

# Humor, Mankind's Greatest Blessing: The Relationship between Sense of Humor and Psychological Wellbeing among High School Students in Taiwan

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## Abstract

The aim of the present study was to investigate the relationships between sense of humor and self-esteem, depression, emotional blockage, and poor coping. In addition, the statistical differences between the variables in different groups of participants were examined. Chinese questionnaires with multiple scales were used to collect the data. For all participants, there was a positive correlation between sense of humor and self-esteem and a negative correlation with poor coping. As the result suggests, sense of humor is related to self-esteem and not to depression. People with higher sense of humor scores do not always have lower depression scores. In addition, no correlation was found between sense of humor, self-esteem, depression, emotional blockage, and poor coping in the male students. Finally, the students with higher scores for sense of humor and depression had lower scores for self-esteem.

*Keywords:* depression, high-school students, humor, self-esteem, well-being

## 1 Introduction

Mark Twain once said, "Humor is mankind's greatest blessing;" this literary thought has been scientifically investigated in various life situations. For example, humor has been found to be an important mechanism when doctors and patients are faced with the stress of making decisions about death [1]. Laughter and humor interventions are also effective in relieving depression and anxiety in adults [2]. To date, a consensus has been reached that humor is related to our self-esteem and mental health [3]; however, the comparison between groups such as students and non-students and women and men did not reveal the same results. Obviously, more work is needed to explore more about humor. For adolescents today, the stress caused by schoolwork and relationships is overwhelming, but they do not have appropriate strategies to deal with their emotions. Therefore, it is worthwhile to explore the relationships between positive traits (i.e., humor and self-esteem) and negative traits (i.e., depression, emotional blockage, and poor coping). In this way, we can distill scientific findings that will help teenagers grow into healthy adults.

In the literature, females tend to be more prone to depression, while males tend to hide their emotions [4]. People of both genders seem to experience different emotional problems. This scientific finding can be extended by examining whether different genders perform differently on five variables that would be examined in the present study (i.e., sense of humor, self-esteem, depression, emotional blockage, and poor coping). The results will certainly shed light on how to

provide emotional support to people of different genders. The following two research questions guided this study: RQ1: Is there any correlation between sense of humor and positive/negative characteristics (i.e., self-esteem, depression, emotional blockage, and poor coping)? RQ2: Do different groups (e.g., females versus males; students versus non-students) show differences in terms of positive characteristics (i.e., sense of humor and self-esteem) and negative characteristics (i.e., depression, emotional blockage, and poor coping)?

## 2 Methodology Design

### 2.1 Example

A total of 305 participants responded to the questionnaire. About 68% of them were female, 31% were male, and 1% did not reveal their gender. About 52% of them were students, of which 78% were female, approximately 21% were male, and 1% did not want to reveal their gender. Of the remaining 148 non-student participants, about 58% were female, 41% were male, and 1% did not reveal their gender.

### 2.2 Research Instruments

Data were collected using an online questionnaire via Google Form. This questionnaire consisted of three subscales (i.e., Humor Scale (HS), Self-Esteem Scale (SS), Depression Scale (DS)) and five self-developed items measuring emotional blockage and poor coping. All items were written in Chinese, but translated into English for presentation in this study. To measure participants' sense of humor, this study used the Taiwan Adolescent Humor Instrument (TAHI) [5]. An item to measure humor is: "I like to tell or listen to funny jokes." The participants answered the items on a 5-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree). This questionnaire consists of five questions adapted from the Rosenberg Self-Esteem Scale (RSE) [6] [7]. An example to gauge self-esteem is: "On the whole, I am satisfied with myself." Items were presented on a 5-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree). The depression scale used was the BSRS-5, which has a high consistency with the Taiwanese Depression Scale (TDS) [8]. An item to measure depression is: "Difficulty falling asleep." Participants rated the degree to which the descriptions matched their situations on a 5-point Likert scale (5 = strongly agree; 1 = strongly disagree). To measure emotional blockage and poor coping, five items were developed. An example is: "Because of caring about others, I would smile even though I feel bad." The items were presented on a 5-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree).

### 2.3 Software for Data Analysis

The collected data was processed with SPSS 20 for the analysis of correlations and *t* tests.

