

# Text-delivered Peer Network Counseling to treat Cannabis Use Disorder

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# Public Health Problem & Treatment Challenges

- Engaging youth in treatment is very challenging
- Peer networks as malleable risk or protective social force
- Creative interventions such as mHealth are warranted
- Limited evidence of mHealth treatments is promising

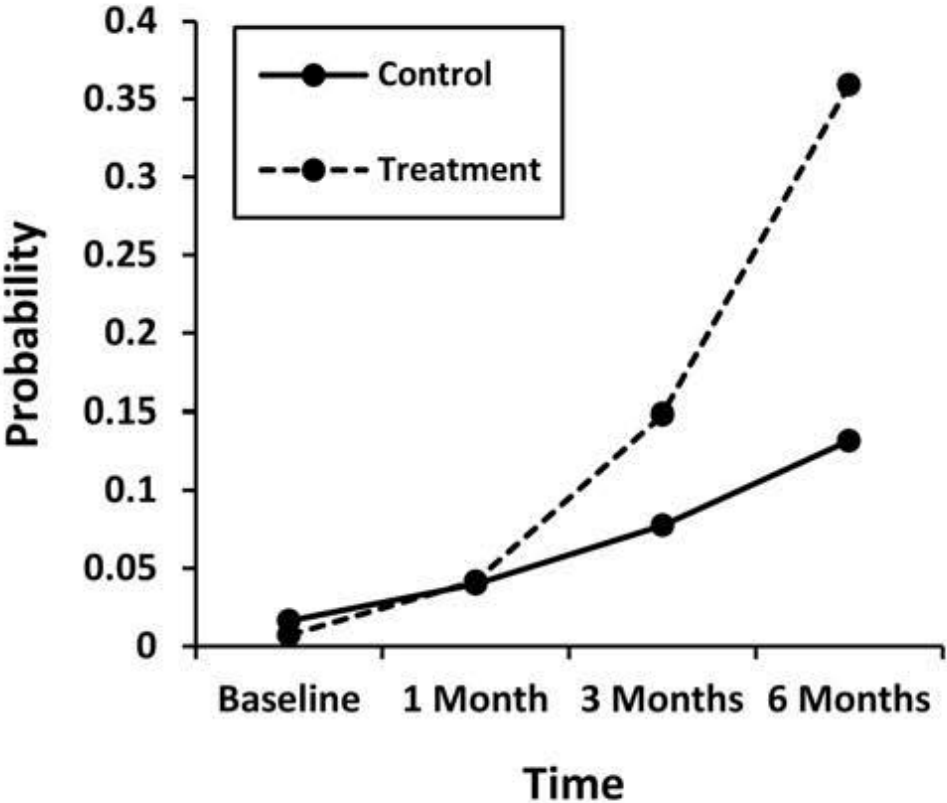
# Peer Network Counseling (PNC)

- **20-minute** substance use intervention
  - Applies MI & MET principles & approaches
- ***Raises awareness of peers and place as protective and risky***
- ***PNC Parts:***
  1. Cannabis use history, attitudes, & motives
  2. Cannabis use normative feedback
  3. ***Peer network health (sum of peers deviant & prosocial behavior)***
  4. Action plans

