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DEPARTMENT OF PSYCHOLOGY

February, 2023

# INVESTIGATING THE RELATIONSHIP BETWEEN HUMOR, EMOTION REGULATION ISSUES AND ALEXITHYMIA IN STUDENTS



by

Naeema Tariq  
BSP191041

A Research Thesis submitted to the  
DEPARTMENT OF PSYCHOLOGY  
in partial fulfillment of the requirements for the degree of  
BACHELOR OF SCIENCE IN PSYCHOLOGY

Faculty of Management and Social Sciences  
Capital University of Science & Technology,  
Islamabad  
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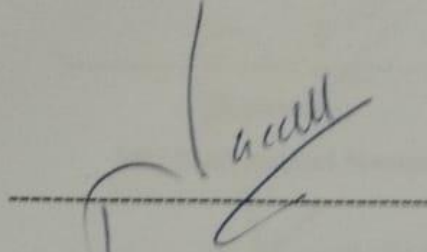
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## CERTIFICATE OF APPROVAL

It is certified that the Research Thesis titled "**Investigating the Relationship Between Humor, Emotion Regulation Issues and Alexithymia in Students**" carried out by **Naeema Tariq**, Reg. No. **BSP191041**, under the supervision of **Mr. Muhammad Naeem**, Capital University of Science & Technology, Islamabad, is fully adequate, in scope and in quality, as a Research Thesis for the degree of **BS Psychology**.

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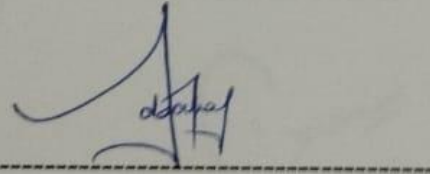
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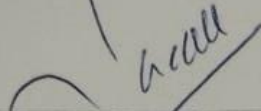
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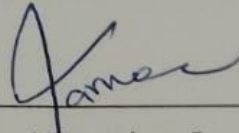
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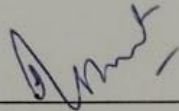
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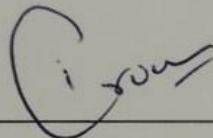
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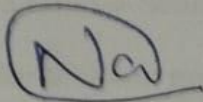
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## DEDICATION

*I dedicate this thesis to my parents, whose constant support has made me who I am today. They have always encouraged, motivated, and guided me through all the crests and troughs of my student life. I am truly grateful to my parents for everything they have done and sacrificed for me. I pray that my efforts and work would make them proud.*

## DECLARATION

It is declared that this is an original piece of my own work, except where otherwise acknowledged in text and references. This work has not been submitted in any form for another degree or diploma at any university or other institution for tertiary education and shall not be submitted by me in future for obtaining any degree from this or any other University or Institution.



**Name:** Naeema Tariq

**Registration Number:** BSP191041

**February 2023**

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## ABSTRACT

This study focused on finding relationships between alexithymia and mood amongst university students. As the emotional and mental health of university students was not widely studied in Pakistan; hence we aimed to study the emotion regulation capabilities of university students in Pakistan. The cross-sectional research design was used in this study. The sample size for this study was (N=150) and consisted of both males and females undergraduate university students of university belonging to twin cities (Islamabad, Rawalpindi). The data was collected using self-reporting. Humor Style Questionnaire (HSQ, 32 items), Perth's Alexithymia Questionnaire (PAQ, 24 items) and Emotion Regulation Questionnaire (ERQ, 10 items). The Pearson's correlation and Independent T-test were used to analyze the collected data. The results of the study were consistent with our initial hypothesis i.e. alexithymia had a positive correlation with humor (Pearson's correlation 0.592). Difficulty in emotion regulation had a positive correlation with alexithymia (Pearson's correlation 0.55). Difficulty in emotion regulation had lower correlation with humor in participants of the study (Pearson's correlation 0.35). Based on the results of this study, a correlation between humor, difficulty in emotion regulation and alexithymia amongst university students can be concluded.

**Keywords:** Alexithymia, Emotion Regulation, Humor, University students, Pakistan, Islamabad, Rawalpindi.

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## **Chapter 1. Introduction**

Studies in field of psychology have majorly demonstrated that emotions play a nurturing role in human behavior. People have different tendencies for emotion regulation when dealing with their emotional problems (Atkinson, 2015). Many theories have underscored that effective self-emotional regulation includes one's awareness, acknowledgment, assessment, and management of their own emotions (Berking et.al, 2008). Alexithymia is defined as trouble in regulation of sympathy, and namely, it's a failure in the mental processing of changing facts and the regulating empathy in one's self (Taylor 2002; Heinzl et.al. 2010; Walker 2011). Amongst individuals affected with alexithymia, they face problems in forming and continuing social relationships, decreased support/abilities amongst friends, smaller social networks, decreased empathy and they also face raised anger and bad attitude (Humphreys 2009; Payer 2011).

