Analysis of Public Perceptions of Sexual Harassment On Women in Indonesia Using Chi-Square Method

¹Shintia Puji Utami, ¹Shalwa Oktavrilia Kusuma, ¹Davina Shafa Vanisa, ¹Jennifer Evelyn Chandra, ²Nur Chamidah*

¹Student of Department of Mathematics, Faculty of Science and Technology, Airlangga University Jl. Mulyorejo, Kampus C UNAIR, Surabaya, 60115, Indonesia
²Department of Mathematics, Faculty of Science and Technology, Airlangga University Jl. Mulyorejo, Kampus C UNAIR, Surabaya, 60115, Indonesia
*Corresponding Author : nur-c@fst.unair.ac.id

Abstract: Sexual harassment against women is a phenomenon that haunts Indonesian society. It is important to understand that sexual harassment is not just an individual problem, but a social problem that requires serious attention from all levels of society. Based on the Chi-Square test, it shows that the level of public perception of sexual harassment against women does not depend on how they dress. Meanwhile, the level of public perception of sexual harassment towards women regarding dating shows that there is dependency.

Keywords— Sexual harassment, chi-square, how to dress, dating.

1. INTRODUCTION

Sexual harassment is a form of insulting or looking down on someone because of matters relating to sex, gender or sexual activity between men and women. In sexual harassment there are elements which include: 1. an act that is sexually related, 2. generally the perpetrator is male and the victim is female, 3. the form of the act is physical and non-physical and 4. there is no voluntariness [1]. Sexual harassment does not only take the form of harassment against women but can also occur against men, however, those who most often experience sexual harassment are women [2].

Sexual harassment against women is a phenomenon that haunts Indonesian society. Even though there have been efforts to protect women's rights and regulations that protect them, sexual harassment is still a serious threat. This phenomenon involves inappropriate behavior such as verbal harassment, physical actions, or harassment via electronic media. Women in Indonesia often become victims of sexual harassment in various contexts, including in public places, the workplace, and even within the household.

It is important to understand that sexual harassment is not just an individual problem, but a social problem that requires serious attention from all levels of society. Previous research shows that most victims of sexual harassment are reluctant to report the incident because of stigma and fear of public judgment. Some cases are not even revealed and handled properly by law enforcement officials.

In the context of public transportation, women often face sexual harassment which can be physically and psychologically detrimental. According to the latest survey by the Coalition for Safe Public Spaces (KPRA), throughout 2019, almost 50% of female passengers experienced sexual harassment on public transportation in various cities in Indonesia. A survey involving 38,766 female respondents from 34 provinces with varying ages and levels of education provided information that the most widespread sexual harassment was whistling (5,392 people). KRPA also categorizes 19 types of harassment, including comments about the body, touching and vulgar gestures [3].

The importance of this research lies in increasing public awareness about the serious impact of sexual harassment on women and pressing for changes in attitudes and social norms. By understanding the root of the problem and public perception, educational programs and campaigns can be designed that aim to change mindsets and reduce the rate of sexual harassment. The government, women's protection institutions and the general public can work together to create a safe and supportive environment for women in Indonesia. Through a comprehensive approach, it is hoped that positive changes can be realized in overcoming the problem of sexual harassment against women in Indonesia.

2. LITERATURE REVIEW

2.1 Sexual Harassment

Sexual harassment is any form of behavior with a sexual connotation that is carried out unilaterally and is not desired by the victim [4]. There are various forms of sexual harassment, it can be through words, writing, or actions that have a sexual connotation. The action in question is when there is unilateral coercion by the perpetrator where an incident occurs that the victim does not want and the incident has been initiated by the perpetrator which results in the victim experiencing suffering.

Although not all sexual harassment is experienced by women, men can also experience sexual harassment, but still, the majority of victims are women [2]. At a more specific level, women's clothing is often identified as a potential factor hat triggers sexual harassment, linking the type of clothing to the level of risk of harassment [5].

2.2 Forms of Sexual Harassment

Vol. 7 Issue 12, December - 2023, Pages: 199-209

There are many forms of sexual harassment cases, namely as follows :

- 1. Physical harassment, which is related to attitudes such as wanting to kiss, hug, pinch, stroke, massage the nape of the neck, touch the body, or other physical touch.
- 2. Verbal harassment, which relates to unwanted verbal remarks or comments about a person's private life or body parts or appearance, including sexually charged jokes and comments.
- 3. Non-verbal harassment or signals, namely body language and/or sexual body movements, looking at the body full of lust, gesturing with the fingers, licking the lips, or other things.
- 4. Visual harassment, which can be carried out in the form of showing pornographic material in the form of photos, posters, or harassment via e-mail and other media.
- 5. Psychological or emotional harassment, namely actions that continue to lead to continuous and unwanted requests and advances, unexpected date invitations, insults, or insults of a sexual nature.

