



The Relationship Between Suicide and Ease of Access to Medical Care in Adolescence

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Introduction

- Globally, suicide is the fourth leading cause of death among 15 - 29 year olds (WHO, 2021).
- The presence of social support and mental health services is directly correlated with a decrease in suicide ideation and suicide attempts (Holman & Williams, 2020).
- The association between suicide and the presence of medical-based services such as mental health services has been researched and concluded to showcase a significant association (Feyman et al., 2022; Holman & Williams; 2020, Nakanishi & Endo, 2017). However, the degree to which individuals can access these services is something that has noticeably not been present in much academic researching regarding the topic.
- Additionally, literature discussing the association between suicide and the presence of medical-based services lacks inclusion of how results may have been influenced by socioeconomic status

Research Questions

- How does the ease of access to medical care relate to subjects that exhibit suicidal thoughts?
- Does the association between ease of access to medical care and subjects who have exhibited suicidal thoughts appear similarly or different to the association between ease of access to medical care and subjects that have previously attempted suicide?
- Do either of these associations differ for individuals of different socioeconomic status?

Method

Sample:

- AddHealth (National Longitudinal Study of Adolescent to Adult Health Study) is a study of a sample of over 20,000 adolescents who were in grades 7-12 during the 1994-95 school year, and have been followed for five waves to date, most recently in 2016-18. Wave I was conducted in the 1994 - 1995 school year.
- Young adults (Grades 7 - 12) who reported to exhibiting suicidal thoughts or having previously attempted suicide were drawn from the first wave of the AddHealth Wave I study.
- Parents of these young adults who reported to the degree of difficulty they had to accessing medical care and their total income over one fiscal year were also drawn from the AddHealth Wave I study.

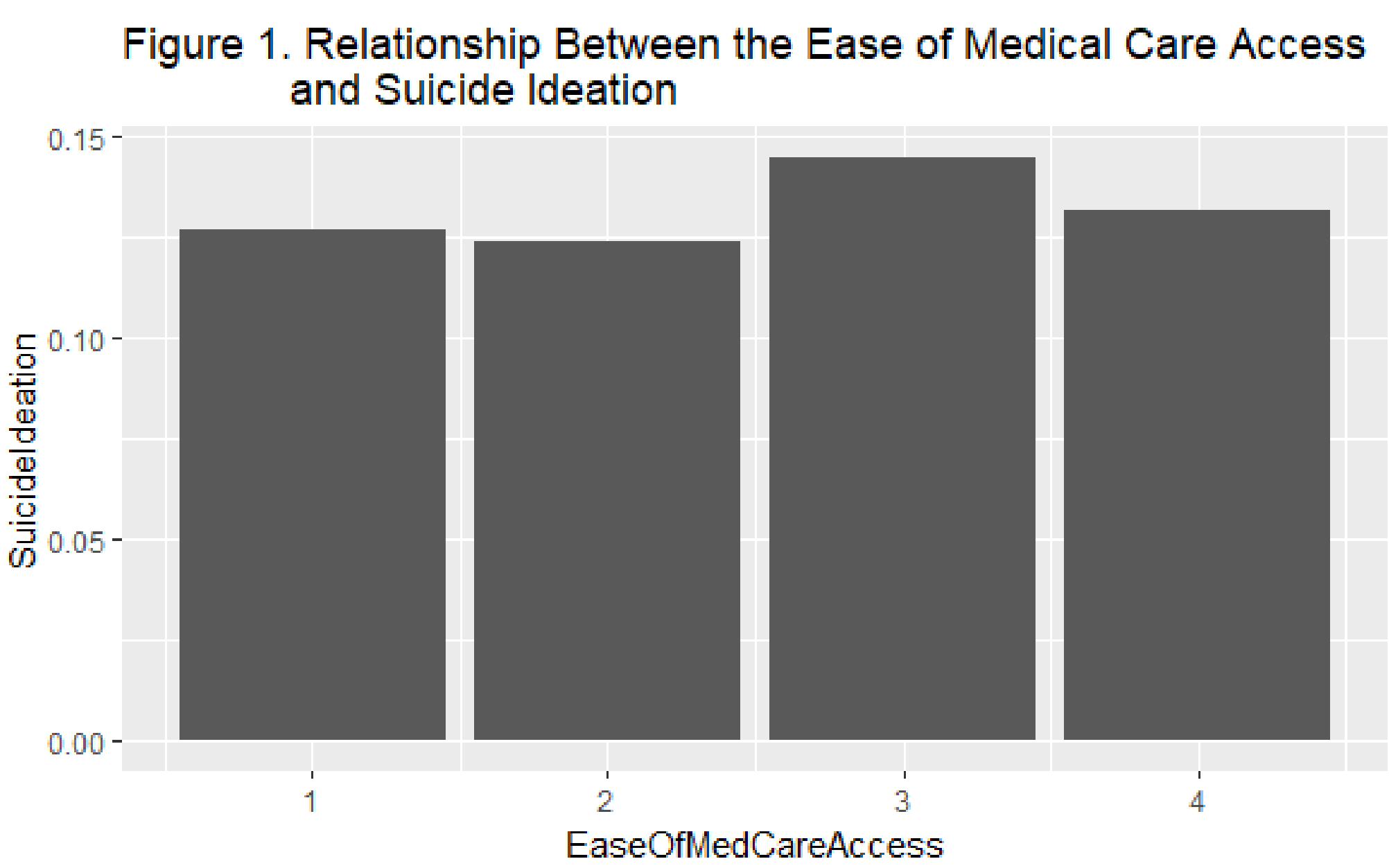
Measures:

