

# The Effect of Teen Relationships on Mental Health

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## **Abstract**

The purpose of this study is to see if people in relationships have worse mental health than those who aren't in relationships. Previous research has suggested that good relationships lead to good mental health outcomes and bad relationships lead to bad mental health outcomes. We have hypothesized that the mean mental health scores of people in relationships will be significantly different from people who aren't in relationships, and the mean mental health symptoms of people in unhealthy relationships will be significantly worse than those of people who are in healthy relationships. A total of 28 participants, 14 people who were in a relationship and 15 who weren't, took two questionnaires, the DASS-21 and the relationship quality satisfaction test. We found that people in relationships were more stressed than those who weren't in relationships, but when it came to depression and anxiety, there was no significant difference. Our data suggest that teens in relationships should be mindful of their stress levels.

## Introduction

Romantic relationships can have a big impact on our lives overall and can affect us mentally. Of teens between 13 and 17, 39% have been in relationships (1). Over 1 in 3 teens have been in a romantic relationship, which is a lot of people (1). We can test the theory and understand how it affects them mentally so that teachers, family, and others can be aware. Researchers on this topic include the three main types of mental health symptoms, conflict in relationships, sexual effects in relationships, marriage effects on mental health, and physical and mental health in relationships (2, 4-7). This is important because educators and therapists must know the causes and benefits of relationships. In our study, we gave teens in relationships and singles a survey to see where their mental health rates were and how different relationships affect them.

Stress, anxiety, and depression are the three major mental health problems in our world (2). They are all different, but they also have some similarities. Anxiety is feeling worried or on edge. Depression is when a person feels sad or disinterested in normal activities. Stress is both a mental and physical response to something being difficult. When these things are experienced, it can be due to trauma or everyday life events. They are triggered in the brain in response to these things. Feeling these emotions is normal for everyone, but when they become constant and interfere with daily life, it becomes an actual mental health disorder that requires treatment. Depression, anxiety, and stress are measured using the DASS-21 (3). It is 21 questions, with 7 questions for each mental health problem. For example, a statement for depression might read, "I couldn't seem to experience any positive feelings at all." A participant answers 0-3, with 0 meaning not at all and 3 meaning always. The DASS21 does not diagnose people with mental health disorders, it instead tells us how severe a person's symptoms are, with levels from "Normal" to "Extremely Severe".

Conflict in a romantic dating relationship can hinder the mental health of young adults. Nair and Sinha did a study to see if depression, anxiety, and stress affect romantic relationships (4). Nair and Sinha studied 106 college students who were in committed relationships or were single and were in the age group of 18 to 25. They had the students take two surveys, one for the depression, anxiety, and stress scale (3) and the Conflict in Adult Dating Inventory form (CADRI-S). They put the information from the survey scores into an R-test. The research found that there was a positive correlation between romantic dating relationships and depression. However, there was no correlation between romantic dating relationships and stress and anxiety. This shows that depression has a great impact on romantic relationships, and stress and anxiety may not (3).

One important part of relationships for many young people is sexual relationships, especially "hook-ups." Sinder took 140 undergrad students, 65 men and 74 women, around the ages of 18-21, of all different kinds of races (5). Sinder does this to determine if other kinds of relationships are related to depression and anxiety in college students. Sinder thinks that higher levels of casual sexual encounters would be associated with greater depression and anxiety. Sinder gave all 140 students multiple surveys to test this. She went through numerous

relationships, such as romantic relationships, friends with benefits, hookups, etc. Sinder found that men are more interested in having non-romantic sexual relationships, and women want more romantic relationships. Still, contrary to the hypothesis, people who engage in hook-ups do not have poor mental health (depression, anxiety, stress, self-esteem). Also, women with negative attitudes towards hook-ups and with few partners had higher anxiety, which makes sense since anxious people don't want to put themselves out there. For college students, gender is a major factor in how people feel about sexual encounters. Overall, casual relationships were not associated with poor health (5). Snider's study suggests that gender is important when discussing relationships and mental health.

In addition to simply dating, couples can also be in committed marriages, which could affect their mental health. Jankovic et al. wanted to find whether different relationship status affects people's satisfaction with life and depression (6). They took 200 single people, 197 people in romantic relationships, and 245 who are married, aged 20-40, to see who is satisfied with their lives and how their depression rates differed. Single people had lower satisfaction with life than married or people in relationships. Single people also had worse depression compared to married people. Overall, married people had the highest satisfaction with life and the lowest depression. In this study, the researchers also found that depression and satisfaction had nothing to do with the gender of the person in the relationship (6). This, combined with other studies, suggests that the relationship between mental health and gender is complicated and should be tested to see if these results are supported in our sample.