Based on the description above, it can be concluded that the forms of sexual harassment are physical harassment, verbal harassment, non-verbal/gesture harassment, visual harassment, and psychological/emotional harassment [6].

2.3 Causes of Sexual Harassment of Women

There are so many things that cause sexual harassment of women such as the following:

How to Dress a.

Women are often blamed for the way they dress. This is associated with the use of tight clothing and not covered making sexual harassment. But the facts show that even people with closed or loose clothing can still be victims of sexual harassment.

b. Dating

Dating is a common thing to do, especially teenagers. Dating activities do not have to be connoted as something negative all the time. This depends on how the individual is in the relationship. There are many cases of accidents before marriage which makes many underage marriages because of dating. However, in fact, not all who are quiet or have never dated will escape sexual harassment.

It can be concluded that, the occurrence of sexual harassment is about awareness from both parties. A man should not do any activity that makes women feel uncomfortable. Then, a woman should also not provoke lust by dressing sexy and avoiding two-on-two activities that have the potential to produce sexual harassment. In addition, it can also be done by avoiding quiet places alone.

2.4 BxK Contingency Table

Contingency tables are a data processing technique to see the relationship between categorical variables in one table. Meanwhile, a two-way contingency table is a table that records observation data involving two variables, for example, X and Y. If the variable X as a row variable consists of k categories and the variable Y as a column variable

consists of s categories, then an N observation data matrix can be formed. which is $k \times s$ with n_{ij} representing the observation frequency data from the cell (i, j) [7].

$$\mathbf{N} = \begin{bmatrix} n_{11} & n_{12} & \dots & n_{1s} \\ n_{21} & n_{22} & \dots & n_{2s} \\ \vdots & \vdots & \ddots & \vdots \\ n_{k1} & n_{k2} & \dots & n_{ks} \end{bmatrix}$$

Matrix N can also be presented in the form of a contingency table like Table 1.

Table 1 : '	Two-Way	Contingency	Table
-------------	---------	-------------	-------

					<u> </u>	
	Y_1	Y_2	Y_3		Y_s	Sum
X_1	<i>n</i> ₁₁	<i>n</i> ₁₂	<i>n</i> ₁₃		n_{1s}	$n_{1.}$
X_2	n_{21}	<i>n</i> ₂₂	n_{23}		n_{2s}	$n_{2.}$
X_3	<i>n</i> ₃₁	<i>n</i> ₃₂	n_{33}		n_{3s}	$n_{3.}$
:	:	:	:	•.	:	
\overline{X}_k	n_{k1}	n_{k2}	n_{k3}		n_{ks}	$n_{k.}$
Sum	$n_{.1}$	n _{.2}	$n_{.3}$		n _{.s}	n_

In this research, we want to analyze whether there is a relationship between public perceptions of the occurrence of sexual harassment against women based on how they dress and the special relationship between men and women (dating). To determine whether there is a relationship between the two categorical variables in the contingency table, a Chi-Square test (χ^2) is carried out with the following formula:

$$\chi^{2} = \sum_{i=1}^{k} \sum_{j=1}^{s} \frac{\left(n_{ij} - e_{ij}\right)^{2}}{e_{ij}}$$
(1)

$$e_{ij} = \frac{(n_{i.})(n_{.j})}{n_{..}}$$
 (2)

With:

 n_{ii} = Observation frequency in the i-th row and j-th column

 e_{ij} = Expected frequency in the ith row and jth column The test criteria used are if $\chi^2_{count} > \chi^2_{\alpha(k-1)(s-1)}$ shows that at the real level α there is a relationship between the two categorical variables in the contingency table [8]. The real level used in this research is $\alpha = 0.05$.

2.5 Validity Test

The validity test is used to measure whether a questionnaire is valid or not. A questionnaire is said to be valid if the questions in the questionnaire can reveal something that the questionnaire will measure [9].