The function of emotion regulation for keeping one's psychological health has been substantiated in multiple studies (Natalie, 1994). Whereas the inability to influence one's emotions can have destructive effects on one's psychological and physiological health (Gross and John, 2003). Similarly, the use of unfitting and faulty strategies is linked with inadequate psychological and physical health (Gross and John, 2003). Gratz and Roemer (2004) ascribe the difficulty in regulating emotions to the use of harsh strategies that may have proved to be utilitarian in the past or in some specific case. However, in current scenarios these methods cause disturbances in conventional social, cognitive and interpersonal operations of individuals (Gross and John, 2003). Alexithymia is one of the emotional and psychological problems that is associated with emotion regulation capabilities of a person (Swart 2009;

Parker2011;Lundh2002). Therefore, we can make a hypothesis that problems in emotion regulation in individuals may be linked with alexithymia.

In recent years, research has been directed on ideas which help improve the human condition. One of such ideas which is researched is called Humor. Humor is defined as an individual's tendency, that exhibits itself in the one's behavioral abilities and it is primarily guided by witticism, jests, and hobbies. Also, humor has been popularly growing as a defense mechanism that helps society to handle moving conflicts or external stressors by conferring significance to funny and entertaining facets of a situation.

Humor also serves as an adept coping strategy; however, existing literature provides us with non-conclusive results. As an example, Lytle (2007) considers humor as a double-edged sword that can also be harmful to social relationships. Humor can be classified in many ways, e.g. (Martin et al., 2006) have classified humor into two broad categories: adaptive which is positive in nature and maladaptive which is negative in nature. Studies on humor styles have indicated that in majority cases, the adaptive styles have a positive relationship with psychological health, well-being, emotional intelligence, social capabilities, and academic achievements in people. On the contrary, maladaptive humor styles form a negative relationship with the aforementioned components. Also, maladaptive humor styles have a positive relationship with depression, anxiety, and hostility in individuals (Martin, 2003 and 2006). Studies have shown that there exists a relationship between emotional intelligence (EQ) and humor amongst people. In this regard, Yip and Martin (2006) demonstrated the same in their investigation, that indeed there is a substantial relationship between humor and emotional intelligence (EQ).

## **Humor**

Humor is defined as the capacity to perceive and/or express the comical aspects of any given situation. Humor can be a source of entertainment and a method of coping with difficult and stressful situations or events. As humor can provoke laughter in individuals but humor can be serious business. As it can take form of lighthearted forms such as satire, to its more eccentric ones such as dark humor, humor can play a very important role in a person's life when creating social bonds or releasing tension.

## **Alexithymia**

Alexithymia is defined as the inability of a person to understand, share, or distinguish amongst their own emotions. Alexithymia can occur in many disorders including psychological, psychosomatic, repeated traumatic stressor and in some cases of substance abuse.

## **Emotion Regulation**

Emotion regulation is defined as the ability of a person to change an emotion or set of emotions amongst one's self. Emotion regulation requires conscious observation, using methods such as trying to modify the perception of situations in order to manage them more effectively. Also trying to change the final target of the emotion (e.g., anger) in a way which can produce positive and better results. Emotion regulation also involves recognizing how changing one's behavior to a different type can be utilized to serve the present emotional state. Most of the time in humans, the emotion regulation happens sub-consciously or unconsciously. However, people can learn to regulate their emotions explicitly as well and it can be a lifelong learning process.

## **Literature Review**

Several studies have demonstrated that comic people have good stress management skills, as they are keenly able to ascertain, express and endure their emotions, and thus they are highly favored in social interactions (Nicole, 1998). Thus, problems in self-regulation of emotion can be linked with alexithymia as they share similar traits. Studies have shown that being skilled in emotional awareness and regulation is a friendship between passion and temperament. Yip and Martin (2006), found in their studies that this skill is a meaningful relationship which exists in middle between two things i.e. mood and emotional state.

Torabi and Seif (2013) also found that there is a meaningful and constructive relationship between emotional intelligence and humor. Similarly, Khoshoie(2009) also demonstrated that there is a positive correlation between emotional intelligence and its components including enjoyment of verbal humor in daily life, humor in social situations, and humor in stressful situations. Samson and Gross (2012) mentioned that the positive humor was more efficacious in helping with regulate negative emotions in one's self than compared to negative humor by individuals. They also showed that use of positive humor was more successful in reducing the negative emotions in individuals whereas it was less efficient to regulate the positive emotions using negative humor. Aydin and Campus (2014) in their survey found that negative humor style was a positive predictor for alexithymia in individuals (in general), and also, it's a marker for problems in identifying and describing emotions in one's self.



As per research, humor is a person's ability to view the positive or comic aspect of a potentially negative situation. This indicates that the person is capable of regulating their emotions; whereas people who are unable or have difficulty regulating their emotions would have difficulty in using humor as a coping mechanism in difficult situations. Thus, in our study we will be looking for this negative relationship between humor and emotion regulation capabilities. Similarly, as alexithymia is lack of emotional awareness in a person and this also correlates positively with difficulty in emotion regulation abilities in a person. As a person who has difficulty in regulating their emotions is likely to be unaware of them as well. Thus, in our study we would be looking for a positive correlation between alexithymia and problems in emotional self-regulation amongst the participants. Humor can be of four different styles (affiliative, self-enhancing, self-defeating, and aggressive) and alexithymia would form a negative association with self-enhancing and affiliative humor and positive association with aggressive and self-defeating humor (Breanna E. Atkinson, 2015).