Navaneeth and Kanth want to find that relationships have a physical and mental effect on young people (7). They conducted a meta-analysis, which is a summary of all 27 of the available projects on the topic. They have found that relationships can help or hurt a person's mental health, based on risk factors and protective factors in the relationship. When two people have a committed relationship that is high in quality, with dyadic factors like intimacy and partner support, then they will have positive outcomes. These include increased happiness, relational well-being, psychological well-being, decreased loneliness, suicidal ideation, and substance abuse. The risk factors for a relationship are the partner's substance use, low relationship quality, attachment anxiety, aggressive behavior, and forced sexting, which can cause loneliness and internalizing symptoms like depression, anxiety, stress, and low life satisfaction (7). Overall, this suggests relationships can have good or bad outcomes, and it depends on whether they have a good relationship or a bad relationship. We will need to measure how good the relationship is in our study as well.

Overall, the research says that people in relationships usually have worse mental health than single people, and it also matters how healthy your relationship may be. This study contributes to a better understanding of mental health in relationships and how different ones affect people's mental state. In our research, we gave couples and people who aren't in relationships surveys called the DASS-21, where we gave them a scale based on 0 - 7 to indicate where they are with anxiety, stress, and depression.

We have hypothesized that the mean mental health of people in relationships will be significantly different from people who aren't in relationships. This is because research suggests younger teens have unhealthy relationships, while other researchers suggest that overall relationships are healthy (2). Second, we hypothesized that the mean mental health symptoms of people in unhealthy relationships would be significantly worse than those of people who are in healthy relationships. This is because researchers suggest that unhealthy relationships cause more mental health problems (4). After conducting our study, we had to revise this hypothesis because no one in the sample reported an unhealthy relationship. Instead, our second hypothesis explored whether there was a relationship between the mental health of the two partners in the same relationship.

### **Method section and materials**

A total of 29 high school students from The Neighborhood Academy participated in this study to determine if the status of one's relationship affects their mental health. All participants were African American, composed of males (n=15) and females (n=14) from all grades and between the ages of 14 and 18. All students were given the same two questionnaires, which are the DASS-21 and a questionnaire to see how satisfied each partner is in their relationship (3,8).

The participants were given a survey known as the DASS-21 to get their baseline scores on their stress, anxiety, and depression symptoms (3). The survey consisted of 21 statements in total, with 7 statements about either stress, anxiety, or depression symptoms. For example, anxiety had statements such as "I was worried about situations where I might panic and make a fool of myself. For depression, there were statements such as "I couldn't seem to experience any positive feeling at all". Lastly, for stress, there were statements such as "I found it hard to wind down. Based on the participants' responses to those statements, they would answer 0, meaning that the statement did not apply to them at all, and 3, meaning that it applied to them very much or most of the time. The participants were scored by their ratings being added up on the scale for each statement on anxiety, stress, or depression. Those totals for each disorder would be multiplied by two, and these totals would then determine the severity of their symptoms for each disorder. For example, a score of 0-9 in the depression category would mean the person's symptoms are normal, and a score of 28 would mean that their symptoms are extremely severe. I also have a survey to see the satisfaction with the relationship called The Relationship Satisfaction Test (8). It's a questionnaire of 20 questions, rating between disagree, neutral, and agree. The test provides a score from 0-100 and a label for the relationship: unhappy, somewhat unhappy, neither happy nor unhappy, fairly happy, and extremely happy.

To compare the mental health of people in relationships, we used a t-test for independent Samples. The abbreviation for the mean is M, and for standard deviations, it is SD. We used the website [vassarstats.net](http://vassarstats.net) with a 0.05 cut-off for significance.

## Results

The purpose of this study is to see whether people in relationships have better or worse mental health than those who aren't in relationships. To do this, we took people who were single and who were in relationships and gave them two questionnaires: the DASS-21 and a questionnaire based on the quality of their relationship.

For people in relationships, we had seven heterosexual couples. For people not in a relationship, there were eight male and seven female participants. All participants went to The Neighborhood Academy and were in grades 9-12. For the couples in the study, their average relationship quality score was 85%, which would be a fairly happy relationship. No one scored below a 68%, which would be "neither happy nor unhappy."

