



# An Exploratory Study of Beliefs that Determine Medication Adherence to Psychotropic Drugs in Young Adults Aged 18-25



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## INTRODUCTION

- Anxiety and depression are two of the leading causes of illness and disability in young adults (National Alliance of Mental Illness, 2021).
- In the young adult population, approximately five percent of adolescents experience anxiety and three percent experience depression (WHO, 2021).
- When left untreated, anxiety and depression can cause severe effects such as increased psychiatric hospitalizations, and suicide attempts, making adherence to prescribed psychotropic medication critical to the wellbeing of the patient (WHO, 2021).
- Beliefs such as fear of side effects, negative attitude and perceived stigma have thought to impact medication adherence (Semahegn et al., 2021).
- A gap in research exists regarding which beliefs impact adherence to psychotropic medication in young adults.

## PURPOSE

- The purpose of this exploratory study is to investigate how beliefs surrounding medication affect psychotropic medication adherence in young adults aged 18-25 diagnosed with anxiety and/or depression.

## METHODS

- Wagner IRB approval (#F21-9) was granted.
- An *a priori* power analysis revealed that the minimum sample size needed to achieve significance was 135 participants using G-power version 3.1.9.7. (Germany).
- An electronic survey was created through Qualtrics XM™ (Provo, UT) and distributed via social media, email and text message.
- The survey consisted of an informed consent question, 24 demographic questions and two valid and reliable scales: the Beliefs About Medicines Questionnaire (BMQ) and the Medication Adherence Rating Scale (MARS) (Horne et al., 1999, Fialko et al., 2008).
- Sample size was **N = 407**.
- Data were analyzed with IBM SPSS Version 28.0.1 (Armonk, NY) with an alpha level set at 0.05.

### Inclusion Criteria

- Aged 18-25 years old.
- Diagnosed with anxiety and/or depression by a medical professional in the US.
- Currently being prescribed medications for anxiety and/or depression by a medical professional in the US.
- Fully completed survey.

### Exclusion Criteria

- Younger than 18 or older than 25.
- Not diagnosed with anxiety and/or depression by a medical professional in the US.
- Not currently being prescribed medications for anxiety and/or depression by a medical professional in the US.
- Incomplete survey.

## RESULTS

Figure 1. Medication adherence (N = 407)

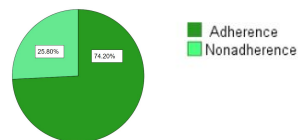
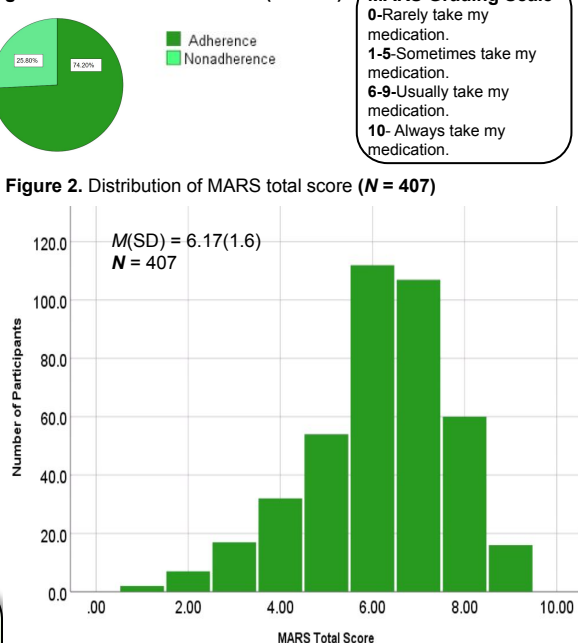


Figure 2. Distribution of MARS total score (N = 407)



**MARS Grading Scale**  
 0-Rarely take my medication.  
 1-5-Sometimes take my medication.  
 6-9-Usually take my medication.  
 10- Always take my medication.