### **Theoretical Framework**

Emotion regulation theory provides the basis for this thesis. Emotion regulation by using humor is being studied in this research. Humor is used to regulate negative emotions and thus helping one's self gain a positive outlook of the situation.

Perspective-attractive comedy has thus happened and suggested as a form of emotion-directed managing method designed to immediately distance oneself to gain perspective of negative knowledge. This concept is expected to be accomplished by communicable either being or one's occurrence (or both) less dangerously, chief to a reduction in moving backlashes to menacing situations (May, 1953; Freud 1959). According to a view, the beneficial belongings of humors are presented by way of cognitive shifts and matching

changes in concerning feelings and intuition quality (Lefcourt, 1995). This shift in outlook is trusted to therefore lead to reductions in severe negative concerns (Dixon, 1980). Humor should be most direct in the decline of negative fervor when it matches the aggravation, admitting for flexible procedures to manage the something which causes stress. Thus, perspective-attractive can serve to promote responsive concern regulation actions (to a degree reappraisal) and agreement of negative emotions or stressors.

The outlook-attractive view of humor is comparable to the care build of decentering, which care-located approaches describe as the capability to “shrink away” rationally from a situation to enhance more-completely aware of the position in addition to alternate habits of interpreting and behaving (Teasdale, 2002; Wupperman, 2013; Wupperman, 2008). Theoretically, this would counter-balance individuals to view various judgments and responses to a situation superior to without thinking returning with usual (conceivably maladaptive) responses. Decentering maybe understanding of as analogous to the “observant personality” within psychodynamic conceptualizations, by which the ability for self-knowledge and perception of remainder of something and impressions are experienced as separate individuals (Kutz, 1985).

## **Rationale**

Humor has been used in a large number of psychological and therapeutic interventions around the world, mainly due to its multiple benefits (Chow, 2022). Some patients often use humor as a decoy and masking strategy while they may be suffering from alexithymia and an inability to regulate their emotions. Therefore, attempting to find a relationship between humors, problems in emotional self-regulation and alexithymia in young adults (i.e. at

undergraduate university level) can create new horizons for further investigations in the field of psychology.

Also, this study will help us identify the Emotion Regulation and Alexithymia prevalence amongst university students and capability of students to use Humor in day-to-day situations. As these specific topics and participants i.e. university students; are not often part of many researches being conducted in Pakistan. Therefore, this study may give us more insights into the emotional outlook of students going through university life.

### **Objectives**

- To explore the relationship between humor and problems in emotional self-regulation amongst university students.
- To explore the relationship between problems in emotional self-regulation and alexithymia among university students.

### **Hypothesis**

- There will be a negative relationship between humor and problems in self-regulation of emotion amongst the participants.
- There will be a positive relationship between humor and alexithymia amongst the participants.
- There will be a relationship between alexithymia and difficulty in regulation of emotion.

## **Chapter 2. Methodology**

### **Research Design**

The cross-sectional research design was used in this study.

### **Procedures and Samples**

The sample size of this study was (N=150), including both male and female participants. The adults were approached from public and private university of Rawalpindi and Islamabad were selected to participate in this research study. The inclusive age range of the participants was between 18 – 25 years.

### **Sampling Procedures and Techniques**

Convenient sampling technique was used to collect the data.

### **Inclusive Criteria**

Participants between the age ranges of 18 -25 years were included in the study. The participants of this study were university students, male and female, studying in undergraduate program i.e. 1st-8th semester in the university.

### **Exclusive Criteria**

Participants having age 17 and below were not part of the study.

### **Instruments**

The following questionnaires were used as instruments of the study. These questionnaires were shared with students who filled it themselves and return them to the researchers.

### **Humor Style Questionnaire**

Humor Style Questionnaire is a scale consisting of 32 items; it is a self-reporting performance that aims to assess the affiliative mood, self-improving belligerent humor and self-overpowering comedy in a person. It was authored by Sven Svebak in 1974. It uses Likert variables in the scale. This questionnaire had exhibited good reliability and construct validity (Heintz & Ruch, 2015). The Cronbach alpha's valid range for this questionnaire is 0.79 - 0.86.

### **Emotion Regulation Questionnaire**

Emotion regulation questionnaire is a scale consisting of 10 items, which is designed to measure participants' capability to regulate their own emotions. It was authored by Gross, J.J., & John, O.P. in 1998. It uses Likert variables in the scale. The Cronbach's alpha of emotion regulation questionnaire's total scores and sub-scales has an acceptable range of (0.68 - 0.82), therefore indicating that the ERQ proves to be a dependable measure of emotion regulation. Therefore, ERQ proves to be a valid and reliable measure to determine emotion regulation (Wang, Yuan, Wang, Han 2022).

### **Perth Alexithymia Questionnaire**

Perth alexithymia questionnaire is a 24-item self-reported measure of alexithymia. It has five sub-scales and was authored by David A. Preece, PhD in 2018. It uses Likert variables in the scale. All sub-scale and cumulative scores demonstrated a high internal reliability, and proved their validity (2021 Becerra, Baeza, Fernandez and Preece). The Cronbach alpha's valid range for this questionnaire is 0.82 - 0.94.