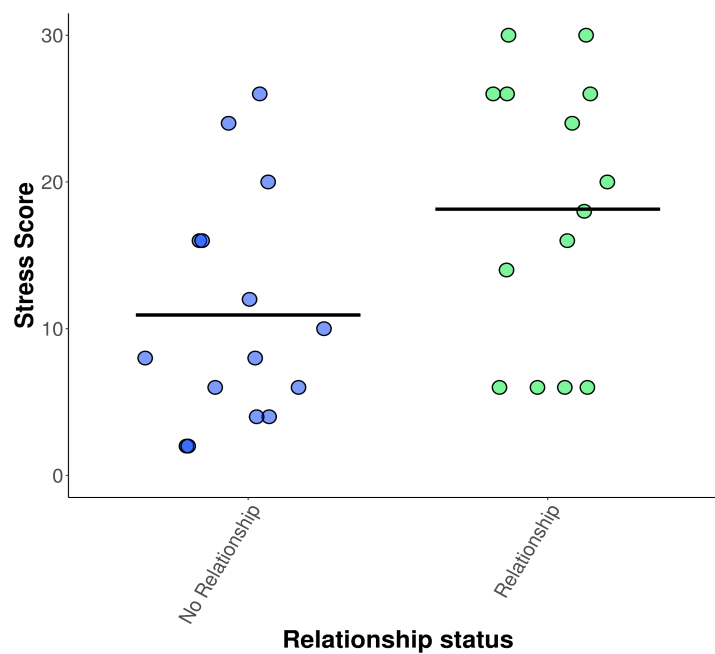
	Stress		Anxiety		Depression	
	Relationship	Not	Relationship	Not	Relationship	Not
Normal	4	8	8	9	13	13
Mild	0	2	1	3	1	0
Moderate	4	3	1	2	0	2
Severe	4	2	1	0	0	0
Extremely Severe	2	0	3	1	0	0

**Table 1. Mental Health Patterns in Participants.** The majority of the students were placed in the normal rating regardless of whether they were in a relationship or not. As you can see, the stress numbers are different in grapes, but all the other numbers are close. This shows that people are more stressed in relationships than when they are single.

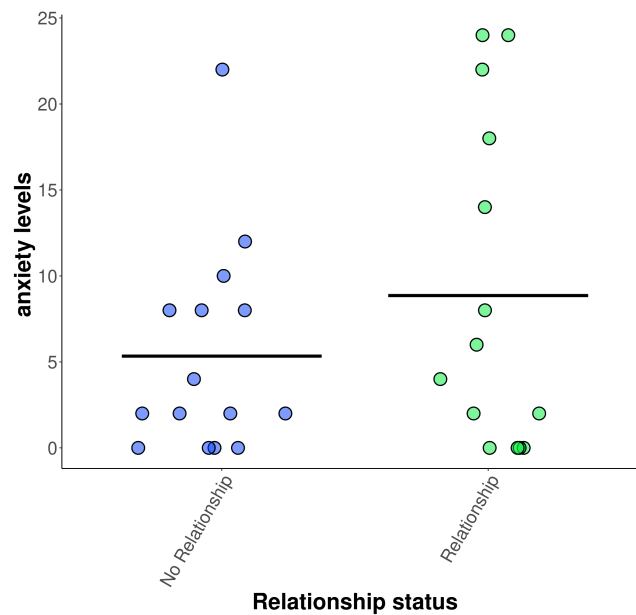
Our first hypothesis was that people in relationships will have different mental health than those who aren't in relationships. We took the DASS-21 scores of 14 people who are and aren't in relationships. A higher score indicates that the person has more of those symptoms. A t-test for stress found a significant difference between people in relationships and people who aren't in relationships ( $t=2.27$ ,  $p=0.031$ ). People in relationships were more stressed ( $M=18.1$ ) than people who weren't in relationships ( $M=10.9$ ). For anxiety, we also used a t-test and we did not find a significant difference between relationships and people who are single ( $t=1.19$ ,  $p=0.24$ ). For depression, the t-test also did not find a significant difference between the two ( $t=0.13$ ,  $p=0.89$ ).