The significance test is carried out by comparing the calculated r-value with the r table for degrees of freedom (df) = n-2, in this case, n is the number of samples and alpha =0.05. If the calculated r is greater than the table and the value is positive, then the item question or indicator is declared valid [9].

$$r = \frac{\sum xy - \frac{(\sum x)(\sum y)}{n}}{\sqrt{(\sum x^2 - \frac{(\sum x)^2}{n})}(\sum y^2 - \frac{(\sum y)^2}{n})}$$
(3)

With:

Vol. 7 Issue 12, December - 2023, Pages: 199-209

r is the Pearson correlation coefficient $\sum xy$ is the number of products of x and y $\sum x^2$ is the sum of the squares of the x values $\sum y^2$ is the sum of the squares of the y values $(\sum x)^2$ is the sum of x values then squared $(\sum y)^2$ is the sum of y values then squared

2.6 Reliability Test

Reliability Test is a tool for measuring a questionnaire which is an indicator of a variable or construct. A questionnaire is said to be reliable or reliable if a person's answers to statements are consistent or stable over time [9]. Reliability measurements are carried out using one shot or just one measurement, and then the results are compared with other questions or measure the correlation between question answers. SPSS provides facilities for measuring reliability with the Cronbach Alpha (α) statistical test [9]. A construct or variable is said to be reliable if it provides a Cronbach Alpha value > 0.6 [9]. The formula used to calculate Cronbach's Alpha is as follows:

$$r_x = A = \left(\frac{n}{n-1}\right) \left(1 - \frac{\sum \sigma t^2}{\sigma t^2}\right) \tag{4}$$

With:

 r_x is the calculated reliability

n is the number of statement items

 $\sum \sigma t^2$ is the total variance of the scores for each item σt^2 is the total variance

2.7 Slovin's Formula

Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics that are determined by researchers to be studied and then conclusions drawn. The sample is part of the number and characteristics of the population [10]. If the population is large, and it is impossible for researchers to study everything in the population, for example, due to limited funds, energy, and time, then researchers can use samples taken from that population. Determining the sample size can be determined using the Slovin formula [11], which is as follows:

$$n = \frac{N}{1 + (Ne^2)} \tag{5}$$

With:

n is the number of samples

N is the population number

e is the error level which is generally used as 1%, 5%, and 10% which is determined by the researcher.

2.8 Cramer's V Contingency Coefficient

Cramer's V contingency coefficient is used to measure the association between two nominal scale variables in the bxk contingency table. Where b and k are more than 2 and are asymmetric ($b\neq k$). The calculated statistics for the Cramers'V contingency coefficient test are as follows.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}}$$
(6)

With:

V = Cramer's V contingency coefficient value

 $\chi^2 = Chi - Square Value$

n = Total observations

k = Number of contingency table rows

s = Number of contingency table columns

3. MATERIAL AND METHOD

3.1 Research Type and Research Data

This research uses a quantitative approach and utilizes questionnaires as the main tool in data collection to obtain the necessary information and data. The data used in this research is primary data collected from respondents from the Indonesian population and collected online through a questionnaire. The requirement to be a respondent to this survey is an Indonesian citizen. The sampling method used in this research is purposive random sampling where the researcher determines certain criteria so that the selected sample is based on the variable of gender, residential areas, age group, last level of education, and profession

3.2 Research Variables

In this study, there are 5 variables analyzed for their relationship with public perception regarding cases of sexual harassment experienced by women resulting from the way they dress and special relationships between men and women (dating). The variables used are gender, residential areas, age group, last level of education, and profession are presented in Table 2.

Table 2 : Research Variables				
Research	Operational	Data Scale		
Variables	Definition			
Gender	Biological	Nominal :		
	characteristics	1.Male		
	possessed by	2.Female		
	respondents			
Age	Respondents life span	Ordinal :		
	from birth to the time	1.Adolescent		
	they filled out our	(12-25 years)		
	questionnaire which	2.Adult (26-45		
	was calculated in years	years)		
	-	3.Elderly (46-65		
		years)		
Residential	Residence by	Nominal :		
Areas	respondents	1.Western part		
	_	of Indonesia		
		2.Central part of		
		Indonesia		
		3.Eastern part		
		of Indonesia		