## **Procedure Details**

The participants of the study were selected from the twin cities (Rawalpindi and Islamabad) of Pakistan. The participants were young adults i.e. university students who filled out the provided questionnaires. The permission of the tool has already been taken from the author. Both oral and written consent for data collection was taken from the participants. The confidentiality of the collected data was ensured by the researcher. A demographic sheet was also attached with each set of questionnaires to obtain the relevant data. Later, the questionnaires and the demographic data was digitized and analyzed with IBM SPSS software.

## **Variables**

The variables used in this study were as follows:

Humor variables used were 32 in quantity and named as H1...H32. Emotion Regulation variables used was 10 in quantity and named as E1...E10. Alexithymia variables used were 24 in quantity and named as A1...A24.

The HUMOR was the variable representing cumulative result of all Humor variables ( $H1+H2...+H32$ ). The EMOTION REGULATION was the variable representing cumulative result of all Emotion Regulation variables ( $E1+E2...+E10$ ). The ALEXITHYMIA was the variable representing cumulative result of all Alexithymia variables ( $AQ+A2...+A24$ ).

## **Ethical Considerations**

This research followed the ethical guidelines of the APA standards. Written and oral informed consent was taken from each participant before collecting the data of the study. There was no physical and emotional harm to the participants of the study by the researcher. The confidentiality of collected data was ensured by anonymizing the information collected in the questionnaires. The physical consent form was used to get the written authorization of the participants. Also, the consent form contained information about the purpose of this research study and how the collected information was going to be used during the study.

## **Data Analysis Procedures**

SPSS was used for statistical analysis. The mean, standard deviations, and range were determined using descriptive statistics. The correlation was determined using Pearson correlation. For regression analysis, an independent T-test was used to predict the effect humor and difficulty in regulation of emotions and alexithymia in university students.

## Chapter 3. Results

### Demographic Results

#### Frequency Analysis

The following results of frequency analysis were seen from the collected data.

**Table 1**

*Frequency Analysis of Participants Distributed by Different Categories*

Category	Sub-Category	F	%
Gender	Male	55	36.7
	Female	95	63.3
Department	Natural Sciences	122	81.3
	Social Sciences	28	18.7
Family System	Nuclear	92	61.3
	Joint	58	38.7
Education in Years	12	61	40.7
	13	21	14.0
	14	20	13.3
	15	48	32.0
Marital Status	Unmarried	135	90.0
	Married	15	10.0
Residence status	Home	129	86.0
	Hostel	21	14.0
Employment Status	Employed	20	13.3
	Unemployed	130	86.7
Education of Father	Uneducated	7	4.7
	Matric	11	7.3
	Intermediate	17	11.3
	Bachelors	79	52.7
	Masters	27	18.0
Education of Mother	Doctorate	9	6.0
	Uneducated	7	4.7
	Primary	9	6.0
	Matric	9	6.0
	Intermediate	34	22.7
	Bachelors	58	38.7
	Masters	32	21.3
Doctorate	1	0.7	



Category	Sub-Category	F	%
Number of Siblings	0	5	3.3
	1.00	9	6.0
	2.00	36	24.0
	3.00	35	23.3
	4.00	38	25.3
	5.00	16	10.7
	6.00	9	6.0
	7.00	2	1.3
Occupation of mother	Army Officer	1	0.7
	Business	1	0.7
	Doctor	4	2.7
	Govt.servant	2	1.3
	Housewife	119	79.3
	Lawyer	1	0.7
	Private Job	2	1.3
	Teacher	20	13.3
Occupation of father	Army Officer	7	4.7
	Businessman	61	40.7
	Doctor	7	4.7
	Engineer	1	0.7
	Govt.servant	33	22.0
	Lawyer	3	2.0
	Private Job	31	20.7
	Retired Officer	1	0.7
	Teacher	6	4.0

*Note.* F=Frequency, %=Percentage.

From the frequency analysis, we found that there were more number of women participants (F=95, %age= 63.3) than males (F=55, %age=36.7). We had more number of participants in natural science department (F=122, %age=81.3) than in social science department (F=28, %age=18.7). We had more number of participants belonging to nuclear family system (F= 92, %age= 61.3) than to joint family system (F=58, %age=38.7). We had more number of participants having 12 years of education (F= 61, %age=40.7) and at 15 years of education (F=48, %age=32.0). We had more number of participants who were unmarried (F= 135, %age= 90.0) than who were married (F=15, %age=10.0). We had more number of participants who lived at their homes (F=129, %age=86.0) than at hostel (F=21, %age=14.0).

We had more number of participants who were unemployed (F=130, %age= 86.7) than who were employed (F=20, %age=13.3). Most of the participant's father education was bachelors (F=79, %age= 52.7). Most of the participant's mother education was also bachelors (F=58, %age= 38.7). The number of siblings for most participants were 4 (F=38, %age= 25.3). Most of the participant's mothers were housewives (F=119, %age= 79.3). Most of the participant's fathers were businessman (F= 61, %age=40.7).

## Reliability

We saw( $\alpha= 0.80$ ,  $n=32$ ) as humor reliability,( $\alpha=0.89$ ,  $n=24$ )as alexithymia reliability, ( $\alpha= 0.75$ ,  $n=10$ ) as emotion regulation reliabilityin our Cronbach's Alpha results and these valueswere in range of accepted values.