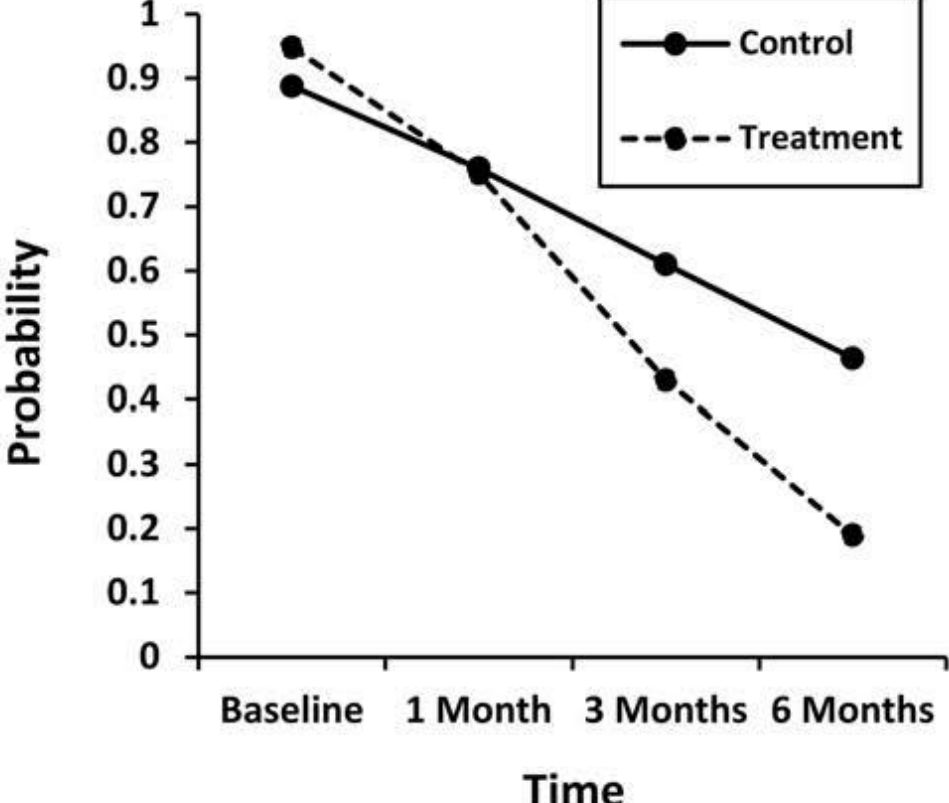
## *Peer relations* component

- *Where do I spend my time, for how long, and with whom?*
  - Peers not “bad” or “good,” broaden framing to include **contextual awareness**
- Subtle, small modifications: **less time with peer W, at place X, on day Y**
  - Hypothesized active ingredient: **peer network health**

# Probability of 0 days cannabis use



# Probability of heavy cannabis use



# PNC Results so Far

< cannabis use among heavy using adolescents

< offers to use alcohol from friends

< social stress

< substance use before sexual behavior

## ❖ ***Adapted PNC into PNC-tx:***

> readiness to change alcohol use among college students

< cigarette use among adolescents

# How PNC-txt works

- **Key data** at baseline and throughout the intervention tailor the texts
- **TextIt**, auto-populates data into the texts
- PNC-txt is **4 weeks**
- 7 primary texts every other day = **112 texts**
- 50 brief **booster messages** of support



3:22 PM



[< Back](#)

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Thx **NAME**, Let's talk more about your friends. Some people spend more time with certain friends at non-SMK places to make **HEALTH** changes. Here's a list of places & activities, pick one that you think would help. Places.List

**WORKING OUT AT GYM WITH FRIEND**

Nice! **WORKING OUT AT GYM WITH FRIEND** is a great choice. Give this a try over the next few days. You can still spend time with your close friends at non-SMK places

Say your friend wants use W with you, but you don't. Do you think suggesting **WORKING OUT AT GYM** would help? Txt Y or N





3:22 PM



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**N**

**IF Y:** Great, trust yourself & give it a try. **IF N:** Sometimes we need different strategies for different situations, see the link for more ideas, pick one and give it a try. [Places.list](#)

Thx a lot **NAME**. Even very small changes like where you hang out can really help. That ends today's texts. Need more support? Txt: BOOST.  
This is not being read immediately, if this is a crisis call 911

