



# A DESCRIPTIVE STUDY TO ASSESS THE SELFIE ADDICTION AMONG THE COLLEGE STUDENTS IN SELECTED NURSING COLLEGE AT COIMBATORE

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## ABSTRACT

### STATEMENT OF THE PROBLEM

A descriptive study to assess the selfie addiction among the college students in selected nursing college at Coimbatore.

### Objectives

- To assess the level of selfie addiction among nursing college students .
- To evaluate the different domains of selfie addiction among the nursing college students.
- To find out the association between selfie addiction with their selected demographical variables.

### Methods

The study was conducted through quantitative research approach .The design of the study used in the research was non - experimental descriptive research design .The duration of the study was one week ,simple random stratified technique was used and sample size was 45 students. The study population was First year B.Sc (N) , Second year B.Sc(N) , Third year B.Sc(N) nursing students , who are studying in cherraan's college of nursing at Coimbatore . Test was conducted with standardized questionnaires for the samples .

### Result

The findings shows that maximum 30(66.7%) of students had above acute level of selfie addiction , 14(31.3%) of them had chronic level of selfie addiction and 1(2.22%)had borderline level of selfie addiction .

### Conclusion

Thus the study concluded that , the college students are not exposed towards selfie addiction .

**KEY WORDS:** Assess,Selfie addiction,College, Student

## INTRODUCTION

**Selfie** is defined as a self-portrait photograph that a Person has taken of oneself, typically with a smartphone or webcam and then shared via social media.

- Oxford English Dictionary

**Addiction** is a strong inclination to do , use , or indulge in something repeatedly .

- Amanda Ripley

**Selfie addiction** is when a person is almost obsessively taking selfies, multiple times a day,and posting that to whatever it might be - snapchat .

-Dr.Ramani Durvasula

A selfie is self portrait photograph typically taken with a digital camera or camera phone held in the hand or supported by a selfie stick .selfies are often shared on social networking services such as Facebook, Instagram ,and twitter.initially, popular



with young people, selfies gained wider popularity overtime. In recent years, selfie-taking has become an incredibly popular activity often going viral online when sharing selfies via social media domains.

Certain studies have reported selfie taking being linked to psychopathologies such as grandiosity, narcissism, and body dysmorphic disorder. There are various studies at international and national level that stated selfitis, selfie craze and addiction or selfie addiction is obsessive compulsive disorder or new mental disorder of modern era. Defined as an "obsessive taking of selfies, when international media said that it has been classed as a mental disorder by the American psychiatric association.

#### Statement of the study

A descriptive study to assess the selfie addiction among the college students in selected nursing college at Coimbatore.

#### Objectives

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- To find out the association between selfie addiction with their selected demographical variables.

#### Delimitation

Students belongs to 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> year B.SC[N] , who have mobile phone(or)smart phone.

The participants who are studying B.SC(N);.

Students can able to understand read and write English .

Students are willing to participate in the study .

The study was limited to 45 student only .

#### RESEARCH METHODOLOGY

This chapter deals with research design , research approach , the setting of the population , sample size , criteria for sample selection and sampling technique , description of the tool and method of scoring reliability , data collection process , pilot study and data analysis .

#### RESEARCH APPROACH

Research approach used for this study was quantitative approach .

#### RESEARCH DESIGN

Research design is the master plan specifying the methods and procedure for collecting and analyzing the needed information in a research study .

The research design for this study is non-experiment descriptive research design .

#### Setting of the study

The setting is the physical location and condition in which data collection take place .

The study was carried out Cherraan's college of nursing situated in Telungupalayam pirivu , Coimbatore . this college at B.SC [N] and M.SC[N], it is headed by a principal .