Table 1. Spearman rho Correlation: Demographics vs. BMQ

	All medicines are poison.	My medications protect me from getting worse.	My medicines are a mystery to me.	I feel weird like a zombie.	My medication makes me feel tired and sluggish.
Age	-.026	.105*	-.241*	-.145*	-.117*
Sex Assigned at Birth	-.106*	.129*	-.019	-.100*	-.023
Race	-.114*	-.002	-.112	-.058	-.070
Religion	-.080	.099*	.096	.129*	-.033
College grade level	-.141*	.050	-.335*	-.316*	-.215*
Diagnosed with Anxiety	.118*	-.127*	.135*	.025	.058
Diagnosed with Depression	.052	-.095	-.120*	-.064	.060

\* Correlation is significant at the 0.05 level

## CONCLUSIONS

- In our study, we found that younger age, concerns about side-effects, and fear of dependence are the factors that are most likely to lead to decreased medication adherence with a significance level at a  $p < 0.05$ .
- These results show us that clinicians need to better educate patients on the likelihood of experiencing different side effects and medication dependency, especially within the younger population.

## MENTAL HEALTH RELEVANCE

These data emphasize specific beliefs that impact medication adherence in individuals aged 18-25 diagnosed with anxiety and/or depression. With this information, clinicians can consult patients on their concerns surrounding their medications and increase medication compliance, overall leading to better health outcomes such as decreased psychiatric hospitalizations, and suicide rates.



