

Effects of Explicit Music Lyrics to the Cebu Technological University – Danao Campus Students

Delfa G. Castilla; Jayson G. Bayogo; Keizyl Marie T. Gaco; Sofia P. Gonzales; John Paul Guinocor; Shanea Leigh J. Olivar; Elyn M. Pepito; Jole Mae C. Yuri; Jole Rose C. Yuri

Department of Industrial Engineering, Cebu Technological University. Danao City, Philippines

E-mail: delfa.castilla@ctu.edu.ph

http://dx.doi.org/10.47814/ijssrr.v6i3.1104

Abstract

Music has been one of the sources of entertainment for people. It has created a significant impact on every individual who listens to it. Over the years, the explicitness of the music lyric content has become more evident, creating havoc in the community. The majority of the student respondents in Cebu Technological University Danao Campus have stated their fondness for listening to lyrical music; thus, the researchers conducted a study to find out if the explicitness of the music lyrics affects their behavior, sexual attitude, personality, and emotion by assessing their perceived level of agreement of the effects of explicit music lyrics. This research study used a descriptive quantitative approach using a survey research method. The survey questionnaires were administered to 376 participants, which is the sample mean of the whole college to be logically assumed as the representative of the entire population. The data gathered were thoroughly analyzed through the use of weighted mean, percentage frequency, One-way Analysis of Variance, and Spearman's Rank Correlation Coefficient. The study's findings show that respondents remember songs by their lyrics, understand the song's lyrical content, agree with the lyrics presented in their favorite song/s, and are exposed to explicit lyrics. Respondents also agree that explicit music lyrics affect personal factors such as behavior, sexual attitude, personality, and emotions. A person's perceived level of effect of explicit music lyrics is significantly correlated to age, status as a music lover, and level of interest in music and not the gender of a person. Through these findings, the researchers developed recommendations for the awareness of the potential effects explicit music lyrics might bring, and to lessen the increasing public sexualized and unfiltered music for its impact on consumers is of great importance.

Keywords: Song; Vulgar Words; Exposure to Explicit Lyrics; Risk on Behavior; Influence of Explicit Lyrics

1. Introduction

Music is acknowledged as an essential component of human life and has played a significant role throughout human history. It is a luxury that many people enjoy listening to, depending on their mood or genre preference. People love to listen to music so much that it has become an ingrained habit. When we



are sad, anxious, or stressed, we can use music as therapy. On the other hand, we listen to music because it makes us happy, motivated, and excited, for it is known to have a special connection to our emotions. Music can likewise provide an antidote to some of the most intense emotions we experience throughout the day and can be used to manage and relieve stress effectively. Mehr et al. (2019) found out that people of all ages come from different cultures around the world and use music daily, making it one of the universal forms of expression and communication.

According to Matija (2022), Nielsen's 2018 Music 360 report stated that the global share of people who listen to music is between 90 and 93%. In 2016, it was reported that music remains the preferred media outlet of teens, with 66% reporting listening to music daily (Rideout, 2017). Previous research has also predicted that adolescents and young adults will listen to music for two to four hours per day (Baclaan et al., 2020).

Popular music research has looked into various topics, including how it affects schoolwork, social interactions, mood, and, most notably, behavior. Studies have also shown that music has a powerful influence on humans, with both individual and collective benefits. According to Steil (2018), over the past forty years, music lyrics have seen a significant transformation. Since music has evolved dramatically over the last few decades, the impact of popular music on the emotions and behavior of young people has become a significant concern for both the general public and government policymakers. Music has become more explicit in a way that songwriters tend to forget that there are young listeners who can listen to songs with explicit lyrics. It has become more explicit as a method of gaining popularity, like popular song lyrics, for instance, that were debated by many as studies have shown that it explicitly uses references to sex, violence, suicide, vulgar words, and substance use. Numerous artists are well-known by many, including Post Malone and Nicki Minaj, who reference drugs, sex, and violence in their music.

In a study by Wright and Centeno (2018), more than one-third of popular song lyrics have explicit sexual content, with two-thirds featuring degrading content. Notably, music genres such as rock, heavy metal, rap, and new emerging genres such as reggaeton have been known to center on themes including sexual promiscuity, suicide, murder, and substance abuse. Additionally, Wright and Rubin (2017) found that genres such as pop, dance, and rock music contain more sexual content than other music genres. Studies have also long maintained that exposure to violent song lyrics is associated with mental and behavioral disorders, including aggression, substance addiction, risky sexual practices, and suicide Pratt (2022). Listening to this style of music exposes young individuals to profanity, which shapes their language and habits. Many young children who listen to these types of songs believe that using this type of language is a good thing and cool, and they want to show off to other people by using it, whether they know it or not understand what they are saying. A study by Rasmussen & Densley (2017) has also shown that country music lyrics have also become more negative, antisocial, and sexual, just like popular music lyrics, which focus more on gender roles, misogyny, and violence.

Music can be found almost anywhere and is easily accessible via radio, various records, the Internet, and new technologies, allowing adolescents to listen to it in various locations and situations, alone or with others. With easy access to music among other media outlets, people tend to be exposed to it with or without their will. It presents a problem since it has a negative effect after engaging in acts that someone can be encouraged to do after listening to music with explicit lyrics. Individuals connected to the Internet can listen to any song on platforms such as YouTube and Spotify without restriction. According to a data science manager at Spotify, Bannister (2017), 75% of the songs in the Hot 100 showed a presence of explicitness of the lyrics, with two of the three new number one singles using explicit lyrics ("Starboy" by The Weekend feat. Daft Punk and "Bad and Boujee" by Migos feat. Lil Uzi Vert). Furthermore, this pattern has only exponentially grown since then with the rise of the songs containing explicit lyrics to the no. 1 streaming audio service with nearly 200 million paying customers, the number of people exposed to explicit lyrics than what we expect.



Per Spargo and Chakkenchath (2020), when a song trends on the Billboard Top 100, it is synonymous with a trend on social media. Looking back to WAP, the music is now frequently used on TikTok as a trending dance song, with influencers of all ages dancing to it. As Sophie Miller (2020), a writer for the Pipe Dream, says, "Once a song becomes part of a TikTok trend, it is everywhere." In today's generation, hearing music with explicit lyrics anywhere has become a natural thing without even realizing the potential effects the explicitness of the music lyrics holds. Younger kids are also exposed to music with explicit lyrics, which is inappropriate for their age to hear. This can lead them to be involved earlier in things meant for adults.

The RIAA (2019) reported that streaming accounted for 75% of the music industry's recorded revenue in 2018. With physical music devices such as iPods and MP3 players, record labels can produce and disseminate their content without most of the paperwork and regulation that used to come with music. In response to claims about the impact of lyrical content, some may have conjectured that adolescents are listening to music only for self-gratification. Little attention or even nothing is given to the lyrics; if any attention is paid, comprehension is constrained and related to the listener's life events. Song lyrics are always open to multiple interpretations that sometimes contradict the lyrics' literal meaning intended by the performer in a song. It takes on different meanings in different settings since the performers and the audiences add their meanings. Adolescents interpret the song in a variety of ways, and in interpreting the songs, song lyrics play an important role in depicting and understanding the message of the music. They examine features running throughout the lyrics to see how the discussion shapes their perception of reality and what the lyrics do to express meaning: how forms of subject matter and language influence the characterization of the topic and how the relationship between those patterns evokes actual meaning. Many thoughts go through a person's mind when listening to music, and this causes people to come to many random realizations.