#### 3.4 Population

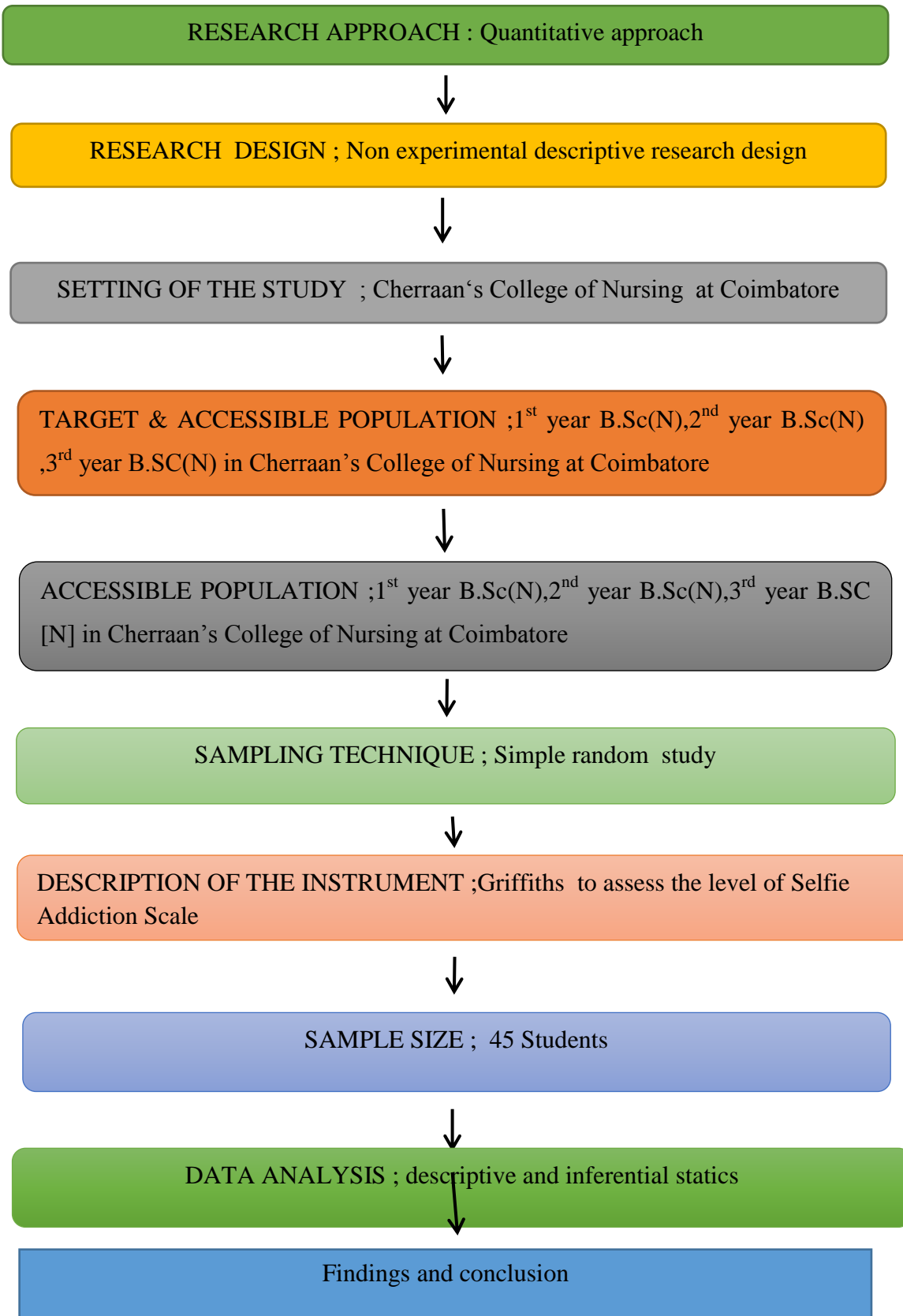
The population for the present study was 45 B.Sc Nursing students.

##### a) Target population

The target population for the study comprised of B.Sc Nursing students studying in cherraan's college of nursing at Coimbatore.



### SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY





### b) Accessible population

The accessible population of the study comprised B.Sc Nursing students studying in Cherraaan's college of nursing at Coimbatore and who were in access at time of data collection.