Last LevelLast level of educationNominal :ofcompletedbythe1.BasicEducationEducation2.MiddleEducation3.HigherEducation8.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.HigherEducation1.Higher
of completed by the 1.Basic Education respondents Education 2.Middle Education Beducation 3.Higher Education Education Profession Work being carried out
Education respondents Education 2.Middle Education Beducation 3.Higher Education Education Profession Work being carried out
Profession Work being carried out Nominal :
Profession Work being carried out Nominal :
Profession Work being carried out Nominal :
Education Profession Work being carried out Nominal :
Profession Work being carried out Nominal :
by the respondents 1. Students
2.Civil Servants
/ Private
Employees
3.Entrepreneur /
Self-employed
4.Housewife /
Not Working
Public Perception is a process Nominal :
Perception by which a person 1.Agree
selects, organizes, and 2.Disagree
interprets incoming
information to create a
picture of a meaningful
whole

3.3 Step of Analysis

The data analysis stage is an important stage, wher data is collected using various data collection techniques (observation, interviews, questionnaires, and other data collection techniques), processed, and presented to help researchers answer the problems being researched. The procedure in this research is as follows :

- 1. Researchers created a questionnaire in the form of a google form which contained questions related to the research carried out.
- 2. Distributing questionnaires to the community by asking for prior approval for filling out the questionnaire.
- 3. Record the data form the questionnaire so that data processing and analysis can be carried out.
- 4. Carry out processing and analysis of the data that has been obtained.
- 5. Draw conclusions or generalizations.

Then, the steps in the analysis based on the data from this research are as follows :

- 1. Test validity and reliability based on answers from respondents.
- 2. Carry out descriptive statistical interpretation of the data obtained.
- 3. Creates a contingency table in the form of rows and coloumns for each variable being anlyzed.

- 4. Calculates the total number of row values.
- 5. Calculates the total number of column values.
- 6. Calculate the expected frequency value for each cell.
- 7. Calculating the chi-square value.
- 8. Compare the calculated chi-square value with the chi-square table $\chi^2_{\alpha(k-1)(s-1)}$.
- 9. Make decisions based on the following criteria :
 - a. Failed to reject H_0 if value $X^2_{count} < \chi^2_{\alpha(k-1)(s-1)}$
 - b. Reject H_0 if value $\chi^2_{count} > \chi^2_{\alpha(k-1)(s-1)}$
- 10. Calculate the value the cramers'v contingency coefficient.
- 11. Interpretation research results and analysis.

4 RESULTS AND DISCUSSION

The data used came from 160 respondents through questionnaire with non-probability sampling technique. The variable involved in this study is gender which is categorized into two, namely male and female. Then, the variable area of residence is divided into 3, namely the western, central, and eastern parts of Indonesia. Furthermore, related age groups are divided into adolescents, adults, and the elderly. The last education level variable is divided into three, namely primary, secondary, higher education. As well as professions that are divided into Housewives / non-working, Students / students, Civil Servants / Private employees, and Entrepreneurs / entrepreneurs that related to public perception regarding how to dress and date with acts of sexual harassment of women in Indonesia.

4.1 Descriptive Statistics





Based on Fig. 1, the count of respondents in this study was 104 respondents were agree with statement if how to Dress affect sexual harassment in women. Meanwhile, the count of respondents in this study was 56 respondents were disagree with statement if how to dress affect sexual harassment in women.



Fig. 2. Count of Respondent's Perceptions of Dating AAffect Sexual Harassment in Women

Based on Fig. 2, the count of respondents in this study was 112 respondents were agree with statement if dating affect sexual harassment in women. Meanwhile, the count of respondents in this study was 48 respondents were disagree with statement if dating affect sexual harassment in women.

PERCENTAGE OF RESPONDENTS BY GENDER



Fig. 3. Percentage of Respondents by Gender Based on Fig. 3, the percentage of respondents in this

Based on Fig. 3, the percentage of respondents in this study was 34% or as many as 54 respondents were female. Meanwhile, the percentage of respondents in this study was 66% or as many as 106 male respondents.





Based on Fig. 4, the percentage of respondents in this study was 15% or as many as 24 respondents were live in Bali and Nusa Tenggara. Meanwhile, the percentage of respondents was 15% or as many as 24 respondents were live in Java. The percentage of respondents in this study was 12% or as many as 20 respondents were live in Kalimantan. Next, percentage of respondents in this study was 28% or as many as 45 respondents were live in Papua. Then, the percentage of respondents in this study was 25 respondents were live in Sulawesi. Last, the percentage of respondents in this study was 14% or as many as 22 respondents were live in Sumatera.