Music lyrics may affect productivity, illness, depression, and how people perceive the world (Avramova, 2019). Every time someone listens to music, people pay attention to the words and understand the song's message. Understanding the messages and meaning through music, linked to emotions, can stimulate learning, impacting people's perceptions. These perceptions built from personal enriching experiences with music would turn into norm activation benefiting the surrounding world. This is in line with Barradas and Sakka (2021), who also revealed a significant relationship between the lyrical presentations of a song in the musical emotions in a cross-cultural perception of lyrics. Results from a study have also proven the relevance of music lyrics to the perceptions and sense of identity of young people due to its bonding characteristic (González 2021). People sometimes feel defensive about their taste in music, which might be related to how much it defines themselves and relates to their attitudes and personality (Cherry, 2020).

Some research, on the other hand, has discovered the opposite. Seventeen percent of male and 25% of female adolescents said they liked their favorite songs because the lyrics expressed their emotions. Their musical preference is critical because research has shown that exposure to violence, sexual messages, and sexual stereotypes can tremendously influence young viewers' behavior and attitudes. Based on a study in the May issue, released in the Journal of Personality and Social Psychology, lyrics to violent songs trigger more aggressive emotions and thoughts (Grant, 2021), as listeners who are emotionally driven can be affected by that music with explicitly expressed lyrics. A person's emotions are influenced by the sensitivity and response to music that expresses certain emotions, such as sadness, joy, anger, and pain. Explicit lyrics can evoke a variety of emotions among listeners, and one can sense the message contained in the lyrics and the emotions evoked by a particular piece of music while listening to it. Many laboratory-based experimental studies have shown that exposure to violent music increases aggressive thoughts, angry feelings, physiologic arousal, negative appraisals, aggressive behavior, and desensitization to violence while decreasing prosocial behavior, such as helping others and empathy (Anderson et al., 2017).



Compared to other forms of communication, music has the ability to influence and connect with listeners in a profoundly different way. Many turn to music to connect with others, to express themselves, or to find a sense of understanding among peers when they feel that "no one understands them" or knows how they "truly feel" (Peralta, 2021). Music can communicate and express oneself, which may influence listeners through the lyrical content of a song. A recent finding led to the conclusion that some lyrics are partly dependent or are interpreted differently across cultures because of their stereotyping of the particular genres and lyrics' messages (Susino & Schubert, 2020). Wright and Centeno (2018) examined a total of 26 studies that were published between 2000 and 2017 that examined the influence of music lyrics on sexual attitudes, personality, and behaviors.

Since music is a core part of the culture and daily life, there has long been a belief that it is correlated with one's personality (Anderson et al., 2020). The characters of a particular TV show that draws someone's attention can immediately impact a person's personality, such as by practicing the same manner in which the character acts, speaks, and behaves. When it comes to music, personality can be influenced by what a person hears and interprets the song based on personal perspective. Listening to music makes people more motivated to act based on personal interests. If someone comes to listen to explicit music, it could have a negative effect on a person's personality because it indicates detrimental acts and profanities. Our personalities are reflected in the music we make. Because of age-related changes in our personalities, it may be impossible to predict them all using genres. As we get older, our taste in music tends to vary more and less, which may be related to how our personalities have evolved and changed (Mishra & Shastri, 2022). Though maturity is inner growth, a person's age can also be an indicator of their personality because they are expected to act and behave at a certain age. A person's personality changes and matures as they age. That is why, when listening to music with explicit lyrics, a person's age is connected to the perceived level of effect of the explicit music lyrics and a person's personality.

It is difficult to ascertain how this exposure to sexual content in music affects emerging adults' cognitions. As per Bannister (2017), 75% of the songs on the Hot 100 Spotify showed a presence of explicitness in the lyrics. A large percentage of song lyrics in music these days contain sexual innuendo making it challenging to avoid the exposure of inappropriate content lyrics in songs, from music videos to digital streaming. It became critical for society to be aware of these issues and comprehend how the explicitness of lyrics affects people's cognition and behavior. Furthermore, studies show that listening to music alters people's emotions and behavior (Meng et al., 2018). The human brain's behavioral responses are triggered by music, which influences how people behave. Its effect depends on a person's musical enjoyment, anticipation, emotions, and memories since it acts as a stimulus that targets the dopamine system in our brains, which controls how people are supposed to behave. People get drawn to explicit music because it stirs emotions and attracts attention. When someone hears music with explicit lyrics, they may feel the urge to act a certain way. Exposure to violent content undoubtedly normalizes violent offenders' deviant and illegal behavior. It can also poison a child's developing worldview and affect their interactions with others.

Several theories have developed to explain the relationship between music and behavior. In line with this issue, the study is grounded in Cultivation theory. Professor George Gerbner developed cultivation theory in 1960, which Gerbner and Larry Gross later expanded upon in 1976 (Mulder, 2019). The cultivation framework influences people's perception of reality. It claims that the more individuals "live" in the media world, the more probable they believe that what is portrayed reflects reality. It is a theory that examines how the media shapes one's personality and social reality.

With music artists' continuous glamor and popularity, fans may adopt imitable roles and precarious acts depicted in artists' songs, lending support to the cultivation theory. Young listeners are then more likely to make decisions, adopt thinking processes, and behave similarly to the content contained in the



music they are exposed to after musicians create a false reality regarding vulgar activities endorsed through the lyrics of their songs (Nowotny, 2016). The meanings underlying the songs' lyrical messages are examined through the lens of cultivation theory, which proposes that when individuals are exposed to media content or other interactional agents, they eventually come to cultivate or adopt beliefs about the world that correspond with the images they have been viewing or music lyrics they have been listening.

With this theory, researchers can further assert whether the more audiences are exposed to factors such as sexual aggression, vulgarity, perception, personality, and emotion, for they may opt to accept or follow what was pertained in the song lyrics they are listening to over time.

In the music industry, it is crucial to prevent the reproduction of songs with lyrics that are offensive or unsuitable for youth (Rospocher, 2022). Pratt (2022) stated in his study that music with explicit lyrics has a detrimental effect on the audience. It exposes young individuals to profanity, which shapes their language and habits. According to a study by Sortheix et al. (2017), inappropriate actions made by people could be caused by music since it is an instrument that changes emotions and reinforces identity patterns. People's perspectives and opinions vary, just as the explicit lyrics of a song have different effects on different people. For this reason, people must be aware of the potential effects of listening to that kind of music for parents or guardians to be aware of the music played by young teens.

Cebu Technological University Danao Campus has the largest population of students here in Danao City, with over 6 000 students enrolled. After two years of online learning, students returned to traditional classes in September of this year. In online classes, students used gadgets as a mode for learning, thus increasing their chances of being exposed to the explicitness of music in different media outlets. Additionally, researchers found that students at Cebu Technological University – Danao Campus frequently used foul language that is typically only heard in music with explicit lyrics. Researchers have also observed last song syndrome (LSS) among Cebu Technological University – Danao Campus students. Last song syndrome is a term used to describe when someone finds themselves singing the same song repeatedly after listening to it. One example was the song released by cookies, entitled "Sabak Daddy," which lyrics included explicit lyrics such as "Nawng kag kwarta," "Sus lami kayka i-chula," "Hamis kaykag paa" which can be heard all over social media, radio, YouTube, Spotify, and most especially TikTok. Students at Cebu Technological University – Danao Campus of the students in this back-to-normal setup, the researchers aimed to assess if that constant exposure to the unfiltered media affects their behavioral actions and psychological emotions.

