

Andrews University

## Digital Commons @ Andrews University

---

Posters, Presentations, and Papers

Undergraduate Research

---

Summer 6-3-2015

### Relationship between Health-maintenance Preferences and Health

Kiara Dillard  
*Andrews University*

Follow this and additional works at: <https://digitalcommons.andrews.edu/student-works>



Part of the [Social and Behavioral Sciences Commons](#)

---

#### Recommended Citation

Dillard, Kiara, "Relationship between Health-maintenance Preferences and Health" (2015). *Posters, Presentations, and Papers*. 22.

<https://digitalcommons.andrews.edu/student-works/22>

This Poster is brought to you for free and open access by the Undergraduate Research at Digital Commons @ Andrews University. It has been accepted for inclusion in Posters, Presentations, and Papers by an authorized administrator of Digital Commons @ Andrews University. For more information, please contact [repository@andrews.edu](mailto:repository@andrews.edu).

# Relationship between Health-maintenance Preferences and Health

Kiara L. Dillard

dillard@andrews.edu

Behavioral Sciences Department & Behavioral Neurosciences Program, Andrews University

Research Advisor: Harvey J. Burnett, Jr.

## Introduction

### Previous Literature

- Many people are using self-medication to maintain their health (Hughes, McElnay, & Fleming, 2001).
- One self-medication practice used frequently is the administration of over-the-counter drugs (OTCs), regardless of the adverse side effects and dangers of drug interactions and overdose (Sihvo, Klaukka, Martikainen, & Hemminki, 2000).
- Another self-medication practice that is somewhat prevalent is the use of home remedies, even though this practice is surrounded by uncertainty regarding the efficacy and safety (Angell & Kassirer, 1998).

### Research Question & Hypothesis

- Does one's preferred self-medication practice relate to health?
- There is a relationship between at least one of these forms of self-medication practices and health.