### 3 Results

#### 3.1 The Correlations of Five Variable Scores of All Participants

As Table 1 shows, HS had a significant positive correlation with SS and a negative correlation with PCS; SS had a significant negative correlation with DS and PCS; and DS had a positive correlation with PCS.

Table 1: The correlations of five variable scores of all participants.

	HS	SS	DS	EBS	PCS
HS	-				
SS	<b>.245**</b>	-			
DS	-.039	<b>-.515**</b>	-		
EBS	.100	-.008	.052	-	
PCS	<b>-.227**</b>	<b>-.425**</b>	<b>.432**</b>	.057	-
mean	24.229	21.209	5.855	6.478	7.304
SD	5.075	4.610	3.934	1.642	1.948

Note. \*\* $p < .01$ . HS = Humor score, SS = Self-esteem score, DS = Depression score, EBS = Emotional blockage Score, PCS = Poor coping score.

#### 3.2 Female Participants and Male Participants

For female participants, HS had a positive correlation with SS ( $r = .218, p = .002$ ) and a negative correlation with PCS ( $r = -.191, p = .006$ ). SS had a negative correlation with PCS ( $r = -.403, p < .001$ ) and DS ( $r = -.505, p < .001$ ). DS had a positive correlation with PCS ( $r = .438, p < .001$ ) and EBS ( $r = .158, p = .022$ ). EBS had a positive correlation with PCS ( $r = .157, p = .024$ ). In addition, HS had a positive correlation with SS ( $r = .316, p < .001$ ) and a negative correlation with PCS ( $r = .427, p = .004$ ). SS had a negative correlation with PCS ( $r = -.403, p < .001$ ). DS had a negative correlation with SS ( $r = -.532, p < .001$ ) and a positive correlation with PCS ( $r = .440, p < .001$ ).

For female non-students, HS had a positive correlation with SS ( $r = .277, p = .010$ ). SS had a negative correlation with DS ( $r = -.369, p < .001$ ) and PCS ( $r = -.307, p = .004$ ). DS had a positive correlation with EBS ( $r = .277, p = .010$ ) and PCS ( $r = .407, p < .001$ ). For male participants, HS had a positive correlation with SS ( $r = .301, p = .003$ ) and EBS ( $r = .205, p = .047$ ); it had a negative correlation with PCS ( $r = -.538, p = .002$ ). SS had a negative correlation with DS ( $r = -.579, p < .001$ ). DS had a positive correlation with PCS ( $r = .451, p < .001$ ). In addition, SS had a negative correlation with DS ( $r = -.649, p < .001$ ) and PCS ( $r = -.517, p = .002$ ). DS had a positive correlation with PCS ( $r = .480, p = .005$ ). For male non-students, HS had a positive correlation with SS ( $r = .453, p < .001$ ) and a negative correlation with PCS ( $r = -.413, p = .001$ ). SS had a negative correlation with PCS ( $r = -.520, p < .001$ ) and DS ( $r = -.509, p < .001$ ). DS had a negative correlation with EBS ( $r = -.288, p = .024$ ) and a positive correlation with PCS ( $r = .407, p = .001$ ).

### 3.3 Summary of the Correlation Results

As the results show, HS had a positive correlation with SS and a negative correlation with PCS among all participants. For male students, no correlation was found between HS and other variables. For female non-students, HS only had a correlation with SS. SS had a negative correlation with DS and PCS in all groups (i.e., all participants, female participants, male participants, female students, male students, female non-students, and male non-students).

Results of RQ2: Do different groups (e.g., females versus males; students versus non-students) show differences in terms of positive characteristics (i.e., sense of humor and self-esteem) and negative characteristics (i.e., depression, emotional blockage, and poor coping)? To answer RQ2, a series of *t* tests were conducted. Significant differences found in different groups in terms of five variable scores (i.e., HS, SS, DS, EBS, and PCS) are presented below.

### 3.4 Students Versus Non-students

According to the results of the *t* tests, significant differences were found in HS, SS, and DS between students and non-students. Table 2 reports the means, standard deviations, degree of freedom, and *t* test results. As Table 2 shows, students had higher scores on HS and DS, showing that they were more humorous and depressed than non-students. Students had a lower score on SS, showing that they had less self-esteem than non-students.