2. Methodology

2.1 Methods

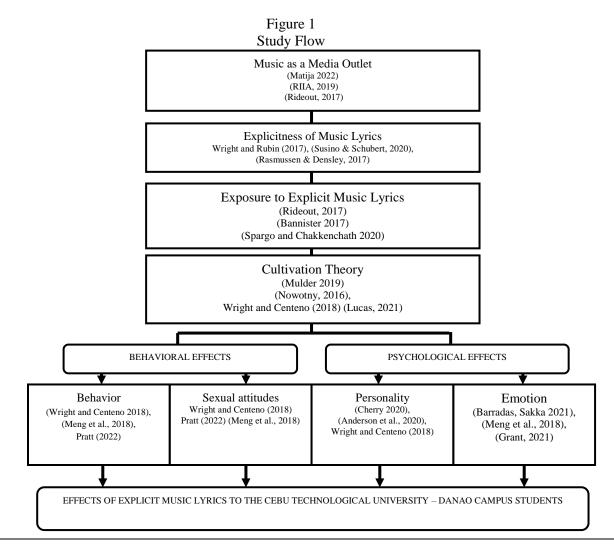
This study focused on the Perceived Level of Behavioral and Psychological Effects of Explicit Lyrics on the Cebu Technological University - Danao Campus Students. The locale of this study is in Cebu Technological University Danao Campus, located at Sabang, Danao City. The respondents for this study are the students of Cebu Technological University-Danao Campus, including all the courses from CEAS, CME, COE, and COT. The whole population of the Cebu Technological University-Danao Campus is 6,230. There was a total of 376 sample sizes for this study which was computed using Slovin's Formula n=N/1+Ne2. The respondents are obtained through stratified random sampling and those who were included in the list of student's selected using stratified random sampling were chosen to answer the survey questionnaire. Therefore, each member of the population had an equal chance of being chosen as the subject.



Lasie	A										
Distribution of Respondents											
Ν	% of N	n									
936	15.02	56									
1 257	20.18	76									
1 605	25.76	97									
2 432	39.04	147									
6 230	100	376									
	Distribution of F N 936 1 257 1 605 2 432	N % of N 936 15.02 1 257 20.18 1 605 25.76 2 432 39.04									

Table 1

The researchers obtained the sample population that best represents the studied population. The class schedules and the data containing the students' list were asked from the department. This study will tackle whether the explicitness of the lyrics indicated in a song impacted the behavior, perception, personality, and emotion of the respondents. To assess the participants' perceived level of agreement or disagreement, a questionnaire based on the Likert-scale rating (1-5 response possibilities, with 1 "strongly disagree" and 5 "strongly agree") was used. Each of the respondents is given the same questionnaires to answer. This study has no specific music genre to give thought to in answering the survey questionnaire; music, in general, that contains explicit lyrics was taken into account when answering the questions provided in the survey questionnaire. The administering of the survey questionnaire was done room to room based on the list of students selected randomly. The respondents were given 15 minutes to answer the questionnaire, which was retrieved immediately.





The formula consisting of a simple percentage, weighted mean, One-way ANOVA, and Spearman's Rank Correlation Coefficient will be used to evaluate and analyze the information obtained from the respondents. The simple percentage is used to measure the demographic profile of the respondents according to gender, age, and whether the respondents are music lovers. The weighted mean was simultaneously used to measure the demographic profile and the level of agreement of the student's psychological and behavioral responses to explicit lyrics. One-way ANOVA was utilized to get the significant difference between the perceived effect of explicit music lyrics on the four groups of respondents in terms of behavior, sexual attitude, personality, and emotion. At the same time, Spearman's Rank Correlation Coefficient was used to test the relationship between the profile of the respondents and the perceived level of effect of explicit music lyrics in terms of general behavior, perception of life, personality, and emotion.

The research utilized the Cultivation theory to support how the media shapes an individual. The meanings underlying the songs' lyrical messages are examined through the lens of cultivation theory, which proposes that when individuals are exposed to media content or other interactional agents, they eventually come to cultivate or adopt beliefs about the world that correspond with the images they have been viewing or music lyrics they have been listening.

With this theory, researchers can further assert if there is a relationship between the explicitness of music to the behavior, sexual attitude, personality, and emotions of the students of Cebu Technological University-Danao Campus as the respondents of this research study.

2.2 Materials

The survey questionnaire was used as the main gathering instrument for this study. The questionnaire, which was based on the 5-point Likert-scale rating (1 being "strongly disagree" and 5 "strongly agree"), was used in order to assess the participants' level of agreement or disagreement. The survey questionnaire was divided into two sections: the profile and the questionnaire. The profile section of the questionnaire included gender, age, status as music lover, and level of interest in music. The questionnaire was categorized into two, behavioral and psychological effects. Under the behavioral effects would be a question related to the behavior and sexual attitudes, while psychological effects include personality and emotion. In this study, the researcher used a stratified random sampling method called proportional or quota random sampling. As per Hayes (2020), this sampling method involves dividing a particular population into smaller subgroups known as strata. The strata in this sampling are formed based on members' shared attributes or characteristics. The computation of the significant difference between the perceived effects of explicit music lyrics on the four groups of respondents which used One-way ANOVA was computed using Microsoft Excel 2016. The computation of the significant relationship between the perceived effects of explicit music lyrics on the four groups of respondents on the other hand which used Spearman's Rank Correlation Coefficient was computed using IBM SPSS Statistics 23.



3. Results and Discussion

3.1 Profile of the Respondents (Gender and Age)

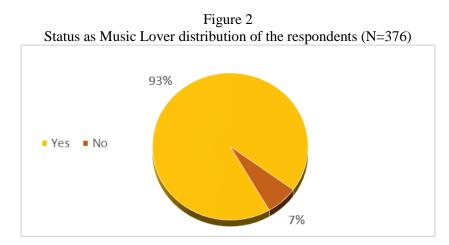
Age and Gender distribution of the respondents (N=376)												
	Gen	der		Age								
Department	Female	Male	18	19	20	21	22	23				
CEAS	12%	3%	3%	7%	4%	1%	1%	-				
CME	17%	3%	3%	5%	8%	3%	0.5%	-				
COE	14%	12%	7%	10%	5%	3%	-	-				
СОТ	22%	18%	11%	14%	5%	8%	0.5%	1%				
Total	64%	36%	24%	36%	22%	15%	2%	1%				

Table 2

The table above shows the age frequency distribution of the respondents. 24% of the respondents were 18 years old. The following 36% were 19 years old. 22% were 20 years old, 15% were 21, 2% of the study participants were 22, and the remaining 1% were 23. This implies that the mean age of the students who participated in this study was 19. It also shows the percentage frequency distribution of gender among the respondents. Female respondents were 64% of the sample size, while 36% were male.

This result implied that most of the Cebu Technological University – Danao Campus respondents were female, with a mean of nineteen years. These findings agree with the study of Nowotny (2016), whose female participants counted for 71.7% of the sample size. In addition, the mean age of students in his study was 22 years, which is in line with the researchers' respondents, whose mean age was 19, who both belong to the "young adult" age range.

3.2 Music Lover



The figure above shows the percentage frequency distribution of music lovers among the respondents. It shows that 93% of the respondents are music lovers, while 7% are not. This implies that the majority of the surveyed respondents were music lovers.



This is similar to Nielsen's 2018 Music 360 report, which accounts for between 90 and 93% of the global share of people listening to music. As per RIAA (2019), streaming accounted for 75% of the music industry's recorded revenue in 2018. In line with this, a report from Rideout (2017) shows that music remains the preferred media outlet of teens, with 66% reporting listening to music daily.

3.3 Level of Interest in Music

The data presented in table 3 shows the descriptive analysis of the computed weighted mean of each question. The weighted mean for remembering songs by their lyrics, understanding the lyrical content of the song, agreeing with the lyrics presented in favorite song/s, and having listened to songs that contain aggressive, sexual, and vulgar lyrics are 4.35, 4.25, 4.32, and 3.84 respectively. The respondents perceived that they most definitely remember, understand, and agree with a song's lyrics and are exposed to explicit lyrics in songs. This implies that the students of Cebu Technological University Danao Campus are greatly interested in music.