**Table 2**

*Descriptive Statistics and Reliability Results for Humor, Emotion Regulation, Alexithymia*

Scales	No. of Items	M	S.D	$\alpha$	Range		Skew	Kurt
					Potential	Actual		
Emotion Regulation Questionnaire	10	30.79	7.24	0.75	10-50	10-50	0.10	0.22
Perth's Alexithymia Questionnaire	24	70.95	16.60	0.89	24- 120	30-115	0.13	0.36
Humor Style Questionnaire	32	92.23	15.55	0.80	32-160	40-136	-0.60	1.19

*Note.*  $\alpha$ =Cronbach's alpha, M=Mean, S.D=Standard Deviation, Skew=Skewness, Kurt=Kurtosis

## Independent T-Test for Gender

In this analysis, we were trying to study the gender of participants with the use of humor, ERQ, alexithymia amongst the participants. We could see the p value was greater than 0.05 for Humor, Emotion Regulation and Alexithymia, thus there was not much variance in means between the genders.

The independent T-Test for gender generated the p value of 0.29 for humor and 0.38 for emotion regulation and 0.40 for alexithymia which were greater than 0.05 showing there was not a significant difference in the mean of humor, difficulty in emotion regulation and alexithymia. Thus, these means were not statistically significant.

**Table 3**

*T-Test Result for Humor, ERQ, Alexithymia Against Different Genders*

Variables	Males		Females		t(148)	p	95% CI	
	M	S.D.	M	S.D.			LL	UL
Humor	90.45	13.85	93.26	16.44	-1.00	0.29	-8.01	2.40
Emotion Regulation	30.11	7.09	31.12	7.33	-0.88	0.38	-3.51	1.35
Alexithymia	69.44	13.95	71.83	17.97	-0.85	0.40	-7.96	3.17

*Note.* M=Mean, S.D=Standard Deviation, t= value of t statistics, CI=Confidence Interval,

p=Significance value, LL=Lower Limit, UL=Upper Limit, MD=Mean Differences.

## Independent T- Test for Employment

In this analysis, we were trying to study the employment status of participants with the use of humor, ERQ, alexithymia amongst the participants. We saw significantly higher mean values for humor, emotion regulation and alexithymia in unemployed people.

The independent T-Test for gender generated the p value of 0.04 for humor and 0.21 for emotion regulation and 0.03 for alexithymia. Amongst these the p values for humor and alexithymia were less than 0.05, hence the difference in means of these was significant.

**Table 4**

*T-Test Results for Humor, ERQ, Alexithymia Against Different Employment Status*

Variables	Employed		Unemployed		t(148)	p	95% CI	
	M	S.D	M	S.D			LL	UL
Humor	85.45	14.91	93.28	15.44	-2.12	0.04	-15.12	-0.53
Emotion Regulation	28.90	6.72	31.08	7.302	-1.26	0.21	-5.62	1.25
Alexithymia	63.35	12.05	72.12	16.93	-2.23	0.03	-16.5	-0.99

*Note.* M=Mean, S.D=Standard Deviation, t= value of t statistics, CI=Confidence Interval,

p=Significance value, LL=Lower Limit, UL=Upper Limit, MD=Mean Differences.

## Pearson's Correlation Results

In this analysis, we were trying to study the Pearson's correlation of cumulative results of humor, ERQ, alexithymia amongst the participants.

**Table 5**

*Pearson's Correlation Results of Humor, Emotion Regulation, Alexithymia*

Variables	Humor	Emotion Regulation	Alexithymia
Humor	-	0.348**	0.592**
Emotion Regulation	-	-	0.548**
Alexithymia	-	-	-

*Note.* \*\*Correlation is significant at the 0.01 level (2-tailed).

From the above results we saw that the Humor had higher positive correlation with Alexithymia compared to Emotion regulation. As we saw that the correlation between humor and emotion regulation was 0.348 which was less than correlation between humor and alexithymia i.e. 0.592. Similarly, there was a positive correlation between emotion regulation and alexithymia i.e. 0.548 respectively.

## Chapter 4. Discussion

The aim of this study was to investigate the relationship between humor, alexithymia, and difficulty in emotion regulation. The sample for this study included 150 participants, amongst them 95 were female and 55 were male participants. The research design was correlational. In the analysis, the frequency analysis of demographic data was done. Independent systems T-Test was applied on demographics categories such as gender, employment status respectively. Also, Pearson's correlation of the three scale variables i.e. cumulative humor values, cumulative difficulty in emotion regulation values cumulative alexithymia values was determined. The reliability results of these variables were also derived and were in their acceptable ranges, namely humor had reliability of 0.80, alexithymia had reliability 0.89 and emotion regulation had reliability of 0.76 respectively.

As we mentioned earlier in our hypothesis that there will be a negative association in the Humor and ERQ amongst participants. And we saw from the Pearson's correlation results the value of correlation between Humor and ERQ was positive and stood 0.348. As this value was significantly less than 1.00 and thus indicates that correlation between Humor and ERQ was a very weak one. As per hypothesis, the results were not negatively correlated but a very weak positive relationship was found in the study. This could potentially be explained due to lower number of participants of the study and having a larger data set may further weaken the correlation and we may see negative correlation between Humor and ERQ values.