Table 2: Means, standard deviations, and significant *t* test results between students and non-students

Variables	Groups	mean	SD	<i>df</i>	<i>t</i>
HS	Students	24.968	4.938	303	2.644**
	Non-students	23.445	5.116		
SS	Students	19.853	5.058	281.197	-5.599**
	Non-students	22.646	3.572		
DS	Students	6.496	4.155	300.543	2.981**
	Non-students	5.175	3.575		

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . HS = Humor score, SS = Self-esteem score, DS = Depression score.

### 3.5 Female Students Versus Female Non-student

According to the results of the *t* tests, significant differences were found in HS, SS, and DS between female students and female non-students. Table 3 reports the means, standard deviations, degree of freedom, and *t* test results. As Table 3 shows, female students had higher scores on HS and DS, showing that female students were more humorous and depressed than female

non-students. Female students had a lower score on SS, showing that female students had less self-esteem than female non-students.

Table 3: Means, standard deviations, and significant t-test results between female students and female non-students.

Variables	Groups	mean	SD	df	t
HS	Female Students	24.836	4.587	206	2.811**
	Female Non-students	22.965	4.916		
SS	Female Students	19.737	5.313	204.930	-4.876**
	Female Non-students	22.709	3.470		
DS	Female Students	6.442	4.260	202.522	2.378*
	Female Non-students	5.174	3.416		

Note. \* $p < .05$ , \*\* $p < .01$ . HS = Humor score, SS = Self-esteem score, DS = Depression score.

### 3.6 Male Students Versus Male Non-student

According to the results of t tests, a significant difference was found in SS between male students and male non-students. Table 4 reports the means, standard deviations, degree of freedom, and t-test results. As Table 4 shows, male students had lower scores on SS, showing that male students had less self-esteem than male non-students.

Table 4: Means, standard deviations, and significant t-test results between male students and male non-students.

Variables	Groups	mean	SD	df	t
SS	Male Students	20.512	3.945	92	-2.559*
	Male Non-students	22.620	3.737		

Note. \* $p < .05$ . SS = Self-esteem score.

## 4 Discussion

First, for all participants, there was a positive correlation between sense of humor and self-esteem and a negative correlation with poor coping. As the result suggests, sense of humor is related to self-esteem. Individuals with high self-esteem are related to highest levels of affiliative humor and lowest levels of aggressive humor [9]. The relationship between more types of humor style and self-esteem could be study in further research. Present study also indicates that sense of humor is negatively related to poor coping, means individuals with higher sense of humor tend to have capability to cope their emotions. A previous study shows that coping humor could buffer the relationship for burnout and PTSD [10]. The correlation between coping humor and emotional coping in educational environment could be analyzed in further study.

Second, no correlation was found between sense of humor, self-esteem, depression, emotional blockage, and poor coping in male students. The finding suggests that when we want to know whether male students have high self-esteem, suffer from depression, prevent access to their emotions, and have appropriate coping strategies, we should not rely on how humorous they are. The positive correlation between students' sense of humor and self-esteem is consistent with previous study [11].

Finally, the students had higher scores for sense of humor and depression and lower scores for self-esteem. This result is consistent with that of the previous study [12] [13]. Appropriate usage of humor in class is proved to be supportive in education [14]. Also, considering the higher score of depression and lower score of self-esteem the students have, better student-teacher relationships might ease this situation and increase their self-esteem [15] [16].

Empirically, two suggestions are proposed for future research. On the one hand, since the data in the present study were collected by an online questionnaire using a specific application (i.e., Google Form), only people who had electronic devices, who had access to the Internet, and who were familiar with the application could participate in the survey. This should create bias in the sampling, so future studies can include participants of various types to present a more comprehensive understanding of humor. On the other hand, to measure emotional blockage, future studies can develop more items based on the two developed in the present study to examine if they are reliable and valid.

Pedagogically, two more suggestions are proposed for teachers. First, for female students, teachers should teach them about the psychological conditions of people and guide them in reducing depressive emotion. Second, for students of both genders, teachers can build their sense of humor, which will develop their ability to cope with inevitable stress.

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