This is supported by the study of Lucas (2021), which stated that the lyrics increase the level of interest in music. It remains the preferred media outlet of teens, even if some lyrics are expressed explicitly. Rideout (2017). Moreover, people use music to connect with others, to express themselves, or to find a sense of understanding among peers when they feel that "no one understands them" or knows how they "truly feel." (Peralta, 2021).

Item	Weighted Mean	Description
Level if Interest in Music		
1.1. Remembering songs by their lyrics.	4.35	The respondents perceived that they most definitely remember songs by their lyrics.
1.2. Understanding the lyrical content of the song.	4.25	The respondents perceived that they most definitely understood the lyrical content of a song.
1.3. Agreeing with the lyrics presented in favorite song/s.	4.32	The respondents perceived that they most definitely agreed to the lyrics in their favorite songs.
1.4. Listened to songs that contain aggressive, sexual, and vulgar lyrics.	3.84	The respondents perceived that they were exposed to explicit lyrics in songs.

Table 3 Descriptive Analysis of the Respondents Level of Interest in Music

3.4 Perceived Effects of Explicit Music Lyrics

. The data presented in table 4 shows the descriptive analysis of the computed weighted mean of each question. Behavior statements 1.1 and 1.2 gave a weighted mean of 3.45, which was interpreted as agree. In the sexual attitude, 3.77 was calculated as the mean of both statements 2.1 and 2.2, equivalent to agree. On the other hand, personality gives 3.52 as the weighted mean for statements 3.1 and 3.2, which means agree. Lastly, emotion statements 5.1 and 5.2 gives a weighted mean of 4.21, equivalent to the verbal interpretation of strongly agree. Overall, the behavioral effect statements give a weighted mean of 3.61, while the psychological statements give 3.86. This overall mean is reflected in each statement's highest and lowest values. The statement "explicit lyrics stir emotions and make me feel worse due to its explicitness" holds the highest value of 4.23 as a weighted mean in comparison to the statement "explicit music lyrics poison one's mind and affect the way I behave around other people" with the lowest



weighted mean of 3.43. This computed data implies that explicit music lyrics affect a person's behavioral and, most definitely, psychological aspects.

In line with this, the study of Wright and Centeno (2018) shows the influence of music lyrics on sexual attitudes, personality, and behaviors. Meng et al. (2018) have also shown that listening to music alters people's emotions and personalities. On the other hand, a study by Grant (2021) shows that violent songs trigger more aggressive emotions and behavior. Pratt (2022) also stated the association of violent and sexual songs to the aggression and sexual practices of people.

Table 4													
Descriptive Analysis of	Descriptive Analysis of the Perceived Effect of Explicit Music Lyrics												
Item	Weighted Mean	Description											
Behavioral Effects													
1. Behavior													
1.1 Adapted some offensive language and swearing in explicit lyrics.	3.47	The respondents perceived that they agreed to adapting offensive language and swearing in explicit lyrics.											
1.2 Explicit music lyrics poisons one's mind and affect the way I behave around other people.	3.43	Respondents perceived that they agreed to explicit music lyrics poisoning one's mind and affecting respondent's behavior around other people.											
2. Sexual Attitude		1 1											
2.1. Explicit lyrics stirs sexual behaviors.	3.75	Respondents perceived that they agreed to explicit song lyrics stirring sexual behaviors.											
2.2. Explicit lyrics make me deviant and do inappropriate behaviors	3.78	Respondents perceived that they agreed to explicit lyrics making respondents deviant and enact inappropriate behaviors.											
Psychological Effects													
3. Personality													
3.1 Feeling identified with the lyrics of certain songs.	3.56	Respondents perceived that they agreed to feel identified with the lyrics of certain songs.											
 3.2 The music I enjoy encourage me to be who I am today. 4. Emotion 	3.47	The respondents perceived that they agree that the music they enjoy encourages them to be who they are today.											
4.1 Stuck in bad memories when listening to music with explicit lyrics.	4.19	Respondents perceived that they agreed that they get stuck in bad memories after listening to music with explicit lyrics.											
4.2 Explicit lyrics stirs emotions and make me feel worse due to its explicitness.	4.23	Respondents perceived that they most definitely agree that the explicitness of music stirs emotion and makes the respondents feel worse.											

3.5 Difference in the Perceived Level of Effect of Explicit Music Lyrics

Table No. 5 shows the significant difference in the perceived level of the effect of explicit music lyrics on the four groups of respondents in terms of behavior, sexual attitude, personality, and emotion using Analysis of Variance (ANOVA). The data shows that $F_{computed}$ is greater than the $F_{tabulated}$ in the sexual attitude factor, thus showing a significant difference in the answers of the four groups of respondents in terms of the behavioral effect under the sexual attitude of the respondents.



The decision shows no significant difference in the behavior, personality, and emotional effects of music lyrics on the respondents. Furthermore, the difference in the mean of the respondents' perceived level of effects of explicit music lyrics in terms of behavior, personality, and emotion is lower compared to the sexual attitude of the four groups of respondents. This further implies that exposure to explicit music lyrics has negatively affected how the respondents perceived the relationship between the explicitness in music lyrics has not affected how the respondents perceived the relationship of the explicitness in music lyrics to the sexual attitude of a person since the respondents have shown different perceptions of the effects of explicit music lyrics on the sexual attitude.

Factors Affected by Explicit Music Lyrics	Mean	F _{tabular}	Fcomputed	Decision		
Explicit Music Lylies						
Behavior						
CEAS	3.21					
CME	3.63	2.63	1.42	Reject, H _{01.1}		
COE	3.46					
COT	3.51					
Sexual Attitude						
CEAS	3.71					
CME	3.49	2.63	3.83	Accept Ho1.1		
COE	3.95					
COT	3.85					
Personality						
CEAS	3.59					
CME	3.41	2.63	1.11	Reject Ho1.2		
COE	3.65					
COT	3.49					
Emotion						
CEAS	4.00					
CME	4.33	2.63	1.75	Reject Ho1.2		
COE	4.24					
СОТ	4.33					

Results are supported by Anderson et al. (2017), who stated that exposure to explicit music affects a person's behavioral and psychological behavior. In addition, a study by Susino & Schubert (2020) led to a conclusion that some lyrics are partly dependent or are interpreted differently across cultures because of their stereotyping of the particular genres and lyrics' messages, thus creating a difference in how explicit music lyrics affects the sexual attitude of each person. Pratt (2022) also stated that long-maintained exposure to explicit song lyrics is associated with mental and behavioral disorders.

3.6 Relationship of the Profile of the Respondents and the Perceived Level of Effect of Explicitness of Music Lyrics

Table No. 6 shows the significant relationship between the profile of the respondents and their perceived level of behavioral and psychological effects of explicit music lyrics in terms of behavior, sexual attitude, personality, and emotion using Spearman's Rank Correlation Coefficient. The data computed shows that there is no significant relationship between the gender of the respondents and the perceived level of effect of explicit music lyrics. This means that the effects explicit music lyrics have on a person do not matter what gender that person has.