Similarly with our second hypothesis i.e. positive correlation between Humor and Alexithymia was also seen in the resulting values. We saw the same from our collected data that the correlation value between Humor and Alexithymia stood at 0.598, indicating a definite and somewhat strong positive correlation existed and in line with our hypothesis.

For our third hypothesis, it was stated that there will be an association between the difficulty in Emotion regulation and alexithymia; we saw this as a positive association based on the values from Pearson's correlation i.e. 0.548. This aligned with our findings that people who had difficulty in Emotion regulation were likely to suffer from alexithymia as well.

We also assessed the reliability of our results and the values stood at humor 0.806, ERQ 0.894, alexithymia 0.755 using the Cronbach's Alpha method. The collected data was reliable because the values were within their acceptable ranges as reported by their authors.

We also analyzed the collected data using the T-test (Independent systems T-test) the overall humor values were assessed against different demographic variables. During the results against gender demographic, we saw for mean value for humor was higher in females (93.26) compared to males (90.45). This can indicate that females were more apt in using humor than their counterparts. Also, we see that the ERQ, alexithymia mean values were being reported similarly between male and female participants thus non-significant.

Also, from our T-Test analysis of data against employment demographic. We saw the mean values reported for people with employment at 85.45 compared to their counterparts i.e. unemployed at 93.23. The T-Test reported the p value for humor for these means at 0.04 which is less than 0.05 and indicating the difference in means as significant. The emotional regulation means were reported as 28.9 for employed and 31.0 for unemployed participants; with the p value at 0.28 which is higher than 0.05. Thus, indicating these values were non-significant. We saw the alexithymia means reported for employed participants at 63.35 and unemployed participants at 72.10. The p value reported at 0.03 which is less than 0.05 thus indicating the differences in means as significant. This indicates that there exists a correlation



between humor and alexithymia and certain humor styles can be predictor for alexithymia in participants.

These findings potentially indicated that people who were employed were either less happy and/or had more difficulty in regulating their emotions compared to their counterparts. As these people have to make their ends meet and potentially had more stress factors to deal with and having stressors of daily studies as well. Whereas their counterparts didn't have to deal with the stressors such as rent, food expenses, job performances. Hence, they had better emotion regulation capabilities and humor capabilities.

This study was conducted with a small set of participants in twin cities of Rawalpindi and Islamabad, Pakistan. However, this sample size of participants could be increased to a higher number which can further improve the reliability of the data collected. Furthermore, the participants in the study were undergraduate university students; for future studies we can also include people from different backgrounds such as graduate students, employed personnel from different spheres of life. This can provide us data of how overall population is adept in emotion regulation and alexithymia, as well as humor capabilities. However, since this research was part of university thesis and limited in scope. Psychologists interested to further investigate the spheres of humor, alexithymia, ERQ can build upon the above limitations and recommendations to expand the horizons of study in local Pakistani population.

## **Chapter 5. Limitations and Implications**

### **Limitations**

The study had the following disadvantages. The study was lightly under powered established the earlier capacity study; growing the sample length can have the likelihood that the study has even greater capacity to discover dissimilarities across environments, while still admitting trait-located funniness styles expected in the framework of the guidance. The current research was laboratory-located, and the pretended background can limit decisions about the generalization of the belongings in real-life backgrounds or positions. Additionally, as one scenario can demonstrate reality while the other can provide to the artificiality of the data. Replication of the study accompanying temperament calculated through more practical examining can likely increase generalization. Furthermore, this study utilized an academy junior sample that, while completely different, can influence the generalization of the results.

### **Implications**

Although studies can document the severe results of regulation, they cannot address either these temporary results have a cumulative affect agreement. Studies submitted that individual differences in the use of reappraisal and abolition intentionally had connection with emotional knowledge and emotional verbalization, in addition to important social consequences. Study proven whether the established use of reappraisal and of abolition disagree in their lengthier term cumulative affect welfare.

On the action of our model, as well as on our exploratory and correlation judgments to this point, we anticipated that reappraisal would promote mental happiness. After all, individual key ingredients in reappraisal was belittling the negative affecting impact of

situation, and to the extent that depressing symptoms are either generated or exacerbated by destructively negative answers to challenges or misfortunes, thus reappraisal should wield a securing effect against depressing symptoms. Furthermore, taking everything in mind the definite passionate and social consequences guide reappraisal, the reappraisers must have greater existence vindication and larger pride. Given their effective and public accomplishments regardless of emotional challenges, we anticipated reappraisers expected mainly more optimistic and to have a better sense of efficiency concerning their immediate atmospheres.

The never-ending use of abolition should be affiliated with more antagonistic effects. In general, self-experience conflicts that typify suppressors have happened linked to adaptation questions (Nolen, 2010). Suppressors still feel more negative sentiment, manage less efficiently, ruminate more, and have less public support, all determinants popular to increase risk for depressive syndromes (Nolen, 2010). We so wanted to see if suppression expected had connection with raised levels of depressive syndromes. Suppressors' prevention and lack of close public friendships also implies less history of vindication, lower self-esteem, and a less on top of world stance about the future. In agreements of Ryff's (1989) domains of beneficial comfort, we anticipated suppressors to show lower levels of well-being comprehensive, and, taking everything in mind Study, we anticipated particular difficulties in the rule of beneficial connections with possible choice. Finally, because many various factors influence an individual's adaptation, we anticipated connections between individual dissimilarity in passion managing and adjustment expected limited in breadth.