## Methods

### Participants

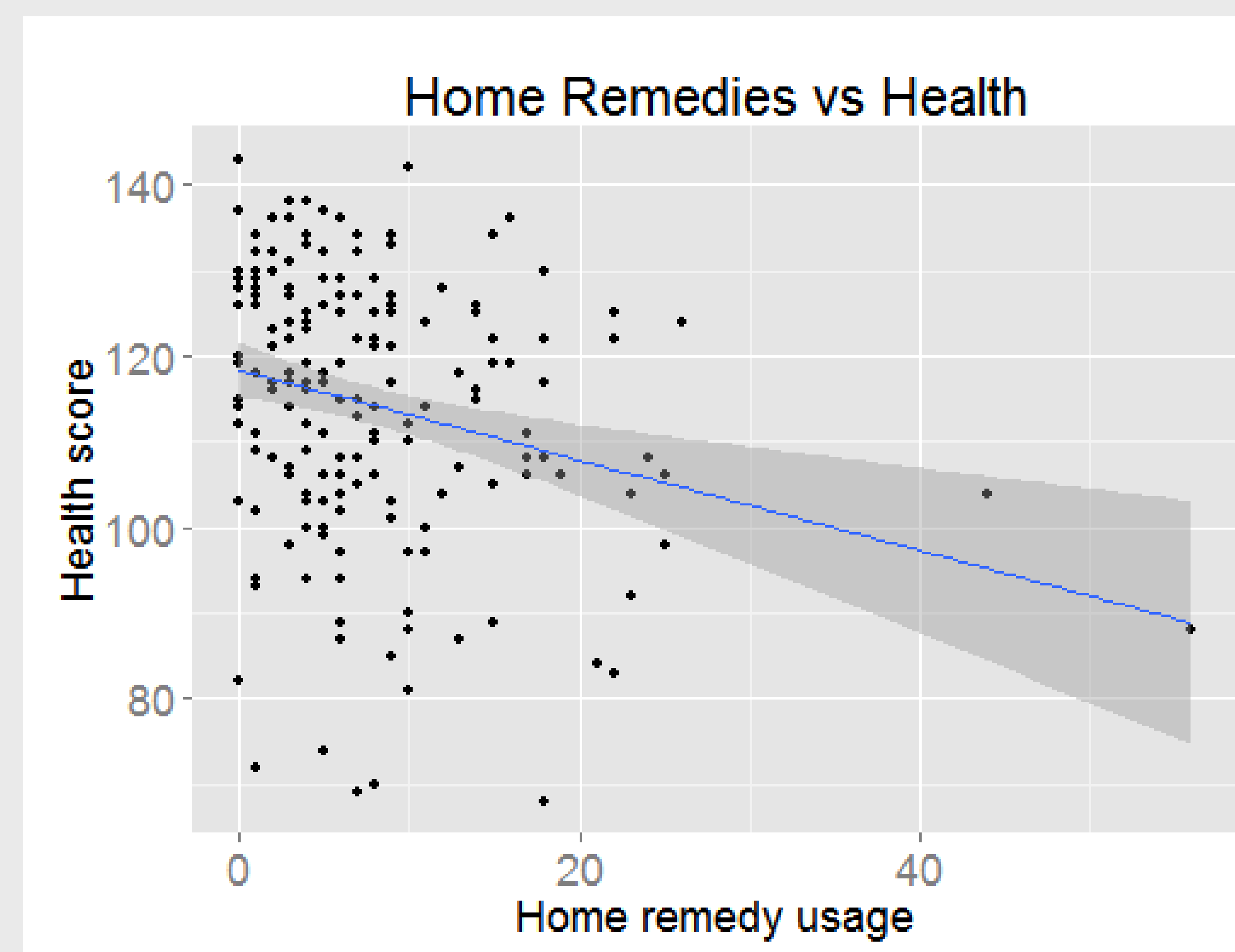
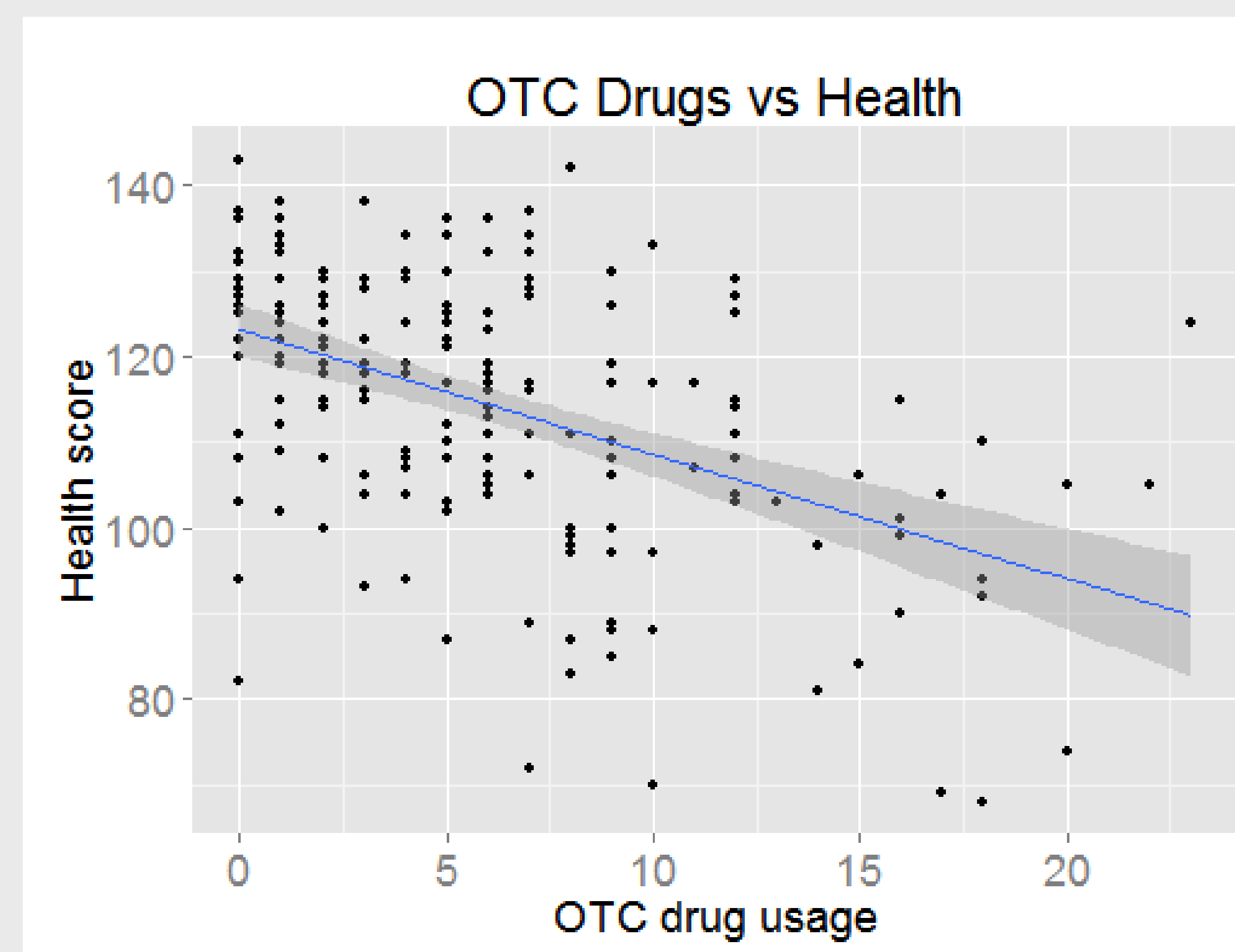
- 184 subjects (52 males, 132 females; all 18 years of age or older) recruited from the Behavioral Sciences Research Participation Pool