Table 6

Spearman's Rank Correlation Coefficient of the Relationship between the Profile of Respondents and the Perceived Level of the Effect of Explicit Music Lyrics

	Factors	r _s -tabulated	r _s -computed	Decision
GENI	DER			
BE	HAVIORAL			
1.	Behavior	058	.266	Accept Ho _{2.1-no relationship}
2.	Sexual Attitude	.082	.113	Accept Ho _{2.1-no relationship}
PS	YCHOLOGICAL			
3.	Personality	.006	.911	Accept Ho _{2.2-no relationship}
4.	Emotion	.029	.581	Accept Ho _{2.2-no relationship}
AGE				
BE	HAVIORAL			
1.	Behavior	0.840	0.000	Reject Ho _{2.1 -strong positive relationship}
2.	Perception	0.759	0.000	Reject Ho _{2.1-strong positive relationship}
PS	YCHOLOGICAL			
3.	Sexual Attitude	0.813	0.000	Reject Ho _{2.2} -strong positive relationship
4.	Emotion	0.665	0.000	Reject Ho _{2.2strong positive relationship}
MUSI	CLOVER			
BE	HAVIORAL			
1.	Behavior	0.242	0.000	Reject Ho _{2.1-moderate} positive relationship
2.	Perception	0.320	0.000	Reject Ho2.1-moderate positive relationship
PS	YCHOLOGICAL			
3.	Sexual Attitude	0.309	0.000	Reject $Ho_{2.2 - moderate positive relationship}$
4.	Emotion	0.301	0.000	Reject Ho _{2.2} -moderate positive relationship

In addition, a strong positive relationship can be seen between age and the perceived level of effects of explicit lyrics, which means that if the age increases, so does the perceived level of effects of explicit lyrics and vice versa. This implies that the older the people get, the higher the chances that they can be affected by the explicitness of the music lyrics. Lastly, a moderate positive relationship is evident between the respondents as music lovers and the perceived level of effects of explicit lyrics. When computing, the numerical value of music lovers where set to 2, and for those who are not was set to 1. This means that if the respondents are music lovers, the perceived level of effects of explicit lyrics increases.

This is similar to a study by Nowotny (2016), which showed no gender-specific impact of song lyrics for positive and negative emotions, meaning that aggressive lyrics were hard to impact one's cognitions. In a study by Winston (2017), in which he stated the difference between the levels of sensitivity people might have on how music lyrics affect them since those effects vary from person to person, especially in which age phase they belong. Mishra & Shastri (2022) also stated that as a person gets older, the taste in music tends to vary more, and at the same time, the effects of music lyrics have evolved and changed. Mulder's (2019) expanded cultivation framework also claims that music influences people, especially those who listen to music. The imagery and language used in song lyrics and the melody of music can subconsciously influence the listeners whether they like music (Wallace, 2018), thus supporting the moderate positive relationship between music lovers and the effects of explicit music lyrics on them.



Table 7

Spearman's Rank Correlation Coefficient of the Relationship of the Respondents' Level of interest in Music to the Perceived Level of the Effect of Explicit Music Lyrics

Factors	r _s tabulated	r _s computed	Decision
1. Remembering songs by their lyrics.			
Behavioral Effect			
1.1 Behavior	0.450	0.000	Reject HO _{2.1=moderate} positive relationship
1.2 Sexual Attitude	0.431	0.000	Reject Ho _{2.1=moderate} positive relationship
Psychological Effect	0.005	0.000	
1.3 Personality	0.385	0.000	Reject HO _{2.2=moderate} positive relationship
1.4 Emotion	0.483	0.000	Reject Ho _{2.2=moderate} positive relationship
2. Understanding the lyrical content			
of the song.			
Behavioral Effect			
1.1 Behavior	0.651	0.000	Reject Ho _{2.1} -strong positive relationship
1.2 Sexual Attitude	0.538	0.000	Reject Ho _{2.1} -strong positive relationship
Psychological Effect	0.601	0.000	
1.3 Personality 1.4 Emotion		0.000	Reject Ho _{2.2-strong positive relationship}
1.4 Emotion	0.532	0.000	Reject Ho _{2.2-strong positive relationship}
3. Agreeing with the lyrics			
presented in favorite song/s.			
Behavioral Effect			
1.1 Behavior	0.799	0.000	Reject HO _{2.1} -strong positive relationship
1.2 Sexual Attitude	0.747	0.000	Reject $Ho_{2.1-strong positive relationship}$
Psychological Effect	0.020	0.000	
1.3 Personality 1.4 Emotion	0.838	$0.000 \\ 0.000$	Reject Ho _{2.2-strong positive relationship}
1.4 Emotion	0.659	0.000	Reject Ho _{2.2-strong positive relationship}
4. Have listened to music that			
contained explicit lyrics.			
Behavioral Effect	0.054	0.000	.
1.1 Behavior	0.874	0.000	Reject HO _{2.1} -strong positive relationship
1.2 Sexual Attitude	0.763	0.000	Reject $Ho_{2.1}$ -strong positive relationship
Psychological Effect	0.704	0.000	Deject He
1.3 Personality 1.4 Emotion	0.794 0.693	$0.000 \\ 0.000$	Reject Ho _{2.2-strong} positive relationship
1.4 E110001	0.095	0.000	Reject Ho _{2.2-strong positive relationship}

The data presented in table 7 shows the relationship between the respondents' level of interest in music and the perceived effect of explicit music lyrics in terms of behavior, sexual attitude, personality, and emotion using Spearman's Rank Correlation Coefficient. The data shows a significant relationship between the student's level of interest in music and the perceived effect of explicit music lyrics. It is shown that there is a moderate positive relationship between the respondents remembering songs by their lyrics to the perceived effect of explicit music lyrics, a strong positive relationship to understanding and agreeing to the lyrics of a song, and also a strong positive relationship to respondents listening to music with explicit music lyrics. This means that if the level of remembering, understanding, agreement, and exposure to music with explicit lyrics increases, the more the perceived effect of explicit music lyrics.



This is similar to the study of Pratt (2022), who stated that long-maintained exposure to explicit song lyrics is associated with mental and behavioral disorders, including aggression, substance addiction, risky sexual practices, and suicide. In addition, Wright and Centeno (2018) examined the influence of explicit music lyrics on sexual attitudes, personality, and behaviors and found a positive relationship between the two.

Conclusion

This study informs the general public that exposure to music with explicit lyrics affects a person's behavior, personality, sexual attitude, and emotions. Based on the results, most respondents "agree" that music's explicit lyrics affect personal factors such as personality, sexual attitude, and emotions. Prior to that, the researchers concluded that there was a significant difference in the perceived level of effects of explicit music lyrics on the sexual attitudes of the respondents. In contrast, no significant difference was found in the perceived level of effect of the explicitness in music lyrics to the four groups of respondents in terms of behavior, personality, and emotion. On the other hand, the result also shows that there was no significant relationship between gender and the perceived level of effect of explicitness in music lyrics for the four groups of respondents. The age, status as a music lover, and level of interest in music lyrics to the four groups of respondents. Based on the results, the factor that gets the highest level of agreement, which indicates "strongly agree," was emotion, which implies that most of the time, exposure to explicit lyrics of music greatly influences the respondent's emotions compared to other factors.

With this, being aware of the effects of such music will educate people to be mindful in choosing the appropriate music to play, as music will affect a person both positively and negatively. This study will significantly help broaden people's understanding of explicit music lyrics and how this kind of music affects a person's behavior, sexual attitude, personality, and emotions. Hence, the researchers conducted this study to raise awareness and provide guidance about the effects of explicit music lyrics on one's behavior, sexual attitude, personality, and emotions.