### Sample

Sample is the sub set of the population of interest or representative set of population .

The sample for study is all the 1<sup>st</sup> , 2<sup>nd</sup> & 3<sup>rd</sup> year B.SC[N] in Cherraaan's College of Nursing , at Coimbatore .

### Sample size

The sample sizes comprised of 45 students studying from 1<sup>st</sup> , 2<sup>nd</sup> & 3<sup>rd</sup> B.Sc(N)in Cherraaan's College of Nursing , at Coimbatore .

### Sample technique

Simple random technique was used in this study .

### Criteria for sample selection

The sample were selected based on the following criteria .

#### 1.Inclusion criteria

Students belongs to 1<sup>st</sup> , 2<sup>nd</sup> , 3<sup>rd</sup> year B.SC[N] , who have mobile phone(or)smart phone.

The participants who are studying B.SC(N);.

Students can able to understand read and write in an English .

Students are willing to participate in the study .

The study was limited to 45 student only .

#### 2.Exclusion criteria

Students who are not willing for participate

Students who are not available at the time of data collection .

Students are suffering from any illness .

Students are all having violent behaviour and also non co-operative person .

### Research tools and technique

Tools were developed by the investigator based on his experience and expert opinion . The tools used for the study is ;

Demographic variables

Griffith's Selfie addiction scale

### Descriptive of the tool

The schedule consist of two parts ; section - A and section - B

#### SECTION -A:(Demographic variable )

It consist of demographic variables selfie addiction students such as age in year, gender, monthly family income, academic year, type of family, area of residence, father's education status , mother's education status, father's occupational status , mother's occupational status, do you like taking selfies, which place of taking selfies, number of selfies taken per day, consequence of taking selfies, other addictive behaviour, do you think taking selfies is good.

#### SECTION - B Standardized questionnaires Griffith 's selfie addiction scale

It is the standardized tool used to find the level of selfie addiction behaviour . The self administered scale consist of 20 items of various aspects such as a environment enhancement , social competition , attention seeking , mood modification , self confidence and subjective conformity .

### SCORING PROCEDURE

That are aggregated to provide the scores ranging from 20 to 100 ;

Borderline - 0 to 33

Acute - 34 to 67

Chronic - 68 to 100



## TEST OF VALIDITY AND RELIABILITY

### Validity of the tool and content

“validity is the degree of which an instrument measure , what is supposed to measure”.

**Polit and beck ,(2008)**

Content validity of the standardized tool was established by sending the standardized questionnaire and content of selfie addiction scale to experts from the various fields such as nursing personnel - 3 . Their opinion and suggestion was taken to modify the tool .

### Reliability :

“Reliability is the consistency with which an instrument measure the target attributes”.

**Polit and beck,( 2008)**

Reliability of the tool was tested by implementing the tool on five college students other than sample . It was done in Cherraaan’s college of nursing at Coimbatore . the reliability was established by questionnaires method . The ‘r’ value is 0.85 .

### Pilot study

A pilot study is a small scale version done in preparation for the main study.

**Polit and Hungler (2004)**

The pilot study was conducted from 10/3/2022 six college students from Cherraaan’s College of Nursing at Coimbatore . Griffith selfie addiction scale used to assess the selfie addiction of nursing students and analyzed by using descriptive and inferential statistics, it was found to be effective .

## Data collection procedure

### A.Ethical consideration

Written permission was obtained from the principal of Cherraaan’s College of Nursing at Coimbatore .

Informed consent was obtained from the 1<sup>st</sup> , 2<sup>nd</sup> & 3<sup>rd</sup> year college students in Cherraaan’s College of Nursing at Coimbatore.

### B.Period of data collection

The data collection was conducted from 10.3.2022 to 15.3.2022. During this period the investigator used to standardized questionnaire used to collected data from the 45 sample by simple random sampling technique.