- Both suicidal thoughts and previous suicidal attempts were measured through an in-person self-administered questionnaire
- Ease of access to medical care and total income over the past fiscal year were measure through an at-home self-administered questionnaire
- Suicidal ideations are categorized into (0) participant has not thought about attempting suicide and (1) participant has thought about attempting suicide
- Suicide attempts are categorized into (0) participant has never attempted suicide and (1) participant has attempted suicide one or more times.
- Ease of medical care access is categorized by degree of difficulty to obtain such with (1) very easy, (2) somewhat easy, (3) somewhat hard, and (4) very hard.
- Income was data managed to be categorized into 7 groups, each group being categorized by increasing increments of \$20,000.

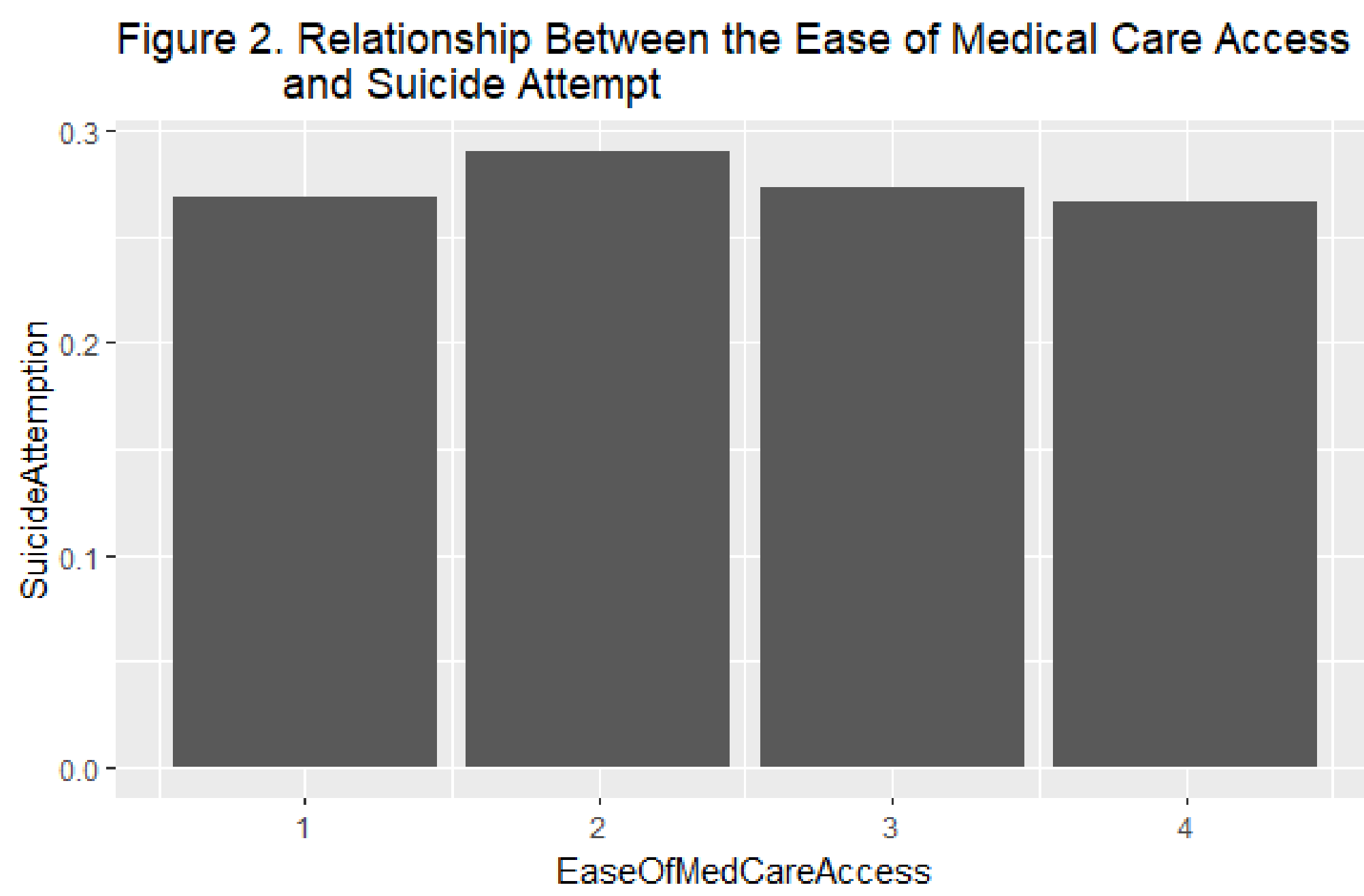
Results

Bivariate

- Chi-square analysis showcased that among adolescent students, those who had easier access to medical care had the same likelihood of showcasing suicidal thoughts when compared to those with harder access to medical care, $X^2 = 1.40$, $df = 3$, $p = 0.71$. This lack of significance can be seen visualized in Figure 1 below:



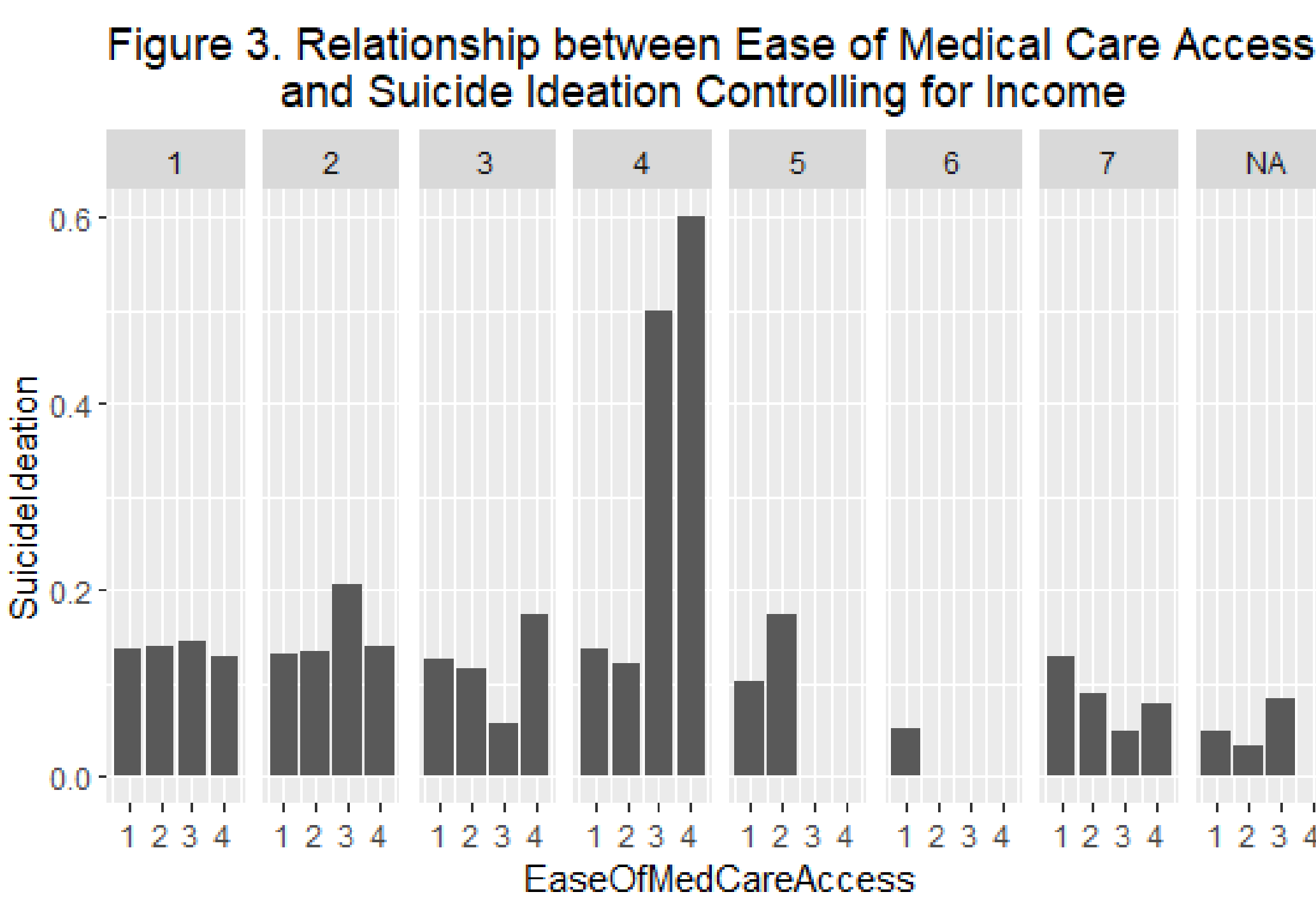
- Chi-square analysis also showed that among adolescent students, those who had easier access to medical care had the same likelihood of having previously attempted suicide when compared to those with harder access to medical care, $X^2 = 0.24$, $df = 3$, $p = 0.97$. This can be seen visualized in Figure 2 below:



- These outputs diverged from the initial predicted results of the study, however implicated that a potential covariate may have been significantly associated with the suicide data of the students.