Fig. 5. Percentage of Respondents by Last Level of Education

Based on Fig. 5, the percentage of respondents in this study was 18% or as many as 29 respondents were studied last at junior high school level. Meanwhile, the percentage of male respondents in this study was 31% or as many as 50 respondents were studied last at senior high school level. Next, the percentage of respondents in this study was 14% or as many as 23 respondents were studied last at diploma level. Then, the percentage of respondents in this study was 25% or as many as 39 respondents were studied last at bachelor level. Last, the percentage of respondents in this study was 12% or as many as 19 respondents were studied last at master level.





Fig. 6. Percentage of Respondents by Age Group Based on Fig. 6, the percentage of respondents in this study was 27% or as many as 44 respondents were teenagers. Meanwhile, the percentage of male respondents in this study was 52% or as many as 83 of respondents were mature age. Last, the percentage of male respondents in this study was 21% or as many as 33 of respondents were elderly.



Fig. 7. Percentage of Respondents by Profession

Based on Fig. 7, the percentage of respondents in this study was 19% or as many as 30 respondents work as civil servant / private employee. Meanwhile, the percentage of respondents in this study was 12% or as many as 20 respondents work as entrepreneur / self-employed. Then, the percentage of respondents in this study was 52% or as many as 83 respondents work as housewife / unemployed. Last, the percentage of respondents in this study was 17% or as many as 27 respondents work as student.

4.2 Validity and Reliability Test For Questionnaire

In the validity test, the components of the questionnaire analyzed using the Spearman test. If the p-value is less than alpha (significance level) by 5%, then the question component is valid to be used as a question in the questionnaire. The following is a table of validity test results:

Table	3:	Validity	Test	Results
abic	υ.	vanuny	rest	Results

Question	P-	Results
	Value	
How do you think that the way you	0,000	Valid
dress aAffects sexual harassment of		
women?		
How do you think dating aAffects	0.000	Valid
women's sexual harassment?		

Furthermore, the reliability test results for each answer to each question are shown in Table 4 below:

 Table 4: Reliability Test Results

Category	Cronbach's Alpha Value	Results
How do you think that the way you dress aAffects sexual harassment of women?	0,943	Reliable

Based on table 4, Cronbach's Alpha value for data on Respondents' Opinions Regarding Sexual Harassment in Women resulted in a Cronbach Alpha value of 0.943 which is located between 0.8 - 1.0, which means that the data has excellent reliability.

4.3 Chi-square Independence Analysis

4.3.1 Public Perseption About How to Dress Affect Sexual Harassment in Women

How to dress and Gender

Total

		Public		Total
		Perception		
		Agree	Disagree	
Gender	Male	72	34	106
	Female	32	22	54

104

56

160

Table 5: Contingency Table for How to dress and Gender

Hypothesis :

 H_0 : There is no relationship between the how to dress and gender with sexual harassment in women.

 H_1 : There is a relationship between the how to dress and gender with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha;\nu}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;1} = 3.841$

Here for the result :

 Table 6: The results of the Pearson Chi-square test of

 Indonesian People Perception of the How to Dress Affect

 Sexual Harassment in Women With Gender

Chi-square test	P-Value
1.181	0.277

From (Table 6) we get a decision to reject the H_1 because the Pearson Chi-Square value (1.181) is less then $\chi^2_{\alpha;1}$ and the P-Value (0.277) is more then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is not rejected or H_0 accepted, thus, there is no relationship between the how to dress and gender with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.085914$$

It can be seen that the coefficient cramer's V value is 0.085914, which means that the level of public perception relationship based on gender is categorized as quite weak.

How to dress and Residential Areas

 Table 7: Contingency Table for How to dress and Residential Areas

International Journal of Academic and Applied Research (IJAAR) ISSN: 2643-9603

Vol. 7 Issue 12, December - 2023, Pages: 199-209

		P	ublic	Total
		Perc	ception	
		Agree	Disagree	
Residential	Western	54	12	66
Areas	Indonesia			
	Central	35	14	49
Indonesia				
	Region			
	Eastern	15	30	45
	Indonesia			
Te	otal	104	56	160

Hypothesis :

 H_0 : There is no relationship between the how to dress and residential areas with sexual harassment in women.