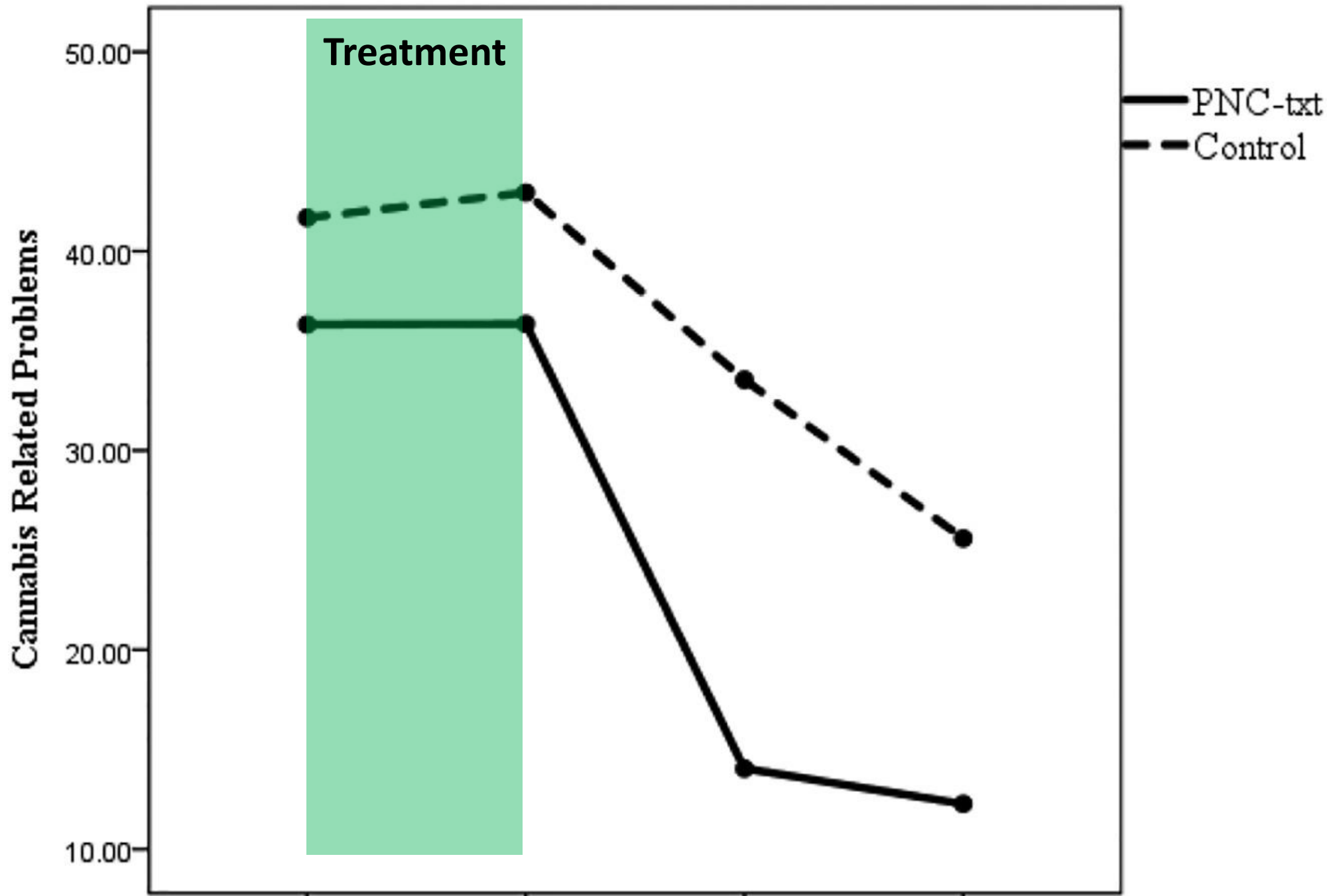
**Boost**

Even simple exercise like walking can help our moods and get our minds on other things.  
Want more? Txt: boost

- Randomized to PNC-txt or Wait-list control
- Screen CUDIT  $\geq 8$ ; Dx CUD; + urine cannabis metabolites
- 4 weeks of treatment, 3 months follow-up
- 50% Female; Age 20; 60% white, 27% black; 66% in college
- 99.4% completed all 16 days of PNC-txt

# Cannabis Use Outcomes

	<b>PNC-txt means (SD)</b>				<b>Control means (SD)</b>				<b>Eta<sup>2</sup></b>
	Baseline	1 mth	2 mth	3 mth	Baseline	1 mth	2 mth	3 mth	
<b>Past 30-day cannabis use</b>	23.4 (6.0)	20.4 (9.8)	14.7 (12.2)	17.6 (10.8)	23.5 (6.0)	22.3 (5.2)	17.3 (9.1)	17.7 (10.3)	0.06
<b>Negative Urine</b>	0%			44%	0%			7%	0.15 *