### C. Stages of data collection

After explaining about the study the formal permission was obtained from the principal of Cherraaan’s College of Nursing at Coimbatore , considering the all ethical principles.45 students those meeting the inclusion criteria and were attending selected colleges were selected using simple random sampling techniques.Purpose of the study was explained to the samples, the confidentiality of their response was assured and their written consent was taken prior to the study .The standard questionnaire (Griffith’s) was administered to the college students to assess the selfie addiction .

## SUMMARY

Standard questionnaire was carried to assess selfie addiction among college students in Cherraaan’s College of Nursing at Coimbatore . Griffith’s selfie addiction scale was validated informational book let titled “ prevention of selfie addiction ” was distributed to the students after administration of the questionnaire . Analysis was planned to be done using descriptive statistics and inferential statistics .

## ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of the collected data from 45 students were Cherraaan’s College of Nursing at Coimbatore . The present study was designed “A descriptive study to assess the selfie addiction among college students in Cherraaan’s College of Nursing at Coimbatore . Analysis is a method of formulating data in such a way that they research question can be answered . Analyzed and interpreted data are based on the objectives of the study . Data presented under following headings .

### Organization of data

#### Section I :

Data on demographic variables of college students .

#### Section II :

a.Data on level of selfie addiction among college students .



b. Data on area wise distribution of mean ,standard deviation , mean percentage of selfie addiction of various domains among the college students .

### SECTION III :

Data on association between the level of selfie addiction among the college students with their selected demographic variables .

#### Section -II

#### A)Data on level of selfie addiction among college students

Table :17 Frequency and percentage distribution of level of selfie addiction among the college students

N=45

S.NO	Level of selfie addiction	Frequency	Percentage%
1	Borderline	1	2.22%
2	Acute	30	66.7%
3	Chronic	14	31.1%