 H_1 : There is a relationship between the how to dress and residential areas with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha;\nu}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;2} = 5.992$

Here for the result :

Table 8: The results of the Pearson Chi-square test of

 Indonesian People Perception of the How to Dress Affect

 Sexual Harassment in Women With Residential Areas

Chi-square test	P-Value
28.931	0.000

From (Table 8) we get a decision to reject the H_1 because the Pearson Chi-Square value (28.931) is more then $\chi^2_{\alpha;2}$ and the P-Value (0.000) is less then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is rejected, thus, there is a relationship between the how to dress and residential areas with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.425228$$

It can be seen that the coefficient cramer's V value is 0.425228, which means that the level of public perception relationship based on residetial areas is categorized as quite strong.

How to dress and Last Level of Education

 Table 9: Contingency Table for How to dress and Last

 Level of Education

Public	Total
Perception	

		Agree	Disagree	
Last Level of	Basic	19	10	29
Education	Education			
	Middle	30	20	50
	Education			
	Higher	55	26	81
	Education			
Total		104	56	160

Hypothesis :

 H_0 : There is no relationship between the how to dress and last level of education with sexual harassment in women.

 H_1 : There is a relationship between the how to dress and last level of education with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha;\nu}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;2} = 5.992$

Here for the result :

Table 10: The results of the Pearson Chi-square test of Indonesian People Perception of the How to Dress Affect Sexual Harassment in Women With Last Level of Education

Chi-square test	P-Value
0.853	0.653

From (Table 10) we get a decision to reject the H_1 because the Pearson Chi-Square value (0.853) is less then $\chi^2_{\alpha;2}$ and the P-Value (0.653) is more then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is not rejected or H_0 accepted, thus, there is no relationship between the how to dress and last level of education with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.073015$$

It can be seen that the coefficient cramer's V value is 0.073015, which means that the level of public perception relationship based on last level of education is categorized as quite weak.

How to dress and Age Group

 Table 11: Contingency Table for How to dress and Age

Gloup					
		Pi	ublic	Total	
		Perc	ception		
		Agree	Disagree		
Age Group	Adolescent	12	32	44	

	Adult	69	14	83
	Elderly	23	10	33
Total		104	56	160

Hypothesis :

 H_0 : There is no relationship between the how to dress and age group with sexual harassment in women.

 H_1 : There is a relationship between the how to dress and age group with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha; \nu}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;1} = 3.841$

Here for the result :

Table 12: The results of the Pearson Chi-square test ofIndonesian People Perception of the How to Dress AffectSexual Harassment in Women With Age Group

Chi-square te	st P-Value				
39.844	0.000				

From (Table 12) we get a decision to reject the H_1 because the Pearson Chi-Square value (39.844) is more then $\chi^2_{\alpha;2}$ and the P-Value (0.000) is less then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is rejected, thus, there is a relationship between the how to dress and age group with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.499024$$

It can be seen that the coefficient cramer's V value is 0.499024, which means that the level of public perception relationship based on age group is categorized as quite strong.

How to dress and Profession

 Table 13: Contingency Table for How to dress and Profession

		Public Perception		Total
		Agree	Disagree	
Profession	Student	12	15	27
	Civil servant /	18	12	30
	Private			
	employee			
	Entrepreneur /	10	10	20
	Self-employed			

Housewives / Unemployed	64	19	83
Total	104	56	160

Hypothesis :

 H_0 : There is no relationship between the how to dress and profession with sexual harassment in women.

 H_1 : There is a relationship between the how to dress and profession with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha; \nu}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;3} = 7.815$

Here for the result :

Table 14: The results of the Pearson Chi-square test ofIndonesian People Perception of the How to Dress AffectSexual Harassment in Women With Profession

Chi-square test	P-Value
12.671	0.005

From (Table 14) we get a decision to reject the H_1 because the Pearson Chi-Square value (12.671) is more then $\chi^2_{\alpha;3}$ and the P-Value (0.005) is less then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is rejected, thus, there is a relationship between the how to dress and profession with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.425228$$

It can be seen that the coefficient cramer's V value is 0.425228, which means that the level of public perception relationship based on profession is categorized as quite strong.

4.3.2 Public Perseption About Dating Affect Sexual Harassment in Women

Dating and Gender

		Public		Total
		Perception		
		Agree	Disagree	
Gender Male		86	20	106
Female		26	28	54
Total		112	48	160

Hypothesis :

International Journal of Academic and Applied Research (IJAAR) ISSN: 2643-9603

Vol. 7 Issue 12, December - 2023, Pages: 199-209

 H_0 : There is no relationship between the dating and gender with sexual harassment in women.