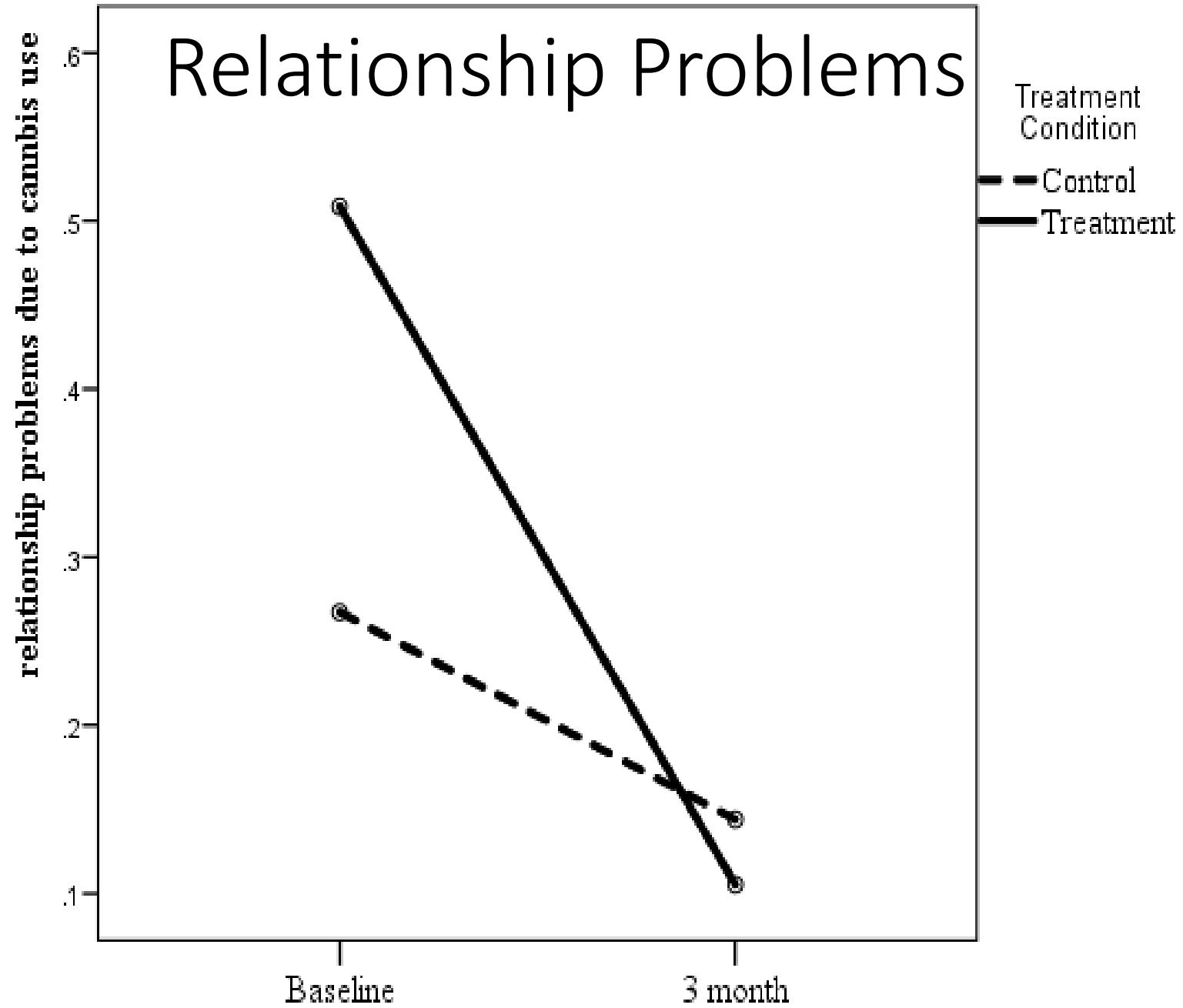


PNC-txt # 2

N = 96

- Randomized to PNC-txt or *assessment only control*
- 43% Female; Mean age: 20.3; 77% white, 93% in college
- 89.4% of participants completed all 16 days of PNC-txt
- Analyzed full sample (n=93) and by CUD severity (n=45)

