceived stress among the students of experimental group after intervention of ice-breaker course, which shows the effect of ice-breaker course in reducing perceived stress among the nursing students.

This study result can be implicated to enhance sense of well-being, and boosts self-image, self-esteem, and selfconfidence, as well as alleviating anxiety and depression of nursing students. It can be used for improving interpersonal relationship among the students and as well as staffs and students in their clinical duty area.

Administrator will be able to organize ice-breaker activity among the professional nurse, medical officers and other health care professionals and students to provide a sound relationship for increasing patient satisfaction and achieving the organizational goal.

REFERENCES

- Henok S, Susan A, Gugsa N. Stress and coping strategies among generic B.Sc. Nursing students of Jimma University, International Journal of Recent Advances in Multidisciplinary Research 02(7), 2015, 511-517.
- Susan A and Nemera G N. Stress and coping strategies among generic B.Sc. Nursing students. International Journal of Recent Advances in Multidisciplinary Research. 2(7), 2015, 0511-0517.
- D'souza L, Thangaraj S. Prevalence of stress levels among first year medical undergraduate students, International Journal of Interdisciplinary and Multidisciplinary Studies (IJIMS), 1(5), 2014, 176-181.
- 4. Najma R, Hafiza J. Prevalence of stress among the Undergraduate students, International journal of endorsing health science research, 1(2), 2013, 73-79.
- 5. Sivan S, Rangasubhe P. Prevalence of stress and its associated factors, Journal of Evolution of Medical and Dental Sciences, 2(48), 2013, 386-394.
- Pulido M M., Augusto J.M. & Lopez Z E. Sources of stress in nursing students: a systematic review of quantitative studies, International Nursing Review, 59, 2012, 15–25.



- Dahlin M, Joneborg N, Runeson B. Stress and depression among medical students: a cross sectional study, Medical education, 39(6), 2005, 594-604.
- 8. Dover K. H. Break the ice in classrooms and meetings, Icebreakers, 3, 2004, 63-76.
- Yohan K P. A Descriptive study: Problems Faced by first Year Basic B.Sc. Nursing Students, Sinhgad e-Journal of Nursing, 1(2), 2011, 2249-3913.
- 10. Kelly M. Warming up the classroom climate, The Icebreaker, 8, 2004, 576-602.
- 11. McInnis C. Researching the First Year Experience. Higher Education Research & Development. 20(2), 2001, 105-113.

- 12. Jacobsons D. Events Pickett Institute Curriculum, Icebreakers for Training, Meetings, and Other, ILJ, 2002.
- Moaddi M. Almeth-hib. The Impact of Ice Breaking Exercises on Trainees' Interactions and Skill Acquisition: An Experimental Study, JKAU: Econ. & Adm, 23(1), 2009, 3-20.
- 14. Gill B, Ramjan L, Koch J, Dlugon E, Andrew S and Salamonson Y. A standardised orientation program for first year undergraduate students in the college of health and science at UWS, A Practice report. The international journal of the first year higher education, 2(1), 2011, 1838-2959.
- 15. Labrague L J. Stress, Stressors, and Stress Responses of Student Nurses in a Government Nursing, School Health Science Journal, 7(4), 2013, 424-435.

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