## **Chapter 6. Conclusion**

We performed this study to find relationship between Humor, Emotion Regulation Difficulties, Alexithymia amongst undergraduate university students of twin cities (Rawalpindi, Islamabad) of Pakistan. Amongst the participants, we gather data of N=150 students including male and female students of university. The data was analyzed using 'Independent Systems T-test' to verify the findings and correlation was developed using 'Pearson's correlation' respectively. The results of the study aligned with our initial hypothesis that there was a negative association between Humor and Emotion Regulation Difficulty, and this was seen via the Pearson's correlation value of 0.348. Similarly, there was a positive correlation between Humor and Alexithymia as anticipated and was verified with Pearson's correlation value of 0.592 respectively. We also hypothesized that there will be an association between the Alexithymia and Emotion Regulation Difficulty and we found that a positive association existed based on Pearson's value of 0.548 respectively.

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## **Appendix A**

### **Informed Consent Form**

I understand that I'm being invited to be a part of research study conducted by a student of BS Psychology from Capital University of Science and Technology. The research is being conducted on the topic of relationship between humor, difficulty in regulation of emotions and alexithymia among undergraduate students and that this research is a requirement of the degree. I also understand that provided information will be anonymized and shall be used for research purposes only. I also understand that I have the right to withdraw from the study at anytime.

By signing the document below, I agree to be part of the research which shall adhere to the above mentioned terms and conditions.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Demographic Sheet

Age (Years): \_\_\_\_\_

Gender: Male  Female

Educational Level (in years) \_\_\_\_\_

Department: Social Sciences  Natural Sciences

Father Education \_\_\_\_\_

Mother Education \_\_\_\_\_

Father Occupation \_\_\_\_\_

Mother Occupation \_\_\_\_\_

Family System: Nuclear  Joint

Siblings \_\_\_\_\_

Marital Status \_\_\_\_\_

Residence: Home  Hostel

Employment Status: Employed  Unemployed

## Appendix B

### Scales

Totally disagree 1, slightly disagree 2, neither agree nor disagree 3, slightly agree 4, totally agree 5

### Questionnaires

#### Alexithymia Questionnaire

**Author:** David A. Preece, PhD

Alexithymia Questionnaire supported the 5 sub-scale structure items.

The mean total score differs about from those students. The intercorrelations of sub-scales were the same in the three samples. However, principal components analyses of the sub-scale scores of the subjects revealed a different factor structure compared to that in the other samples. Correlations between scales support the validity of the Alexithymia. The validity of the Alexithymia is further supported by correlations between Alexithymia scores and measurements of psychological problems. Vorst, H. C. M. (2001). Validity and reliability of the Alexithymia Questionnaire.

No	Statement	Totally Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Totally Agree
1	When I'm feeling bad (feeling an unpleasant emotion), I can't find the right words to describe those feelings					
2	When I'm feeling bad, I can't tell whether I'm sad, angry, or scared					
3	I tend to ignore how I feel					

4	When I'm feeling good (feeling a pleasant emotion), I can't find the right words to describe those feelings					
5	When I'm feeling good, I can't tell whether I'm happy, excited, or amused					
6	I prefer to just let my feelings happen in the background, rather than focus on them					
7	When I'm feeling bad, I can't talk about those feelings in much depth or detail					
8	When I'm feeling bad, I can't make sense of those feelings					
9	I don't pay attention to my emotions					
10	When I'm feeling good, I can't talk about those feelings in much depth or detail					
11	When I'm feeling good, I can't make sense of those feelings					
12	Usually, I try to avoid thinking about what I'm feeling					
13	When something bad happens, it's hard for me to put into words how I'm feeling					
14	When I'm feeling bad, I get confused about what emotion it is					
15	I prefer to focus on things I can actually see or touch, rather than my emotions					
16	When something good happens, it's hard for me to put into words how I'm feeling					
17	When I'm feeling good, I get confused about what emotion it is					
18	I don't try to be 'in touch' with my emotions					
19	When I'm feeling bad, if I try to describe how					

	I'm feeling I don't know what to say					
<b>20</b>	When I'm feeling bad, I'm puzzled by those feelings					
<b>21</b>	It's not important for me to know what I'm feeling					
<b>22</b>	When I'm feeling good, if I try to describe how I'm feeling I don't know what to say					
<b>23</b>	When I'm feeling good, I'm puzzled by those feelings					
<b>24</b>	It's strange for me to think about my emotions					

### **Emotion Regulation Questionnaire**

**Author:** Gross, J.J., & John, O.P.

The ERQ total scores and sub-scales were acceptable, indicating that the ERQ had acceptable to excellent levels of internal consistency reliability. Therefore, ERQ is a valid and reliable measure to assess the emotion regulation of rural-to-urban migrant adolescents and young adults.