Full  
Sample  
N=96



# Peer Network Health Outcomes

< number of cannabis users in peer networks

< frequency of peer cannabis use

< relationship problems due to cannabis use

> peer instrumental and emotional support

# Reflections on Peer Relations

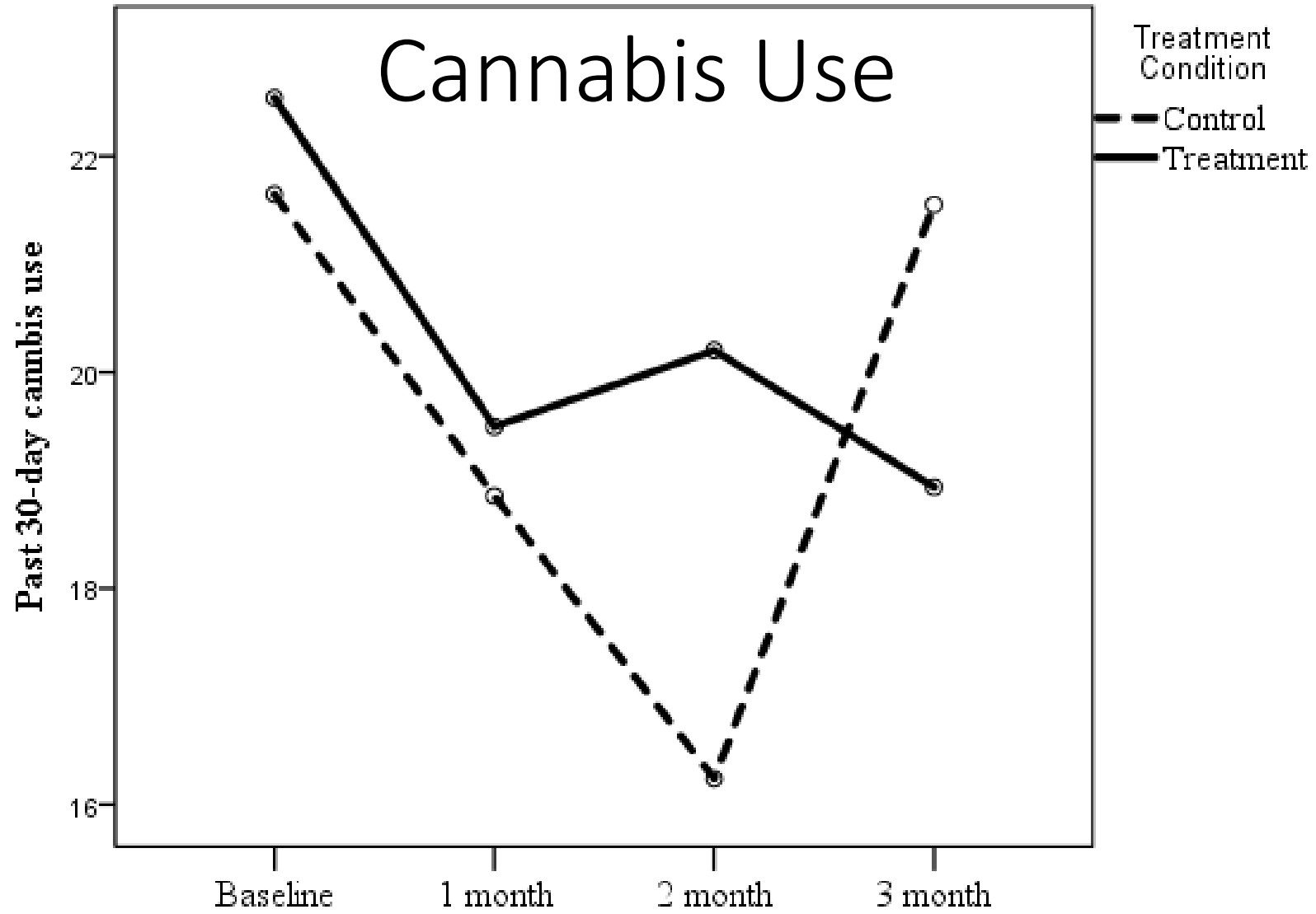
*“Your friend group really defines who you are, so it was really beneficial to evaluate that.”*