	In a relationship	Not in a relationship	P-value two-tailed
Stress	18.1	10.9	$t=2.27, p=0.031$
Anxiety	8.8	5.3	$t=1.19, p=0.24$
Depression	5.2	5.6	$t=0.13, p=0.89$

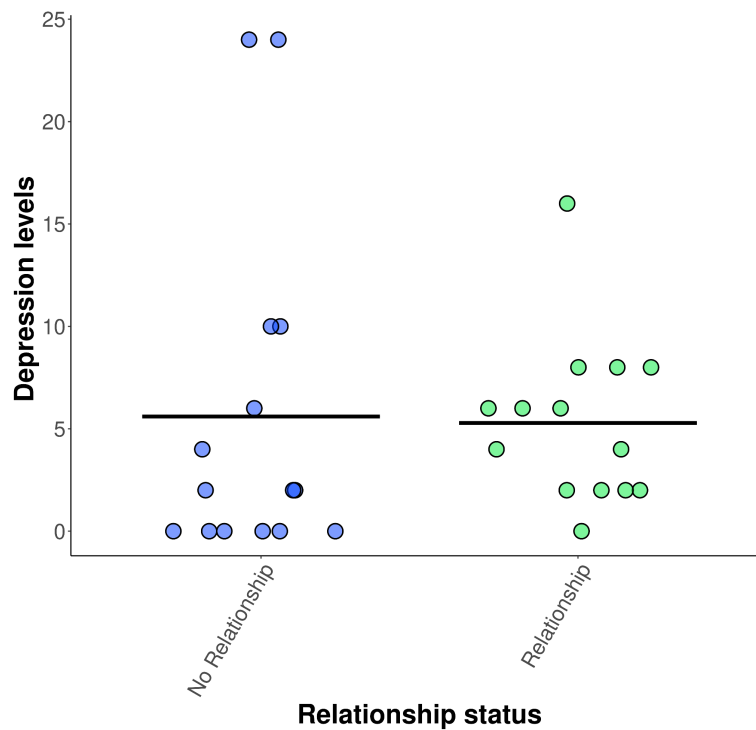
**Table 2. Mental Health Scores.**



**Figure 1. Participants in relationships have more stress than people who aren't in relationships.** A total of 29 TNA students who were in relationships and who were single took a DASS-21 questionnaire. A *t*-test found a difference between people in relationships and people who are single ( $t=2.27, 0.031$ ).



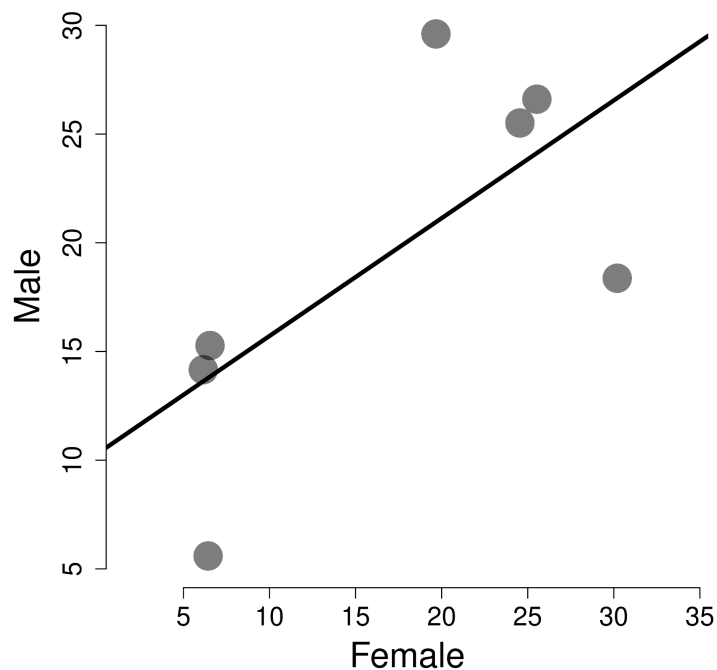
**Figure 2. Participants in relationships and not in relationships found no difference.** A total of 29 TNA students who were in relationships and who were single took a DASS-21 questionnaire. A *t*-test found a difference between people in relationships and people who are single ( $t=1.19, p=0.24$ )



**Figure 3. Participants in relationships and not in relationships found no differences.** A total of 29 TNA students who were in relationships and who were single took a DASS-21 questionnaire. A *t*-test found no difference between people in relationships and people who are single ( $t=0.13, p=0.89$ )



The original second hypothesis was that unhealthy relationships would have worse mental health than people in healthy relationships, but that had to be changed because no one in our study had an unhealthy relationship. The new hypothesis explored whether there was a relationship between the mental health of the two partners. We matched up the mental health symptoms of both partners in the relationship, we conducted a r-test. This produced a total of 7 pairs of data for each symptom. For stress, we found a positive relationship between female and male stress levels ( $r=0.68$ ,  $p=0.04$ ). However, for anxiety and depression, we found no significant relationship between the males' and females' anxiety ( $r=0.53$ ,  $p=0.10$ ) and depression ( $r= -0.11$ ,  $p=0.40$ ) levels with those symptoms. Overall, partners in relationships tend to share stress levels but not anxiety and depression.