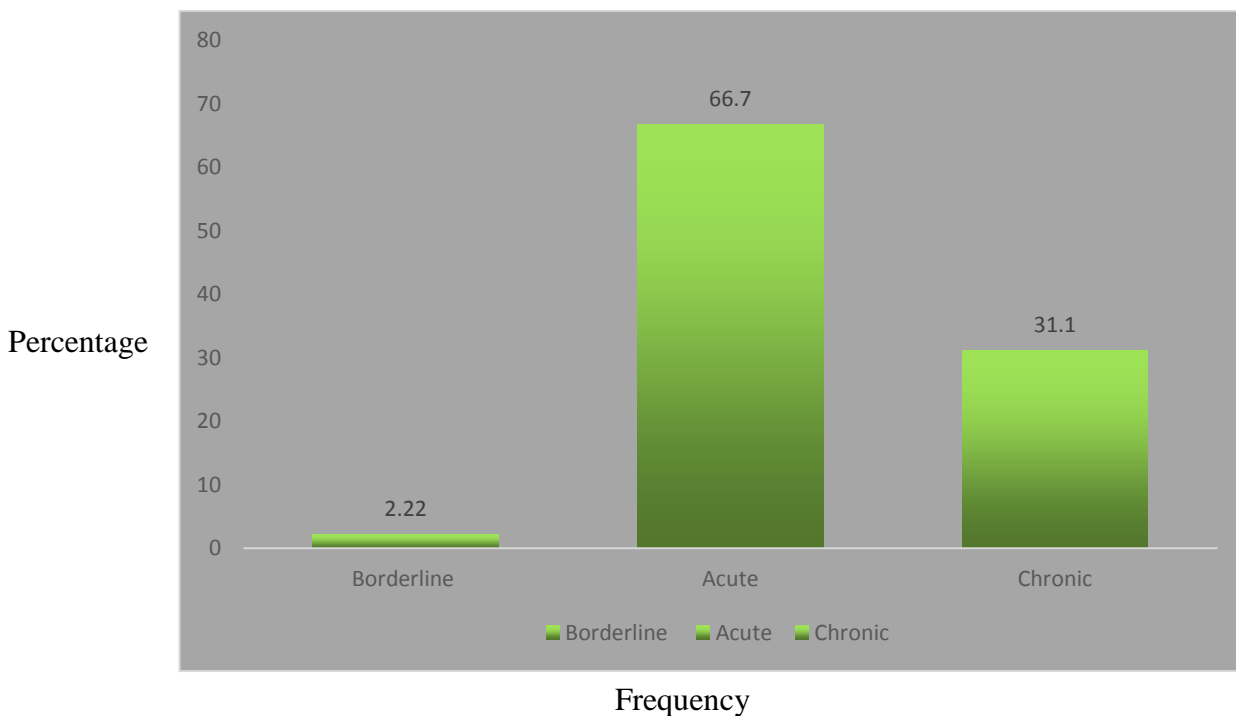


Figure 19: Frequency and percentage distribution of level of selfie addiction among the college students .

The above table - Maximum 30(66.7%) of students had above acute level of selfie addiction , 14(31.3%) of them had chronic level of selfie addiction and 1(2.22%)had borderline level of selfie addiction .



**B. Data on area wise distribution of mean ,standard deviation , mean percentage of selfie addiction of various domains among the college students .**

**Table : 18 Data on area wise distribution of mean , standard deviation , mean percentage of selfie addiction various domains among the college students .**

**N=45**

S.NO	SELFIE ADDICTION	MAX SCORE	MEAN	SD	MEAN%
1	Environmental enhancement	20	15.28	2.988	33.95%
2.	Social competition	20	11.2	3.832	24.88%
3.	Attention seeking	15	7.4	2.954	16.4%
4.	Mood modification	15	9.42	2.585	20.93%
5.	Self confidence	15	9.57	3.232	21.26%
6.	Subjective conformity	15	7.44	2.840	16.53%
	overall	100	60.31	18.431	133.95%

Area wise distribution of mean , standard deviation , and mean percentage of level of selfie addiction shows that the highest mean score (15.28+2.988),which is mean percentage 33.95 of the total score was obtained in the area of environmental enhancement , the mean score(11.2+3.832), which is mean percentage 24.88%of the total score was obtained in the area of social competition , the mean score ( 9.57+3.232), which is mean percentage 21.26% of the total score was obtained in the area of self confidence , the mean score (9.42+2.585), which is mean percentage 20.93% of the total score was obtained in the area of mood modification, the mean score (7.44+2.840), which is mean percentage 16.53% of the total score was obtained in the area of subjective conformity, where us lowest mean score (7.4+2.954), which is mean percentage 16.4% of the total score was obtained in the area of attention seeking .

From the overall mean was (60.31+18.431)which is mean percentage 133.95% of the total score reveals that the selfie addiction students under the study had moderate level of selfie addiction

**SECTION III**

**Data on association between the level of selfie addiction among the college students with their selected demographic variables**

**Table : 19 Frequency, percentage and chi square distribution on level of selfie addiction among the college students with their selected demographic variables .**

**N=45**

S.No	Demographic variables	Level of selfie addiction						Total	Chi-square	df	P value
		Borderline		Acute		Chronic					
		F	%	F	%	F	%				
1.	Age							3	1.307	6	12.59 NS#
	a)16-17 years	0	0	2	6.7	1	7.1				
	b)18-19 years	1	100	16	53.3	9	64.3				
	c)20-21 years	0	0	12	40	4	28.6				
	d)22-23 years	0	0	0	0	0	0	0			
2.	Gender							20	7.26	2	5.991 S*
	a) Male	0	0	13	43.3	7	50				
	b) Female	1	100	17	56.7	7	50	25			
3.	Monthly family income							8	3.67	6	12.592 NS#
	a) Rs.5,000-10,000	0	0	6	20	2	14.3				
	b) Rs.10,001-15,000	0	0	9	30	3	21.4				
	c) Rs.15,001-20,000	1	100	7	23.3	4	28.6				
	d) Above Rs.20,001	0	0	8	26.6	5	35.7				