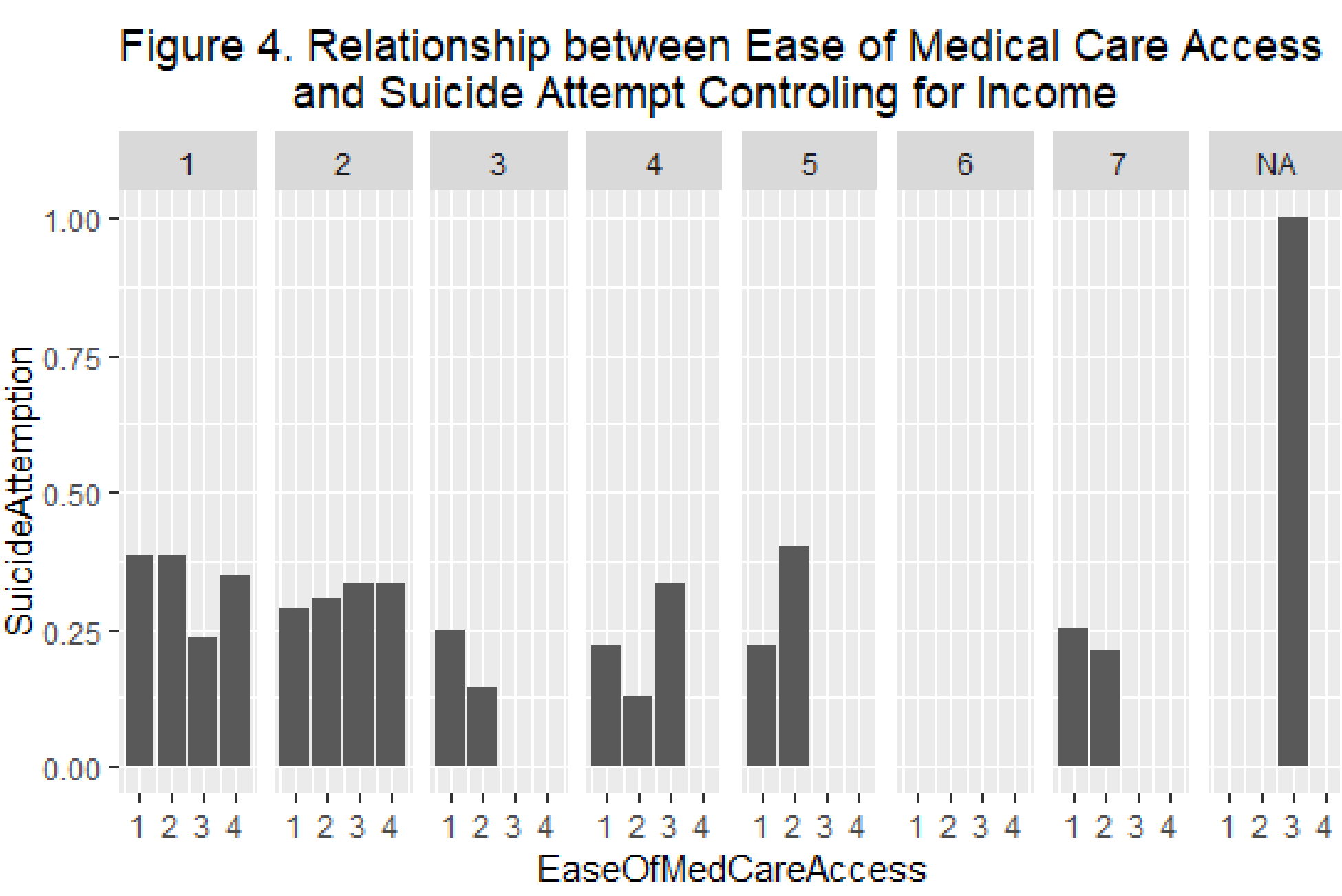
Multivariate

- The ease of subject's access to medical care was positively, but not significantly associated with subjects who exhibited suicidal thoughts nor attempt of suicide after controlling for income. O.R. = 1.01, C.I. = 0.92 - 1.11, $p = 0.77$. This lack of significance can be seen visualized in Figure 3 below:



- Income was found to be significantly and negatively associated with subjects who experienced suicidal thoughts. O.R. = 0.96, C.I. = 0.92 - 1.11, $p = 0.04$.

- The ease of a subject's access to medical care was also positively, but not significantly associated with subjects that had previously attempted suicide after controlling for income. O.R. = 0.93, C.I. = 0.76 - 1.13, $p = 0.47$. This lack of significance can be seen visualized in Figure 4 below:



- Income was also seen to be significantly and negatively associated with both subjects who had previously made suicidal attempts. O.R. = 0.88, C.I. = 0.79 - 0.97, $p = 0.01$.

Discussion

- Young adults whose parents reported their child to have easier access to medical care do not exhibit a higher likelihood of possessing suicidal thoughts or having previously attempted suicide when compared to young adults whose parents reported their child to have harder access to medical care.
- Young adults whose parents reported to making on average higher total earnings over the course of one fiscal year exhibit a lower likelihood of possessing suicidal thoughts or having previously attempted suicide when compared to young adults whose parents reported to making on average lower total earnings over the course of one fiscal year.
- Notably, these findings are representative of how the all-encompassing data that surrounds "medical care" is something that does not directly translate to the influence that specifically mental health resources have on impacting suicidal thoughts or suicidal attempts within subjects.
- Additionally, the categorization of data facilitated through the self-administered questionnaire regarding the ease of access to medical care provides a natural divergence in responses based on participants conceptualizations of what a degree of "very easy" to "very hard" is.

References

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