**Figure 4. Participants in relationships of partners found a positive relationship between each other for stress.** We took 7 couples and found that stress was shared for people in relationships. We found a positive relationship between female and male stress levels ( $r=0.68$ ,  $p=0.04$ ).

## Discussion

In this study, we determined whether a person's being in a relationship or single will have an effect on their mental state. Our first hypothesis was partially supported. Stress was higher with people who are in a relationship (Figure 1), rather than not, but there were no significant differences between depression and anxiety (Figures 2 & 3). Our second hypothesis explored whether there was a relationship between the mental health of the two partners in the same relationship. This was partially supported because stress levels were related to the two people in the relationship, but depression and anxiety were not significantly related (Figure 4).

Our results are partially consistent with other studies of mental health and relationships by Jankovic (6). Jankovic found that depression and satisfaction had nothing to do with the gender of the person in the relationship (6). Our study found that depression and anxiety had nothing to do with the gender of the person in the relationship because of the lack of relationship between each gender in the relationship, but found that stress levels were correlated between females and males in the relationship. This study helps us to claim that gender does not play a big role in someone who is in a relationship and their mental health. This is surprising because we thought that women have more of an emotional and sensitive way about them, and men are so closed off with their emotions that gender would matter and play a role. Our results about the stress levels make sense to us because a person can change their stress levels depending on what they're doing or who they're around, but with depression and anxiety, you can't fluctuate your levels of that mental health.

Our results are partially consistent with other studies by Navaneeth and Kanth (7). Navaneeth and Kanth were studying the qualities of relationships, like when two people have a committed relationship that is high in quality, with dyadic factors like intimacy and partner support, then they will have a positive outcome, but if two people have an unhealthy relationship, they will have a negative outcome (7). Our study found that the people in the relationships that I had were in good relationships, but they also had problems with stress. We believe the research that Navaneeth and Kanth did was right and that in my study, there were mistakes made (7). We took teens to do the study, and they may not have known what a good relationship was, or they didn't want to tell us the truth about the relationship because we know them personally. We agree with Navaneeth and Kanth that positive relationships are healthy, but in our project, we think it's more of the environment that affects our relationships and accounts for why students in relationships are more stressed (7). TNA is a very stressful academic environment, and due to the school not really supporting relationships, students in this situation might feel more stressed than others.

Sinder found that women are more anxious about sexual encounters than men (5). In our study, we didn't talk about sexual encounters between the two in relationships, but we did find that women are more anxious than men. In the study, the women had anxiety levels of 12 and men had the anxiety levels of 5.7, which shows that the anxiety levels have a great difference between each other.

Our study had multiple limitations. Our first limitation was finding participants in relationships who would participate in this study. Not as many people at TNA were in relationships or open to doing the project as we had originally expected. Another limitation was how we measured mental health levels in the relationships. We couldn't get an open and honest opinion on the levels because everyone had a positive outcome of their relationship.

A future improvement could be trying different things to track the health of the relationships. We could try focus groups or a more efficient test for better results. We found that the couples we used were all in a positive relationship, which can be true, but also can't be because they may not have wanted to tell us the truth, or felt comfortable, or they don't know what a healthy relationship is. Maybe there are better ways of measuring mental health, like having an in-person interview, like therapy, to see if they really feel that way or if they are just trying to get it over with. We could also take this experiment outside of TNA and get more couples that can be open and honest about their relationship, like adults and not teens, because teens don't know the ways to a real, healthy relationship.

According to our research, people in relationships are more stressed than those who aren't in relationships. Still, depression and anxiety didn't have a difference between those who had a partner and those who didn't. We also saw that within couples, there was no relationship between their depression and anxiety, but that stress was related to the relationship between the two partners. Therefore, this shows that among the teenagers at TNA, relationships may increase stress but are unlikely to make them happier or sadder. We recommend that teens in TNA should not be in relationships to fix their problems and to understand that it can cause other problems, like stressing them out more than they already are.

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