Recommendation

Based on the findings and conclusion of the study, the researchers present the following recommendations:

Education Systems	Given the lack of media literacy in the Philippine education curriculum, formal instruction about music media influence should be an obligatory inclusion in the formal school curriculum. Media literacy should include controversial media themes in age-appropriate ways (e.g., violent and sexual material portrayed in music media).
Public Policy	It is suggested that an increase in sales tax on music containing explicit content be enacted, with the money raised going toward media literacy programs or media education.
Public Awareness	Schools should collaborate with public and private groups, especially national and local parent-teacher associations, to raise consumer awareness of the explicitness of popular music. Such cooperation may be best suited to solve specific needs and discover solutions representing the local community's values. Activities that support and raise awareness of the negative associations between the explicitness of popular music and its adverse impacts on healthy development and general well-being, including



	the impact on the social, emotional, and physical health of children, adolescents, and emerging adults, are also recommended.									
Music Industry	Strengthening parental advisory warning labels in the music business that									
White moustry	strengthening parental advisory warning labels in the music business that									
	classify explicit material to educate customers better are recommended.									
	Such marks would aid in differentiating between explicit lyrics and songs									
	that objectify men or women and those judged offensive for other reasons.									
	This classification should also apply to music videos and concerts.									
Listeners	Listeners should be mindful of the nature of the explicit music and its									
	potential effects on their behavior, sexual behavior, personality, and									
	emotions. Those of legal age should be accountable for their music tastes									
	and be aware of what they hear in explicit song lyrics.									

References

- Anderson C. et al. (2017). Screen Violence and Youth Behavior. Retrieved from: <u>https://pubmed.ncbi.nlm.nih.gov/29093050/</u> Date Viewed: December 12, 2022.
- Anderson I., Gil S., Gibson C., Wolf S., Shapiro W., Semerci O. and Greenberg D. (2020). Just The Way
You Are': Music Listening and Personality. Retrieved from:
https://research.atspotify.com/2020/12/just-the-way-you-are-music-listening-and-personality/ Date
Viewed: October 13, 2022
- Avramova N. (2019). How music can change the way you feel and act. Retrieved from: https://www.cnn.com/2019/02/08/health/music-brain-behavior-intl/index.html Date Viewed: October 13, 2022
- Bannister M. (2017). The Billboard Hot 100: Exploring Six Decades of Number One Singles. Retrieved from: <u>https://github.com/mspbannister/dand-p4billboard/blob/master/Billboard_analysis_100417</u>...md#the-billboard-hot-100-exploring-six-decades-of-number-one-singles_Date Viewed: December 01, 2022
- Barradas G. T., Sakka L. S. (2021). When words matter: A cross-cultural perspective on lyrics and their relationship to musical emotions. Psychology of Music. Advance online publication. Retrieved from: <u>https://doi.org/10.1177/03057356211013390</u> Date Viewed: October 3, 2022
- Cherry K. (2020). Music Preferences and Your Personality. Retrieved from: <u>https://www.verywellmind.com/music-and-personality-2795424</u> Date viewed: September 29, 2020
- González M (2021). The importance of song lyrics in perceptions and the sense of identity of young people. Retrieved from: <u>https://www.researchgate.net/publication/351773776</u> Date Viewed: September 29, 2022
- Grant S. (2021). The New Era & Genre Of Hip Hop is Progressive Music The Source Magazine. Retrieved from: <u>https://www.rappick.com/?p=11346</u> Date Viewed: October 13, 2022
- Hayes A. (2022). How Stratified Random Sampling Works. Retrieved from: <u>https://www.investopedia.com/terms/stratified_random_sampling.asp#:~:text=Stratified%20random</u> <u>%20sampling%20is%20a,as%20income%20or%20educational%20attainment</u>. Date Viewed: December 27, 2022
- Lucas P. (2021). How Important Are Lyrics In Music? Retrieved from: <u>https://www.concrete-online.co.uk/how-important-are-lyrics-in-music/</u>. Date Viewed: November 30, 2022
- Matija Ferjan (2022). 30+ Official Listening to Music Statistics (2022). Retrieved from: <u>https://headphonesaddict.com/listening-to-music</u>. Date Viewed: September 25, 2022
- Meng Q., Zhao T. and Kang J (2018). Influence of Music on the Behaviors of Crowd in Urban Open Public Spaces. Retrieved from: <u>https://www.frontiersin.org/articles/10.3389/fpsyg.2018.00596/full</u>. Date Viewed: October 13, 2022



- Mehr, A., Singh, M., Knox, D., Ketter, D. M., Pickens-Jones, D., Atwood, S., et al. (2019). Universality and diversity in human song. Retrieved from: <u>https://doi.org/10.1126/science.aax0868</u>. Date viewed: October 11, 2022
- Mishra & Shastri, (2022). Impact of Music Theraphy in Personality Development. Retrieved from: https://doi.org/10.36315/2022inpact054. Date viewed: November 23, 2022
- Mulder, P. (2019). Cultivation Theory (Gerbner & Gross). Retrieved from: <u>https://www.toolshero.com/communication-methods/cultivation-theory-gerbner-gross/</u>. September 29, 2022
- Nowotny N. (2016). Sexual Content in Music Lyrics and their Effects on Sexual Cognition. Retrieved from: <u>https://stars.library.ucf.edu/honorstheses/9</u>. Date Viewed: September 25, 2022
- Peralta, L. (2021). HOW DOES MUSIC AFFECT SOCIETY? Retrieved from: <u>https://www.savethemusic.org/blog/how-does-music-affect-society/</u> Date viewed: December 07, 2022
- Pratt, J. (2022). The Impact of Violent Music Lyrics on Kids. Retrieved from: <u>https://gabbwireless.com/family-resources/violent-musics-impact-on-youth/</u>. Date viewed: October 12, 2022.
- Rasmussen, E. E., & Densley, R. L. (2017). Girl in a country song: Gender roles and objectification of women in popular country music across 1990 to 2014. Sex Roles: A Journal of Research, 76(3-4), 188–201. Retrieved from: <u>https://doi.org/10.1007/s11199-016-0670-6</u> Date viewed: October 28, 2022.
- Recording Industry Association of America (2019). RIAA 2018 Year-End Music Industry Revenue Report. Retrieved from: <u>https://www.riaa.com/riaa-releases-2018-year-end-music-industry-revenue-report/</u>. Date viewed: September 28, 2022
- Rideout, V. (2017). The common-sense census: Media use by kids age zero to eight. Retrieved from San Francisco, California: Retrieved from: <u>https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-kids-age-zero-to-eight-2017</u> Date viewed: September 28, 2022
- Rospocher M. (2022). Detecting explicit lyrics: a case study in Italian music. Retrieved from: <u>https://link.springer.com/article/10.1007/s10579-022-09595-3</u>. Date Viewed: October 13, 2022
- Spargo O. and Chakkenchath A. (2020). Explicit and sexual songs leave lasting impacts on the youth of today. Retrieved from: <u>https://thewildcattribune.com/9860/opinion/explicit-and-sexual-songs-leave-lasting-impacts-on-the-youth-of-today/</u>. Date viewed: September 25, 2022
- Steil, A. (2018). Violent song lyrics have negative effect on youth. Retrieved from: <u>https://eagleeye.news/7393/artsandleisure/how-do-violent-song-lyrics-affect-people/</u>.Date viewed: October 12, 2022
- Susino M, Schubert E (2020) Musical emotions in the absence of music: A cross-cultural investigation of emotion communication in music by extra-musical cues. Retrieved from: <u>https://doi.org/10.1371/journal.pone.0241196</u> Date Viewed: September 30, 2022
- Wallace S. T. (2018). How Lyrics in a Song Can Impact Our Lives. Retrieved from: https://bahaiteachings.org/lyrics-song-can-impact-lives/. Date Viewed: November 30, 2022
- Winston C. (2017). Why Do Lyrics Matter? NRG Recording Studios. Retrieved from: <u>https://www.nrgrecording.com/post/why-do-lyrics-matter</u>. Date Viewed: November 30, 2022
- Wright C. L., Centeno B. (2018). Sexual content in music and its relation to sexual attitudes and behaviors among consumers: A meta-analytic review. Communication Quarterly. Retrieved from: <u>https://doi.org/10.1080/01463373.2018.1437055</u> Date Viewed: October 3, 2022
- Wright, C. L., & Rubin, M. (2017). "Get lucky!" Sexual content in music lyrics, videos and social media and sexual cognitions and risk among emerging adults in the USA and Australia. Sex Education, 17, 41-56. Retrieved from: <u>https://doi.org/10.1080/14681811.2016.1242402</u> Date Viewed: October 3, 2022.