4.	Academic year a) 1 <sup>st</sup> year b) 2 <sup>nd</sup> year c) 3 <sup>rd</sup> year d) 4 <sup>th</sup> year	1 0 0 0	100 0 0 0	11 8 11 0	36.7 26.7 36.7 0	3 7 4 0	21.4 50 28.6 0	15 15 15 0	4.7	6	12.592 S*
5.	Type of family a) Joint family b) Nuclear family c) Extended family	0 1 0	0 100 0	11 19 0	36.7 63.3 0	2 12 0	14.3 85.7 0	13 32 0	2.72	4	9.488 NS#
6.	Area of residence a) Urban b) Rural	0 1	0 100	13 17	43.3 56.7	7 7	50 50	20 25	0.995	2	5.991 NS#
7.	Father's educational status a) Illiterate b) Primary and secondary education c) Under graduate d) Post graduate	1 0 0 0	100 0 0 0	6 15 8 1	20 50 26.7 3.3	3 7 2 2	21.4 50 14.3 14.3	10 22 14.3 14.3	6.448	6	12.592 S*
8.	Mother's education status a) Illiterate b) Primary and secondary education c) Under graduate d) Post graduate	1 0 0 0	100 0 0 0	6 19 5 0	20 63.3 16.7 0	2 10 2 0	14.3 71.4 14.3 0	9 29 7 0	4.32	6	12.592 S*
9.	Father's occupational status a) Private employment b) Government employment c) Self employment d) Unemployee	0 0 1 0	0 0 100 0	8 5 15 2	26.7 16.7 50 6.6	2 1 9 2	14.3 7.1 64.3 14.3	10 6 25 4	3.02	6	12.592 NS#
10.	Mother's occupational status a) Private employment b) Government employment c) Self employment d) Unemployee	0 0 0 1	0 0 0 100	1 0 5 24	3.3 0 16.7 80	1 0 4 9	7.1 0 28.6 64.3	2 0 9 34	1.59	6	12.592 NS#
11.	Do you like taking selfies? a) Yes b) No	0 1	0 100	25 5	83.3 16.7	12 2	85.7 14.3	37 8	5.004	2	5.991 S*
12.	Which place of taking selfies ? a) Public b) Home c) College	0 0 1	0 0 100	13 10 7	43.3 33.3 23.3	7 4 3	50 28.6 21.4	20 14 11	3.396	4	9.488 NS#
13.	No.of selfies taken										





	/day	1	100	25	83.3	8	57.1	34			
	a) less than 10	0	0	1	3.3	0	0	1	5.413	4	9.488
	b) 11-20	0	0	4	13.3	6	42.9	10			S*
	c) More than 20										
14.	Consequence of taking selfies										
	a) Addiction	0	0	5	16.7	3	21.4	8			
	b) Loss of attention	0	0	5	16.7	1	7.1	6	3.23	6	12.592
	c) Disturbance in mood	0	0	6	20	5	35.7	11			NS#
	d) Wasting time	1	100	14	46.7	5	35.7	20			
15.	Other addictive behaviour										
	a) Internet surfing	0	0	4	13.3	1	7.1	5			
	b) Facebook	0	0	0	0	0	0	0	0.57	6	12.592
	c) Television	0	0	2	6.7	1	7.1	3			NS#
	d) Mobile	1	100	24	80	12	85.7	37			
16.	Do you think taking selfies is good ?										
	a) Yes	0	0	19	63.3	8	57.1	27	1.66	2	5.991
	b) No	1	100	11	36.7	6	42.9	18			NS#

#### Significant \* - Not significant #

Table - 19 shows the frequency, percentage and chi square distribution on level of selfie addiction students with their selected demographic variables and it revealed that there is a significant association found the level of selfie addiction and gender, academic year, father's educational status, mother's educational status, do you like taking selfies, no. of selfies taken per day and no significant association found between the level of selfie addiction and age, monthly family income, type of family, area of residence, father's occupational status, mother's occupational status, which place of taking selfies, consequence of taking selfies, other addictive behaviour, do you think taking selfies is good.