 H_1 : There is a relationship between the dating and gender with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha; \nu}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;1} = 3.841$

Here for the result :

Table 16: The results of the Pearson Chi-square test of

 Indonesian People Perception of the Dating Affect Sexual

 Harassment in Women With Gender

a	ar assiment in women with Gen				
	Chi-square test	P-Value			
	18.534	0.000			

From (Table 16) we get a decision to reject the H_1 because the Pearson Chi-Square value (18.534) is more then $\chi^2_{\alpha,1}$ and the P-Value (0.000) is less then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is rejected, thus, there is a relationship between the dating and gender with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.340347$$

It can be seen that the coefficient cramer's V value is 0.340347, which means that the level of public perception relationship based on gender is categorized as quite strong.

Dating and Residential Areas

 Table 17: Contingency Table for Dating and Residential

 Areas

Alcas				
Publ		ublic	Total	
			Perception	
		Agree	Disagree	
Residential	Western	52	12	66
Areas	Indonesia			
	Central	36	15	49
	Indonesia			
	Region			
	Eastern	24	21	45
	Indonesia			
Te	otal	112	48	160

Hypothesis :

 H_0 : There is no relationship between the dating and residential areas with sexual harassment in women.

 H_1 : There is a relationship between the dating and residential areas with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha;\nu}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;2} = 5.992$

Here for the result :

Table 18: The results of the Pearson Chi-square test ofIndonesian People Perception of the Dating Affect SexualHarassment in Women With Residential Areas

Chi-square test	P-Value	
9.818	0.000	

From (Table 18) we get a decision to reject the H_1 because the Pearson Chi-Square value (9.818) is more then $\chi^2_{\alpha;2}$ and the P-Value (0.000) is less then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is rejected, thus, there is a relationship between the dating and residential areas with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.247715$$

It can be seen that the coefficient cramer's V value is 0.247715, which means that the level of public perception relationship based on residential areas is categorized as quite strong.

Dating and Last Level of Education

 Table 19: Contingency Table for Dating and Last Level of Education

		P	ublic	Total
		Perc	ception	
		Agree	Disagree	
Last Level of	Basic	18	11	29
Education	Education			
	Middle	28	22	50
	Education			
	Higher	66	15	81
	Education			
Tot	al	112	48	160

Hypothesis :

 H_0 : There is no relationship between the dating and last level of education with sexual harassment in women.

 H_1 : There is a relationship between the dating and last level of education with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha; v}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;2} = 5.992$

Here for the result :

Table 20: The results of the Pearson Chi-square test of

 Indonesian People Perception of the Dating Affect Sexual

 Harassment in Women With Last Level of Education

Chi-square test	P-Value
10.620	0.005

From (Table 20) we get a decision to reject the H_1 because the Pearson Chi-Square value (10.620) is more then $\chi^2_{\alpha;2}$ and the P-Value (0.005) is less then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is rejected, thus, there is a relationship between the dating and last level of education with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.257633$$

It can be seen that the coefficient cramer's V value is 0.257633, which means that the level of public perception relationship based on last level of education is categorized as quite strong.

Dating and Age Group

Table 21: Contingency Table for Dating and Age Group

		Public		Total
		Perception		
		Agree	Disagree	
Age Group	Adolescent	18	26	44
	Adult	71	12	83
	Elderly	23	10	33
To	otal	112	48	160

Hypothesis :

 H_0 : There is no relationship between the dating and age group with sexual harassment in women.

 H_1 : There is a relationship between the dating and age group with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha;\nu}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;2} = 5.992$

Here for the result :

Table 22: The results of the Pearson Chi-square test ofIndonesian People Perception of the Dating Affect SexualHarassment in Women With Age Group

	0
Chi-square test	P-Value
27.280	0.000

From (Table 22) we get a decision to reject the H_1 because the Pearson Chi-Square value (27.280) is more then $\chi^2_{\alpha;2}$ and the P-Value (0.000) is less then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is rejected, thus, there is a relationship between the dating and age group with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.412916$$

It can be seen that the coefficient cramer's V value is 0.412916, which means that the level of public perception relationship based on age group is categorized as quite strong.

Dating and Profession

		P	ublic	Total
		Perception		
		Agree	Disagree	
Profession	Student	16	11	27
	Civil servant /	20	10	30
	Private			
	employee			
	Entrepreneur /	8	12	20
	Self-employed			
	Housewives /	68	15	83
	Unemployed			
	Total	112	48	160

 Table 23: Contingency Table for Dating and Profession

Hypothesis :

 H_0 : There is no relationship between the dating and profession with sexual harassment in women.