# Sample

Survey Invitation

Survey deployed across various platforms



Number of participants  
**(*N* = 1,271)**



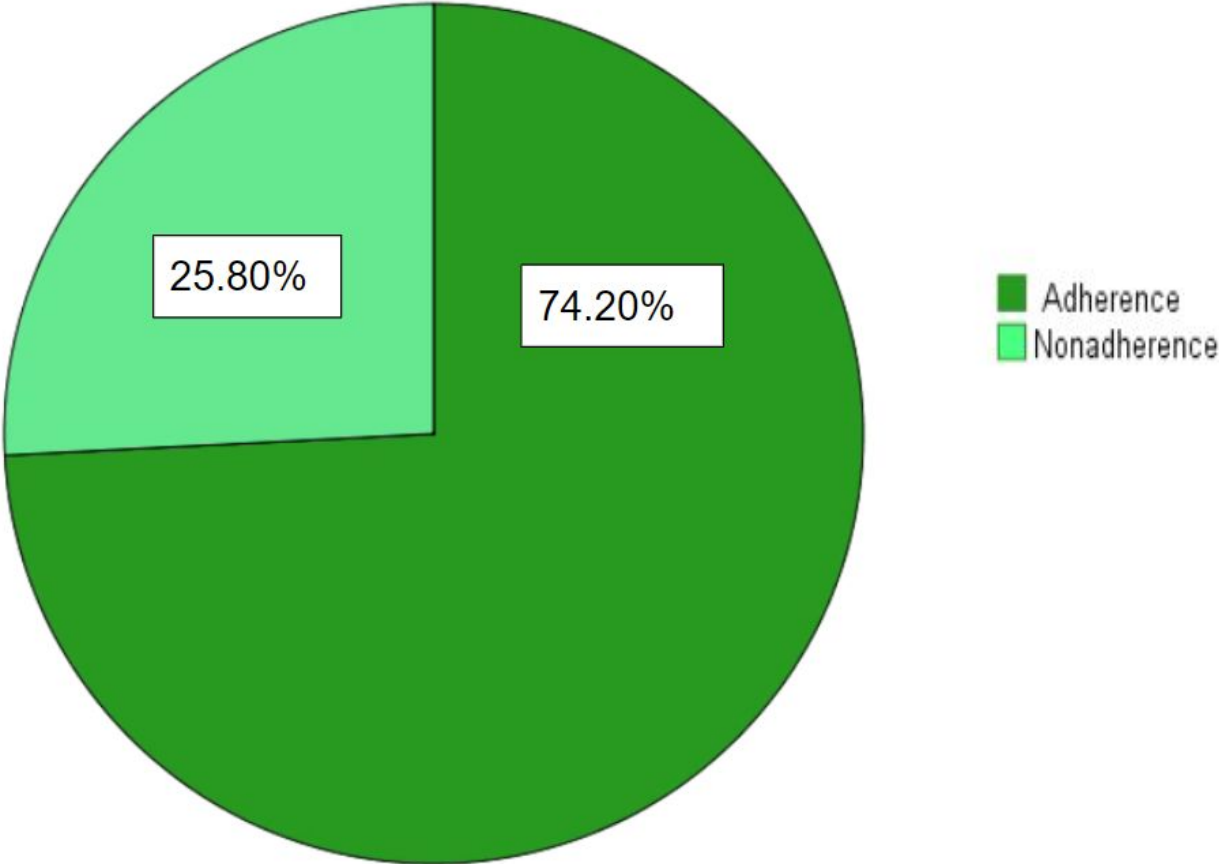
Retained

Total surveys completed and analyzed  
**(*N* = 407)**

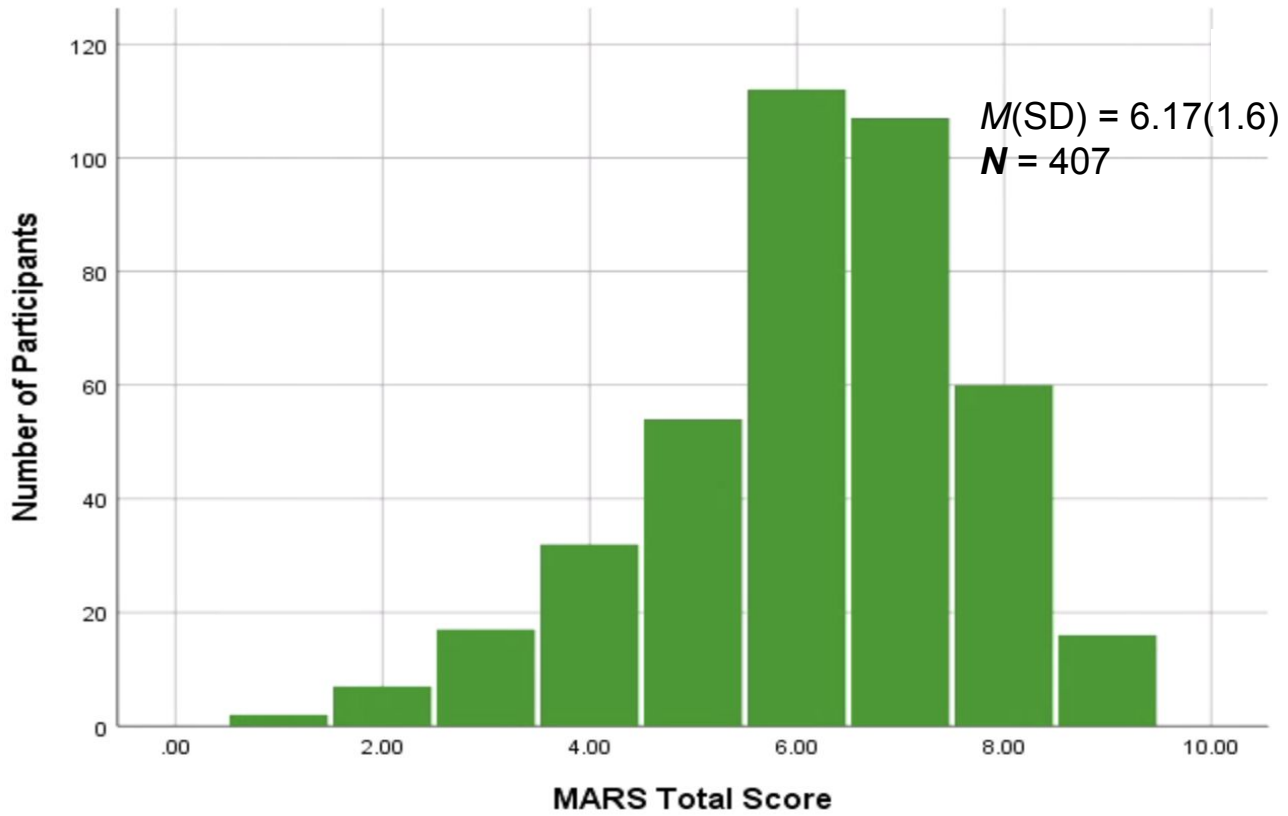
## Excluded (***N* = 864**)