## DISCUSSION

The aim of the study was to assess the selfie addiction among the college students. The research design used for the study was descriptive design. The subjects were assessed by using GRIFFITH selfie addiction scale to assess the selfie addiction.

- To assess the level of selfie addiction among nursing college students.
- To evaluate the different domains of selfie addiction among the nursing college students.
- To find out the association between selfie addiction with their selected demographical variables.

### 1. The first objective is to assess the level of selfie addiction among nursing college students.

Analysis on the level of selfie addiction in college students (Table-19) highlight the maximum 30(66.7%) of students had above acute level of selfie addiction, 14(31.3%) of them had chronic level of selfie addiction and 1(2.22%) had borderline level of selfie addiction.

### 2. The second objectives is to evaluate the different domains of selfie addiction among the nursing college students.

Area wise distribution of mean, standard deviation, and mean percentage of level of selfie addiction shows that the highest mean score (15.28+2.988), which is mean percentage 33.95 of the total score was obtained in the area of environmental enhancement, the mean score (11.2+3.832), which is mean percentage 24.88% of the total score was obtained in the area of social competition, the mean score (9.57+3.232), which is mean percentage 21.26% of the total score was obtained in the area of self confidence, the mean score (9.42+2.585), which is mean percentage 20.93% of the total score was obtained in the area of mood modification, the mean score (7.44+2.840), which is mean percentage 16.53% of the total score was obtained in the area of subjective conformity, where us lowest mean score (7.4+2.954), which is mean percentage 16.4% of the total score was obtained in the area of attention seeking.

From the overall mean was (60.31+18.431) which is mean percentage 133.95% of the total score reveals that the selfie addiction students under the study had moderate level of selfie addiction.

### 3. To find out the association between selfie addiction with their selected demographical variables.

The result shows that age at ( $X^2=1.307$ ), Gender at ( $X^2=7.26$ ), Monthly family income at ( $X^2=3.67$ ), Academic Year at ( $X^2=4.7$ ), Type of family at ( $X^2=2.72$ ), Area of residence at ( $X^2=0.995$ ), Father's education status at ( $X^2=6.448$ ), Mother education status ( $X^2=4.32$ ), Father occupational status at ( $X^2=3.02$ ), Mother occupational status at ( $X^2=1.59$ ), Do you like taking selfies? at ( $X^2=5.004$ ), Which place of taking selfies? at ( $X^2=3.396$ ), No. of selfies taken per day at ( $X^2=5.413$ ), Consequence of



taking selfies at ( $X^2=3.23$ ), Other addictive behaviour at ( $X^2=0.57$ ), Do you think taking selfies is good at ( $X^2=1.66$ ), was significant.

## SUMMARY , IMPLICATION , RECOMMENDATION AND CONCLUSION.

### Nursing implication :

The present study was one of the initial effort to assess the selfie addiction of college students .  
The nurses are teaching to the college students .

### Nursing education :

Nursing education needs to include selfies affect the various domains of college students like emotional , mind/body,relational,social,environmental and tolerability etc in the curriculum of basic nursing education as a part of psychiatric. Nursing educator should encourage the nursing students to Improve knowledge about selfie addiction.

### Nursing research:

The finding of this research motivate the researcher to conduct research in various setting .  
Research can be conducted to find the effectiveness of counselling in terms of better improvement in level of selfie addiction .

### Nursing practice:

It helps the nurses to understand the importance of selfie addiction .

### Nursing administrator:

The study helps the nurse administrator to encourage the nurse to teach about the plan for treating selfie addiction .  
The nurse administrative services should be extended from the institution based service to the community service .  
The study helps the nurse administrator to explore their potential innovative ideas in implementation of appropriate method .

### Recommendation :

The present study recommends the following :  
A similar study can be conducted in different settings with large peoples .  
A descriptive study can be conducted the level of selfie addiction among the college students .