Appendices

	Spearman Tabular Value													
1	df:=1	2	3	4	10	12	15	20	24	30	40	60	120	00
df:=1	161.4476	199.5000	215.7073	224.5832	241.8817	243.9060	245.9499	248.0131	249.0518	250.0951	251.1432	252.1957	253.2529	254.3144
2	18.5128	19.0000	19.1643	19.2468	19.3959	19.4125	19.4291	19.4458	19.4541	19.4624	19.4707	19.4791	19.4874	19.4957
3	10.1280	9.5521	9.2766	9.1172	8.7855	8.7446	8.7029	8.6602	8.6385	8.6166	8.5944	8.5720	8.5494	8.5264
4	7.7086	6.9443	6.5914	6.3882	5.9644	5.9117	5.8578	5.8025	5.7744	5.7459	5.7170	5.6877	5.6581	5.6281
5	6.6079	5.7861	5.4095	5.1922	4.7351	4.6777	4.6188	4.5581	4.5272	4.4957	4.4638	4.4314	4.3985	4.3650
6	5.9874	5.1433	4.7571	4.5337	4.0600	3.9999	3.9381	3.8742	3.8415	3.8082	3.7743	3.7398	3.7047	3.6689
7	5.5914	4.7374	4.3468	4.1203	3.6365	3.5747	3.5107	3.4445	3.4105	3.3758	3.3404	3.3043	3.2674	3.2298
8	5.3177	4.4590	4.0662	3.8379	3.3472	3.2839	3.2184	3.1503	3.1152	3.0794	3.0428	3.0053	2.9669	2.9276
9	5.1174	4.2565	3.8625	3.6331	3.1373	3.0729	3.0061	2.9365	2.9005	2.8637	2.8259	2.7872	2.7475	2.7067
10	4.9646	4.1028	3.7083	3.4780	2.9782	2.9130	2.8450	2.7740	2.7372	2.6996	2.6609	2.6211	2.5801	2.5379
11	4.8443	3.9823	3.5874	3.3567	2.8536	2.7876	2.7186	2.6464	2.6090	2.5705	2.5309	2.4901	2.4480	2.4045
12	4.7472	3.8853	3.4903	3.2592	2.7534	2.6866	2.6169	2.5436	2.5055	2.4663	2.4259	2.3842	2.3410	2.2962
13	4.6672	3.8056	3.4105	3.1791	2.6710	2.6037	2.5331	2.4589	2.4202	2.3803	2.3392	2.2966	2.2524	2.2064
14	4.6001	3.7389	3.3439	3.1122	2.6022	2.5342	2.4630	2.3879	2.3487	2.3082	2.2664	2.2229	2.1778	2.1307
15	4.5431	3.6823	3.2874	3.0556	2.5437	2.4753	2.4034	2.3275	2.2878	2.2468	2.2043	2.1601	2.1141	2.0658
16	4.4940	3.6337	3.2389	3.0069	2.4935	2.4247	2.3522	2.2756	2.2354	2.1938	2.1507	2.1058	2.0589	2.0096
17	4.4513	3.5915	3.1968	2.9647	2.4499	2.3807	2.3077	2.2304	2.1898	2.1477	2.1040	2.0584	2.0107	1.9604
18	4.4139	3.5546	3.1599	2.9277	2.4117	2.3421	2.2686	2.1906	2.1497	2.1071	2.0629	2.0166	1.9681	1.9168
19	4.3807	3.5219	3.1274	2.8951	2.3779	2.3080	2.2341	2.1555	2.1141	2.0712	2.0264	1.9795	1.9302	1.8780
20	4.3512	3.4928	3.0984	2.8661	2.3479	2.2776	2.2033	2.1242	2.0825	2.0391	1.9938	1.9464	1.8963	1.8432
21	4.3248	3.4668	3.0725	2.8401	2.3210	2.2504	2.1757	2.0960	2.0540	2.0102	1.9645	1.9165	1.8657	1.8117
22	4.3009	3.4434	3.0491	2.8167	2.2967	2.2258	2.1508	2.0707	2.0283	1.9842	1.9380	1.8894	1.8380	1.7831
23	4.2793	3.4221	3.0280	2.7955	2.2747	2.2036	2.1282	2.0476	2.0050	1.9605	1.9139	1.8648	1.8128	1.7570
24	4.2597	3.4028	3.0088	2.7763	2.2547	2.1834	2.1077	2.0267	1.9838	1.9390	1.8920	1.8424	1.7896	1.7330
25	4.2417	3.3852	2.9912	2.7587	2.2365	2.1649	2.0889	2.0075	1.9643	1.9192	1.8718	1.8217	1.7684	1.7110
26	4.2252	3.3690	2.9752	2.7426	2.2197	2.1479	2.0716	1.9898	1.9464	1.9010	1.8533	1.8027	1.7488	1.6906
27	4.2100	3.3541	2.9604	2.7278	2.2043	2.1323	2.0558	1.9736	1.9299	1.8842	1.8361	1.7851	1.7306	1.6717
28	4.1960	3.3404	2.9467	2.7141	2.1900	2.1179	2.0411	1.9586	1.9147	1.8687	1.8203	1.7689	1.7138	1.6541
29	4.1830	3.3277	2.9340	2.7014	2.1768	2.1045	2.0275	1.9446	1.9005	1.8543	1.8055	1.7537	1.6981	1.6376
30	4.1709	3.3158	2.9223	2.6896	2.1646	2.0921	2.0148	1.9317	1.8874	1.8409	1.7918	1.7396	1.6835	1.6223
40	4.0847	3.2317	2.8387	2.6060	2.0772	2.0035	1.9245	1.8389	1.7929	1.7444	1.6928	1.6373	1.5766	1.5089
60	4.0012	3.1504	2.7581	2.5252	1.9926	1.9174	1.8364	1.7480	1.7001	1.6491	1.5943	1.5343	1.4673	1.3893
120	3.9201	3.0718	2.6802	2.4472	1.9105	1.8337	1.7505	1.6587	1.6084	1.5543	1.4952	1.4290	1.3519	1.2539
00	3.8415	2.9957	2.6049	2.3719	1.8307	1.7522	1.6664	1.5705	1.5173	1.4591	1.3940	1.3180	1.2214	1.0000