### Research Design

- Modified Questionnaire to Document Self-Medicating Behaviours (Roulet, et al., 2012) & SF-36 Health Survey (Ware & Gandek, 1998)

## Results

- Spearman rank-order correlation
- Moderate inverse relationship ( $r(182) = -.45, p < .001, r^2 = .20$ ) between OTC drug usage and health
- There were very significant relationships between OTC drug usage and all of the health subscales.
- Weak inverse relationship ( $r(182) = -.27, p < .001, r^2 = .073$ ) between home remedy usage and health
- There were very significant relationships between home remedy usage and social functioning, role-emotional, and mental health subscales, respectively.



SF-36 Health Subscales	OTC	Home Remedies
Physical Functioning	-.25***	-.07
Role-Physical	-.27***	-.17*
Bodily Pain	-.30***	-.16*
General Health	-.37***	-.15*
Vitality	-.35***	-.16*
Social Functioning	-.28***	-.30***
Role-Emotional	-.36***	-.30***
Mental Health	-.32***	-.23**

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## Discussion

### Reflection on Hypothesis

- My hypothesis was supported in that this study suggests that the more OTC drugs people use to maintain their health, the less healthy they are, or vice versa

### Reflections on Previous Literature

- These results might reiterate the dangers or uncertainty surrounding these self-medication practices as reflected in previous literature.
- Did not replicate relationships between drug usage and age and gender.

### Limitations

- Correlational, not causal
- Most subjects were between 18 and 22 years old
- Most subjects were female
- Most subjects were undergraduates

### Implication

- This may lead to changes in how doctors and pharmacists advise people to maintain their health.

### Future Research

- Future research should further examine if these relationships are replicated regarding specific medications or remedies.

## References

- Angell, M. & Kassirer, J. P. (1998). Alternative medicine – the risks of untested and unregulated remedies. *The New England Journal of Medicine*, 339(12), 839-840.
- Hughes, McElnay, & Fleming (2001). Benefits and risks of self medication. *Drug Safety*, 24, 1027-1037.
- Roulet, L., Asseray, N., Foucher, N., Potel, G., Lapeyre-Mestre, M., & Ballereau, F. (2012). A questionnaire to document self-medication history in adult patients visiting emergency departments. *Pharmacoepidemiology and Drug Safety*, 22, 151-159.
- Sihvo, S., Klaukka, T., Martikainen, J., & Hemminki, E. (2000). Frequency of over-the-counter drug use and potential clinically significant over-the-counter drug interactions in the Finnish adult population. *European Journal of Clinical Pharmacology*, 56, 495-499.
- Ware, J. E. & Gandek, G. (1998). Overview of the SF-36 Health Survey and the International Quality of Life Assessment (IQOLA) project. *Journal of Clinical Epidemiology*, 51, 903-912