## BIBLIOGRAPHY

### BOOK REFERENCE

1. B.T Basavanthappa; *Nursing Research* ;2<sup>nd</sup> edition published by Jabee; Page No:2.
2. Pearson; *Nursing Research and statistics*; published by Porling Kindersley [India]pvt.Ltd ; Page No;138.
3. F. Gao Smith et.al *Clinical Research*; published by Taylor and Francis;Page No;31.
4. Prem sharma ; “SOCIOLOGY” , 2<sup>nd</sup> edition ; Lotus publishers , philadelphia. Page no;63
5. shama Lohumi & Rakesh Lohumi ; “SOCIOLOGY” , British government , England . page no;21
6. Kothari C.R.(2006) . “Research Methodology methods and techniques” (2<sup>nd</sup> ed ),New Delhi : new age international publishers . Page No:160
7. Bhagavathi . V “ STATISTICS THEORY AND PRACTICE” , 1993; Chand Company Limited , New Delhi, page no;15
8. Sreevani .R “ MENTAL HEALTH AND PSYCHIATRIC NURSING” , 4<sup>th</sup> edition published by Jaypee brothers medical publishers , New Delhi , Page No : 414.
9. Ramkumar Gupta “ MENTAL HEALTH AND PSYCHIATRIC NURSING” , updated edition published by Pee Vee publication , Jalandhar , page no ; 321
10. Dorothy D. Theodore “ A TEXTBOOK OF MENTAL HEALTH AND PSYCHIATRIC NURSING” Published by Elsevier , India , page no; 526

### JOURNAL'S REFERANCE

1. Soumya Sonalika. An exploratory study to access the knowledge regarding selfitis among adolescent in selected colleges of Bhubaneswar, Odisha with a view to develop information pamphel. *International journal of advance in nursing management*.2018;6(1):57-61
2. Janarathanan Balakrishnan. An exploratory study of selfitis and the development of the selfitis Behavior Scale.*international journal of mental health addiction*.2018;16: 722-736.
3. Singh.v, Yadav. A. A study to assess the selfitis behavior and selfie syndrome (level of selfitis) among nursing students.*International journal of medical research and review*.2018;6(08):452-457
4. Kaur Sukhdeep & Maheswari SK. A study to assess the Narcissistic personality and selfi taking behavior among college students. *International journal of medical and health research*.2018;4(5): 56-60.
5. Dutta et al. Attitude towards selfie taking. *Indian journal of psychological Medicine*.2016;38(3):242-245.

### NET REFERENCE

1. [www.Feeldesain.com/the-selfie-syndrome](http://www.Feeldesain.com/the-selfie-syndrome).
2. <https://mymodernmet.com/selfitis-selfie-obsession-disorder/>.
3. [Now Sourcing .com /project/the-selfie syndrome](http://NowSourcing.com/project/the-selfie-syndrome).
4. [Www.Mtatatu.com/en/health/selfie syndrome](http://Www.Mtatatu.com/en/health/selfie-syndrome).



5. *Lifehack. Addiction to selfies; a mental disorder?.Available*  
*<http://www.lifehack.org/articles/communication/addiction-selfies-mental-disorder.html>. Accessed on 1 November 2018.*
6. *<https://www.lifehack.org>*
7. *<https://www.Medindia.net> - selfie obsession*
8. *NewsX. India has the most number of selfie deaths in the world, says study,2016.Available at:<http://WWW.newsx.com/national/46811-india-has-the-most-number-of-selfie-deaths-in-the-world-says-study-a>Accessed on 2 November2018.*
9. *Lev manovich,Alise Tifentale selfiecity:Exploring photography and self-fashioning in social media. Available at*  
*[http://manovich.net/content/04-projects/086-selfiecity-exploring/selfiecity\\_chapter.pdf](http://manovich.net/content/04-projects/086-selfiecity-exploring/selfiecity_chapter.pdf) (Last accessed on November 2018.*
10. *<https://en.m.wikipedia.org>*