International Journal of Social Science Research and Review

One-Way Analysis of Variance (ANOVA) Table

	0.50	0.20 0.10	0.10 0.05	0.05	0.02	0.01	0.005	0.002	0.001 0.0005	α(2): α(1): η Ι	0.50 0.25	0.20 0.10	0.10 0.05	0.05	0.02	0.01	0.005	0.002	0.001 0.0005
5	0.600	1.000 0.800	1.000	1.000	1.000					51 52 53	0.095	0.182 0.180 0.179	0.233 0.231 0.228	0.276	0.326 0.323 0.320	0.359 0.356 0.352	0.390 0.386 0.382	0.426 0.422 0.418	0.451 0.447 0.443
6 7 8 9	0.371 0.321 0.310 0.267	0.657	0.829	0.886 0.786 0.738	0.943 0.893 0.833	1.000 0.929 0.881	1.000 0.964 0.905	1.000	1.000	54 55 56	0.094 0.093 0.092	0.177	0.226	0.268	0.317 0.314 0.311	0.349 0.346 0.343	0.379	0.414	0.439 0.435
10	0.248	0.483 0.455 0.427	0.600 0.554 0.536	0.700 0.648 0.618	0.783	0.833 0.794 0.755	0.867 0.830 0.800	0.917 0.879 0.845	0.933 0.903 0.873	57 58 59	0.091 0.090 0.089	0.172	0.220 0.218 0.216	0.251 0.259 0.257	0.308 0.306 0.303	0.340 0.337 0.334	0.372 0.369 0.366 0.363	0.407 0.404 0.400 0.397	0.432 0.428 0.424 0.421
12 13 14 15	0.217 0.209 0.200 0.189	0.406 0.385 0.367 0.354	0.503 0.484 0.464 0.464	0.587 0.560 0.538 0.521	0.678 0.648 0.626 0.604	0.727 0.703 0.679 0.654	0.769 0.747 0.723 0.700	0.818 0.791 0.771 0.750	0.846 0.824 0.802	60 61 62	0.089	0.168	0.214	0.255	0.300	0.331 0.329 0.326	0.360	0.394	0.418
16 17	0.182	0.341	0.429	0.503	0.582	0.635	0.679	0.729	0.779 0.762 0.748	63 64 65	0.085	0.163 0.162 0.161	0.209 0.207 0.206	0.248 0.246 0.244	0.293 0.291 0.289	0.323 0.321 0.318	0.351 0.348 0.346	0.385 0.382 0.379	0.408 0.405 0.402
18 19 20	0.170 0.165 0.161	0.317 0.309 0.299	0.401 0.391 0.380	0.472 0.460 0.447	0.550 0.535 0.520	0.600 0.584 0.570	0.643 0.628 0.612	0.695 0.677 0.662	0.728 0.712 0.696	66 67 68	0.084 0.084 0.083	0.160 0.158 0.157	0.204 0.203 0.201	0.243 0.241 0.239	0.287 0.284 0.282	0.316 0.314 0.311	0.343 0.341 0.338	0.376 0.373 0.370	0.399 0.396 0.393
21 22 23 24	0.156 0.152 0.148 0.144	0.292 0.284 0.278 0.271	0.370 0.361 0.353 0.344	0.435 0.425 0.415 0.406	0.508 0.496 0.486 0.476	0.556 0.544 0.532 0.521	0.599 0.586 0.573 0.562	0.648 0.634 0.622 0.610	0.681 0.667 0.654	69 70 71	0.082 0.082 0.081	0.156 0.155 0.154	0.200 0.198 0.197	0.237 0.235 0.234	0.280 0.278 0.276	0.309 0.307 0.305	0.336 0.333 0.331	0.368 0.365 0.363	0.390 0.388 0.385
25	0.142	0.265	0.337	0,398	0.466	0.511	0.551	0.598	0.642 0.630 0.619	72 73 74 75	0.081 0.080 0.080 0.079	0.153 0.152 0.151 0.150	0.195 0.194 0.193 0.191	0.232 0.230 0.229 0.227	0.274 0.272 0.271	0.303 0.301 0.299	0.329 0.327 0.324	0.360 0.358 0.355	0.382 0.380 0.377
27 28 29 30	0.136 0.133 0.130 0.128	0.255 0.250 0.245 0.240	0.324 0.317 0.312 0.306	0.382 0.375 0.368 0.362	0.448 0.440 0.433 0.425	0.491 0.483 0.475 0.467	0.531 0.522 0.513 0.504	0.577 0.567 0.558 0.549	0.608 0.598 0.589 0.580	76	0.078	0.149	0.190	0.226	0.269	0.297	0.322	0.353	0.375
31 32 33	0.126 0.124 0.121	0.236 0.232 0.229	0.301 0.296 0.291	0.356	0.418	0.459	0.496	0.541	0.571	78 79 80	0.077 0.077 0.076	0.147 0.146 0.145	0.188 0.186 0.185	0.223 0.221 0.220	0.264 0.262 0.260	0.291 0.289 0.287	0.316 0.314 0.312	0.346 0.344 0.342	0.368 0.365 0.363
34 35	0.120 0.118	0.225	0.287	0.340	0.405 0.399 0.394	0.446 0.439 0.433	0.482 0.475 0.458	0.525 0.517 0.510	0.554 0.547 0.539	81 82 83 84	0.076	0.144 0.143 0.142	0.184 0.183 0.182	0.219 0.217 0.216	0.259 0.257 0.255	0.285 0.284 0.282	0.310 0.308 0.306	0.340 0.338 0.336	0.361 0.359 0.357
36 37 38 39	0.116 0.114 0.113 0.111	0.219 0.216 0.212 0.210	0.279 0.275 0.271 0.267	0.330 0.325 0.321 0.317	0.388 0.383 0.378 0.373	0.427 0.421 0.415 0.410	0.462 0.456 0.450 0.444	0.504 0.497 0.491 0.485	0.533 0.526 0.519 0.513	85 86	0.074 0.074 0.074	0.141 0.140 0.139	0.181 0.180 0.179	0.215 0.213 0.212	0.254 0.252 0.251	0.280 0.279 0.277	0.305 0.303 0.301	0.334 0.332 0.330	0.355 0.353 0.351
40	0,110	0.207	0.264	0.313	0.368	0.405	0.439	0.479	0.507	87 88 89 90	0.073 0.073 0.072 0.072	0.139 0.138 0.137 0.136	0.177 0.176 0.175 0.174	0.211 0.210 0.209 0.207	0.250 0.248 0.247 0.245	0.276 0.274 0.272 0.271	0.299 0.298 0.296 0.294	0.328 0.327 0.325 0.323	0.349 0.347 0.345 0.345
42 43 44 45	0.107 0.105 0.104 0.103	0.202 0.199 0.197 0.194	0.257 0.254 0.251 0.248	0.305 0.301 0.298 0.294	0.359 0.355 0.351 0.347	0.395 0.391 0.386 0.382	0.428 0.423 0.419 0.414	0.468 0.463 0.458 0.453	0.495 0.490 0.484 0.479	91 92	0.072	0.135	0.173	0.205	0.244	0.269	0.293	0.321	0.341
46 47 48	0.102 0.101 0.100	0.192 0.190 0.188	0.246	0.291 0.288 0.285	0.343 0.340 0.336	0.378 0.374 0.370	0.410	0.448	0.474 0.469 0.465	93 94 95	0.071 0.070 0.070	0.134 0.133 0.133	0.172 0.171 0.170	0.204 0.203 0.202	0.241 0.240 0.239	0.267 0.265 0.264	0.290 0.288 0.287	0.318 0.316 0.314	0.338 0.336 0.334
49 I 50 I	0.098	0.186 0.184	0.238 0.235	0.282 0.279	0.333 0.329	0.366 0.363	0.397 0.393	0.430	0.460 0.456	96 97 98 99 100	0.070 0.069 0.069 0.068 0.068	0.132 0.131 0.130 0.130 0.130 0.129	0.169 0.168 0.167 0.166 0.165	0.201 0.200 0.199 0.198 0.197	0.238 0.236 0.235 0.234 0.234	0.262 0.261 0.260 0.258 0.257	0.285 0.284 0.282 0.281 0.281 0.279	0.313 0.311 0.310 0.308 0.307	0.332 0.331 0.329 0.327 0.326

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).