- “No” to informed consent (*n* = 7)
- Younger than 18 (*n* = 5)
- Older than 25 (*n* = 157)
- Not diagnosed with anxiety and/or depression by a medical professional in the United States (*n* = 494)
- Not currently being prescribed medications for anxiety and/or depression by a medical professional in the United States (*n* = 201)

**Figure 1. Medication Adherence (N = 407)**



**Figure 2. Distribution of MARS Total Score ( N = 407)**

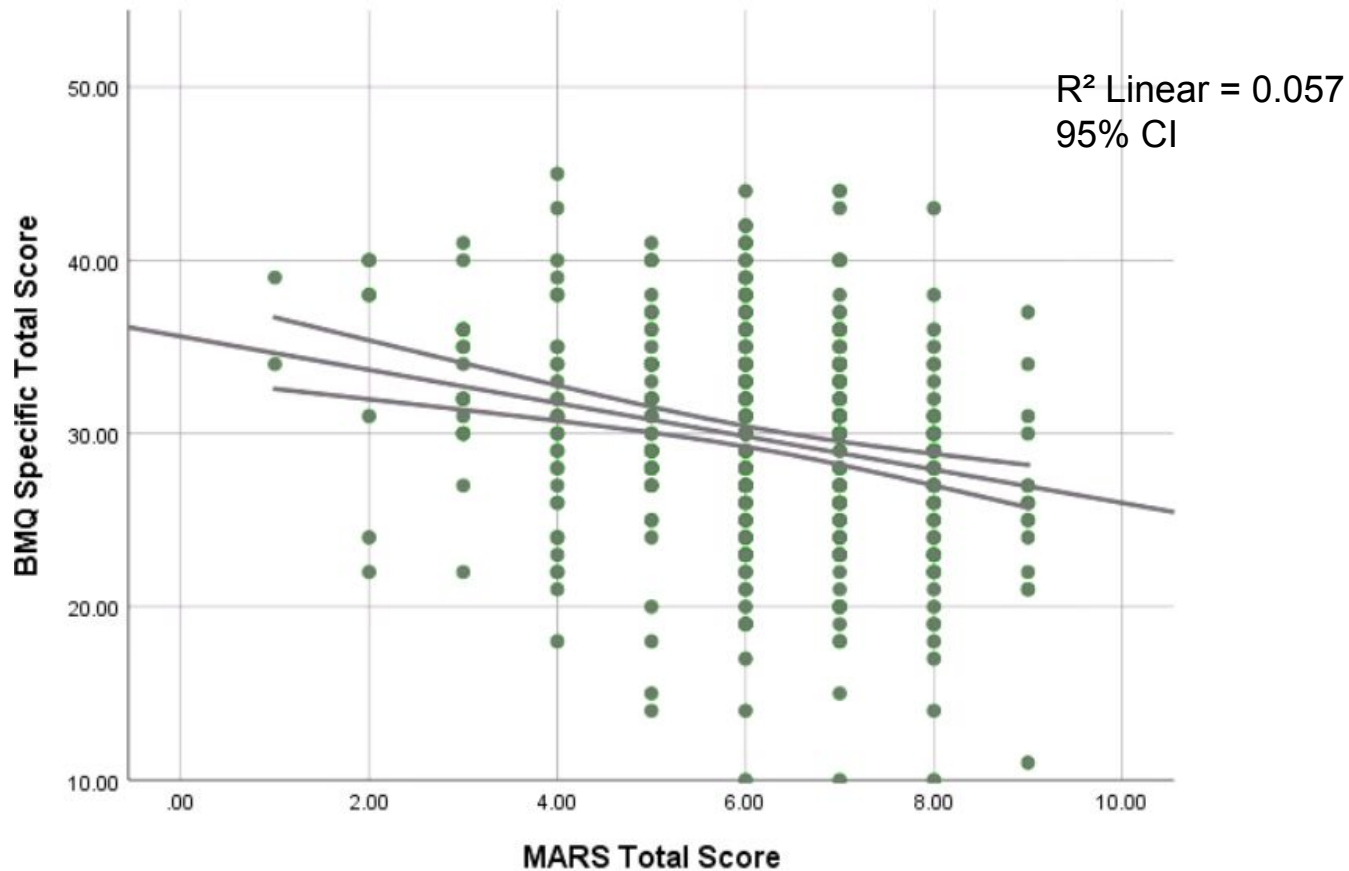


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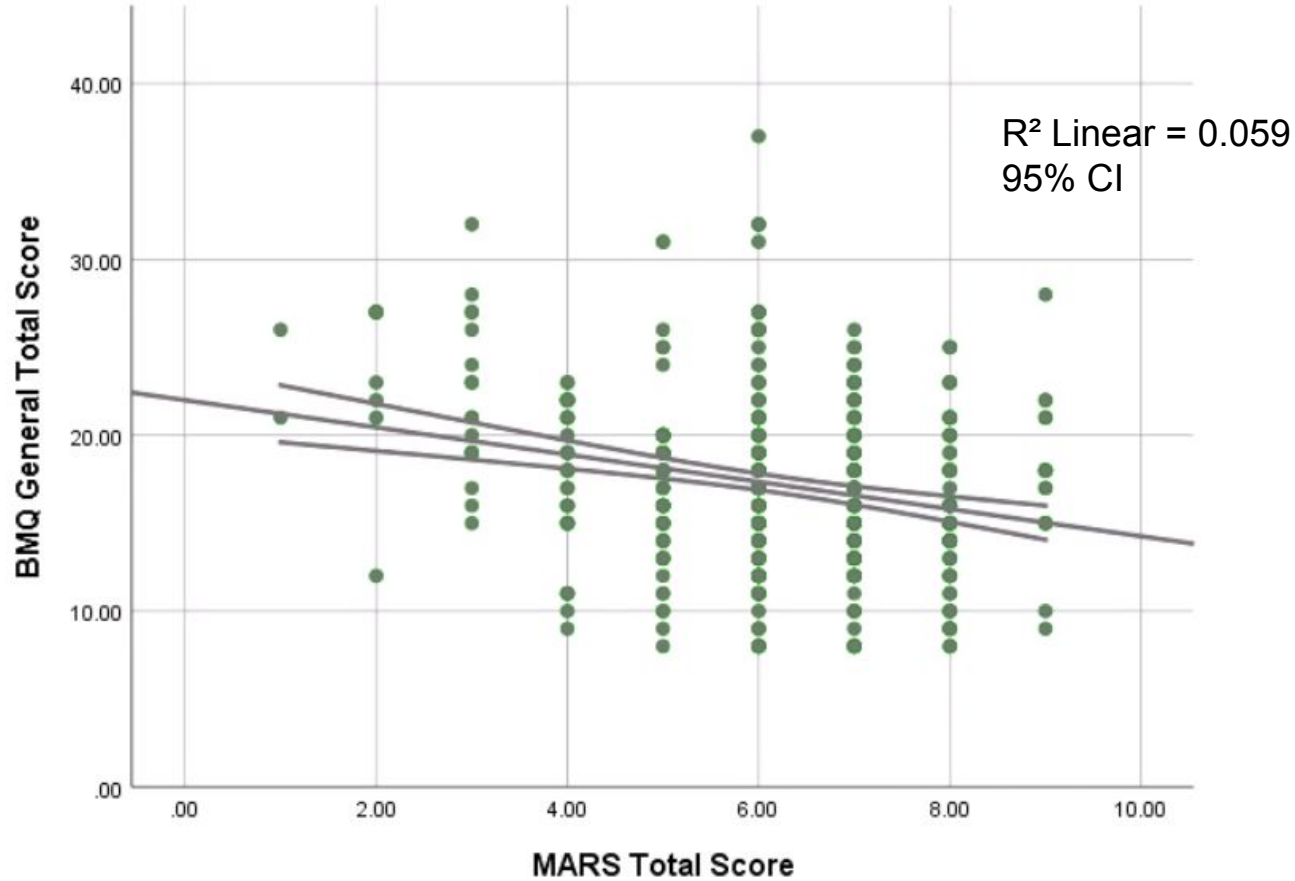
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## Table 2: Scatterplot with MARS and BMQ Specific



**Table 3: Scatter plot with MARS and BMQ General**



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