<b>No</b>	<b>Statement</b>	<b>Totally Disagree</b>	<b>Slightly Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Slightly Agree</b>	<b>Totally Agree</b>
<b>1</b>	When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about					
<b>2</b>	I keep my emotions to myself					
<b>3</b>	When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking					



	about					
<b>4</b>	When I am feeling positive emotions, I am careful not to express them					
<b>5</b>	When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm					
<b>6</b>	I control my emotions by not expressing them					
<b>7</b>	When I want to feel more positive emotion, I change the way I'm thinking about the situation					
<b>8</b>	I control my emotions by changing the way I think about the situation I'm in					
<b>9</b>	When I am feeling negative emotions, I make sure not to express them					
<b>10</b>	When I want to feel less negative emotion, I change the way I'm thinking about the situation					

## Humor Questionnaire

**Author:** Sven Svebak

The scale is an item undimmed factor structure with a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The Humor Questionnaire (HQ) is a widely used self-report measure of a multidimensional approach to sense of humor. The HQ is psychometrically sound, with appropriate levels of reliability and validity.

No	Statement	Totally Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Totally Agree
1	I usually don't laugh or joke around much with other people					
2	If I am feeling depressed, I can usually cheer myself up with humor					
3	If someone makes a mistake, I will often tease them about it					
4	I let people laugh at me or make fun at my expense more than I should					
5	I don't have to work very hard at making other people laugh -- I seem to be a naturally humorous person					
6	Even when I'm by myself, I'm often amused by the absurdities of life					
7	People are never offended or hurt by my sense of humor					
8	I will often get carried away in putting myself down if it makes my family or friends laugh					
9	I rarely make other people laugh by telling funny stories about myself					
10	If I am feeling upset or unhappy, I usually try to think of something funny about the situation to make myself feel better					
11	When telling jokes or saying funny things, I am usually not very concerned about how other people are taking it					
12	I often try to make people like or accept me					

	more by saying something funny about my own weaknesses, blunders, or faults					
13	I laugh and joke a lot with my friends					
14	My humorous outlook on life keeps me from getting overly upset or depressed about things					
15	I do not like it when people use humor as a way of criticizing or putting someone down					
16	I don't often say funny things to put myself down					
17	I usually don't like to tell jokes or amuse people					
18	If I'm by myself and I'm feeling unhappy, I make an effort to think of something funny to cheer myself up					
19	Sometimes I think of something that is so funny that I can't stop myself from saying it, even if it is not appropriate for the situation					
20	I often go overboard in putting myself down when I am making jokes or trying to be funny					
21	I enjoy making people laugh					
22	If I am feeling sad or upset, I usually lose my sense of humor					
23	I never participate in laughing at others even if all my friends are doing it					
24	When I am with friends or family, I often seem to be the one that other people make fun of or joke about					
25	I don't often joke around with my friends					
26	It is my experience that thinking about some amusing aspect of a situation is often a very effective way of coping with problems					
27	If I don't like someone, I often use humor or teasing to put them down					
28	If I am having problems or feeling unhappy, I often cover it up by joking around, so that even my closest friends don't know how I really feel					
29	I usually can't think of witty things to say when I'm with other people					
30	I don't need to be with other people to feel amused -- I can usually find things to laugh about even when I'm by myself					
31	Even if something is really funny to me, I will not laugh or joke about it if someone will be offended					
32	Letting others laugh at me is my way of keeping my friends and family in good spirits					

## Appendix C

### Permission of Alexithymia Questionnaire

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#### Permission of Alexithymia questionnaire

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David Preece <david.preece@curtin.edu.au>  
To: Naeema Tariq <naeematariq98@gmail.com>  
Cc: "namood.sahar@cust.edu.pk" <namood.sahar@cust.edu.pk>

Wed, Sep 28, 2022 at 10:31 AM

Hi Naeema

Thanks for your interest in the PAQ

You are very welcome to use it

Best wishes  
Dave

David Preece  
PhD, MClinPsych, BA(Hons), MAPS  
Lecturer | School of Population Health (Psychology) | Curtin enAble institute  
Director of the [Perth Emotion & Psychopathology Lab](#)

Chair of Professional Development | APS College of Clinical Psychologists (WA)  
WA Committee Member | Australian Association for Cognitive and Behavioural Therapy  
WA Committee Member | Australian Rotary Health  
Editor-in-Chief | Journal of Emotion & Psychopathology

Curtin University  
Room | 408.3511

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Web | [researchgate.net](https://www.researchgate.net)



## Permission of Humor Questionnaire

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### Sense of humour questionnaire

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**Rod Martin** <ramartin@uwo.ca>  
To: Naeema Tariq <naeematariq98@gmail.com>

Mon, Sep 26, 2022 at 3:01 PM

As requested, I'm attaching a copy of the Humor Styles Questionnaire (HSQ) along with scoring instructions. You are welcome to make copies of this measure for use in your research project. I'll also include the original article on the HSQ and a list of published studies that have use it. Best wishes on your research!

Sincerely  
~ Dr. Rod Martin  
Professor Emeritus

## Permission of Emotion Regulation Questionnaire

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### URGENT:: Permission for Emotional Regulation Questionnaire

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**James Gross** <gross@stanford.edu>  
To: Naeema Tariq <naeematariq98@gmail.com>

Mon, Jan 9, 2023 at 4:03 PM

You're welcome to use the ERQ, which you may find on our website, URL below.

---

James J. Gross, Ph.D.  
Ernest R. Hilgard Professor of Psychology  
Bass University Fellow in Undergraduate Education

Department of Psychology  
Stanford University  
Stanford, CA 94305-2130  
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