 H_1 : There is a relationship between the dating and profession with sexual harassment in women.

By using $\alpha = 5\%$, the critical area is reject H_0 if $\chi^2 > \chi^2_{\alpha; \nu}$ or P-Value $< \alpha$.

In chi-square tabel we get that $\chi^2_{\alpha;3} = 7.815$

Here for the result :

International Journal of Academic and Applied Research (IJAAR) ISSN: 2643-9603

Vol. 7 Issue 12, December - 2023, Pages: 199-209

 Table 24: The results of the Pearson Chi-square test of

 Indonesian People Perception of the Dating Affect Sexual

 Harassment in Women With Profession

Chi-square test	P-Value
15.836	0.001

From (Table 24) we get a decision to reject the H_1 because the Pearson Chi-Square value (15.836) is more then $\chi^2_{\alpha;3}$ and the P-Value (0.001) is less then α (0.05). from the calculation, the chi-square value meets the critical area therefore H_0 is rejected, thus, there is a relationship between the dating and profession with sexual harassment in women.

We can calculate the association measure through the Coefficient cramer's V.

$$V = \sqrt{\frac{\chi^2}{n.\min(b-1,k-1)}} = 0.314603$$

It can be seen that the coefficient cramer's V value is 0.314603, which means that the level of public perception relationship based on profession is categorized as quite strong.

5 CONCLUSIONS

Based on the results of the research that has been done, several things can be concluded as follows:

- 1. Based on validity and reliability tests, the data on Analysis of Public Perception of Sexual Harassment of Women in Indonesia are questions in the questionnaire that are used valid and reliable.
- 2. Based on the Chi-square freedom test with a significance level of $\alpha(5\%)$ shows that it does not depend on the level of public perception of sexual harassment on women regarding how to dress with gender and last level of education. Meanwhile, there is a dependence on the level of public perception of sexual harassment on women on how to dress with their area of residence, age group, and profession.
- 3. Based on the Chi-square freedom test with a significance level of $\alpha(5\%)$, it shows that there is a dependence on the level of public perception of sexual harassment on women regarding dating by gender, residence areas, age group, last level of education, and profession.

6 ACKNOWLEDGEMENT

The author would like to thank Mrs. Dr. Nur Chamidah, M.Si. as a lecturer in the Categorical Data Analysis course who has provided guidance and support in the preparation of this scientific article.

7 REFERENCES

- [1] Kinasih, S. E. (2007). Perlindungan dan Penegakan HAM terhadap Pelecehan Seksual. Masyarakat, Kebudayaan Dan Politik, 20(4), 307–312.
- [2] Sumera, M. (2013). Perbuatan Kekerasan/Pelecehan Seksual Terhadap Perempuan. Lex et Societatis, 1(2), 39-49.
- [3] BBC News Indonesia. (2023, November 15). Ribuan perempuan dilecehkan di transportasi umum. Tersedia Pada <u>https://www.bbc.com/indonesia/indonesia-50570430.</u>
- [4] Winarsunu, T. (2008). Psikologi keselamatan kerja. Malang: UMM Press. www. Gunadarma.ac.id>artikel_10501172 (diakses tanggal 15 November 2023)
- [5] Lennon, S. J., Adomaitis, A. D., Koo, J., & Johnson, K. K. P. (2017). Dress and sex: a review of empirical research involving human participants and published in refereed journals. Fashion and Textiles, 4(1). doi:10.1186/s40691-017-0101-5.
- [6] Permana, T.A. (2014). Hubungan antara kontrol diri dengan perilaku delinkuen pada remaja SMA N 1 Polanharjo. skripsi. Surakarta : UMS.
- [7] Agresti, A. (2007). Categorical Data Analysis Second Edition. New Jersey: John Willey & Sons.
- [8] Kusuma, A. W. A., Srinadi, I. G. A. M., Sari, K. (2016). Aplikasi Analisis Korespondensi untuk Melihat Karakteristik Usaha Pariwisata di Provinsi Bali. E-Jurnal Matematika, Vol. 5 (2): 76 - 81.
- [9] Ghozali, I. (2012). *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. Yogyakarta: Universitas Diponegoro.
- [10] Sugiyono. (2011). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Afabeta.
- [11] Noor, & Juliansyah. (2012). *Metodologi Penelitian*. Jakarta: Kencana Prenada Media Grup.