*“I had to change one of my friends because I realized that they were a negative influence on my life.”*

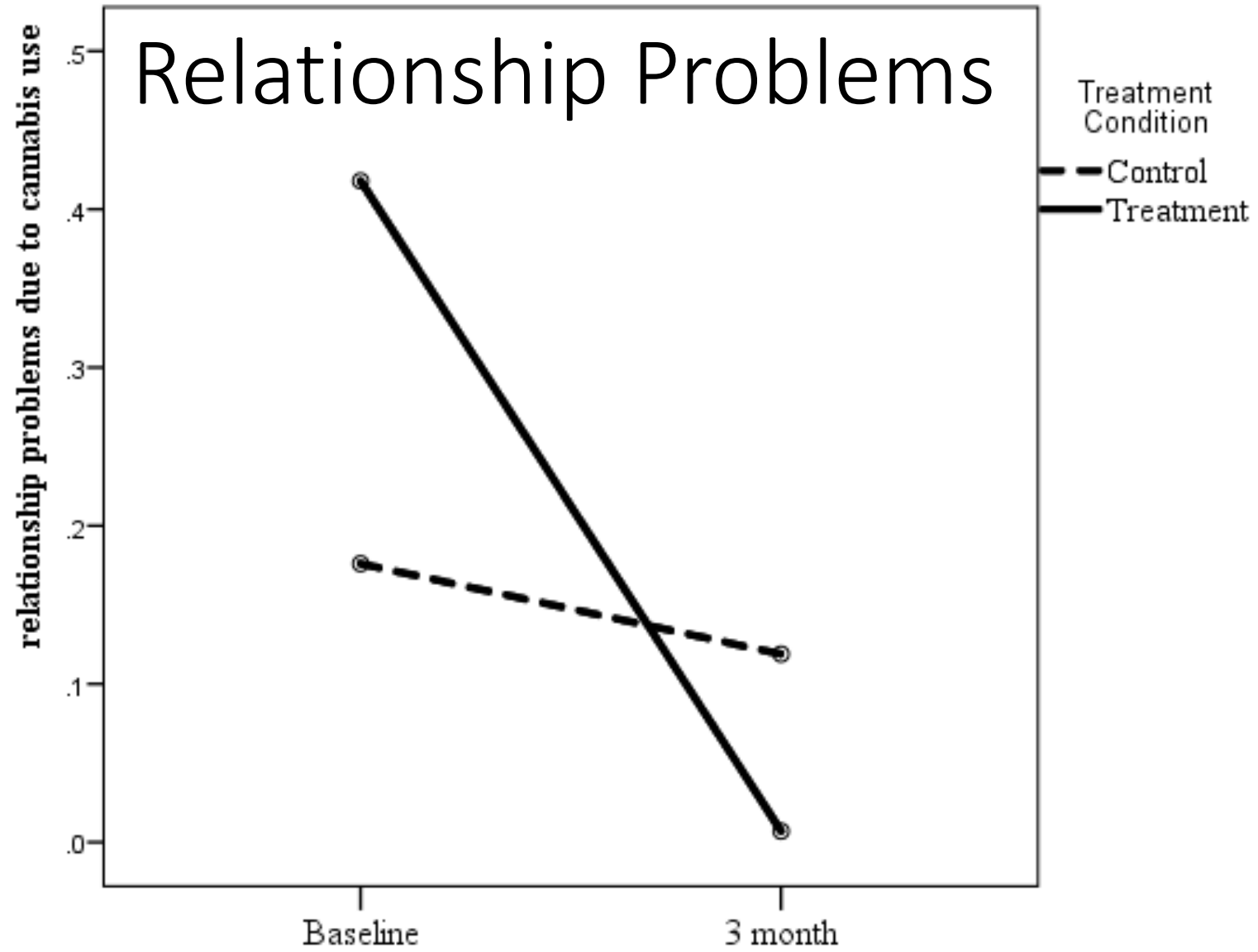
*“I’ve gotten my housemates to both start working out with me more and one of them to start consistently doing volunteer hours.”*



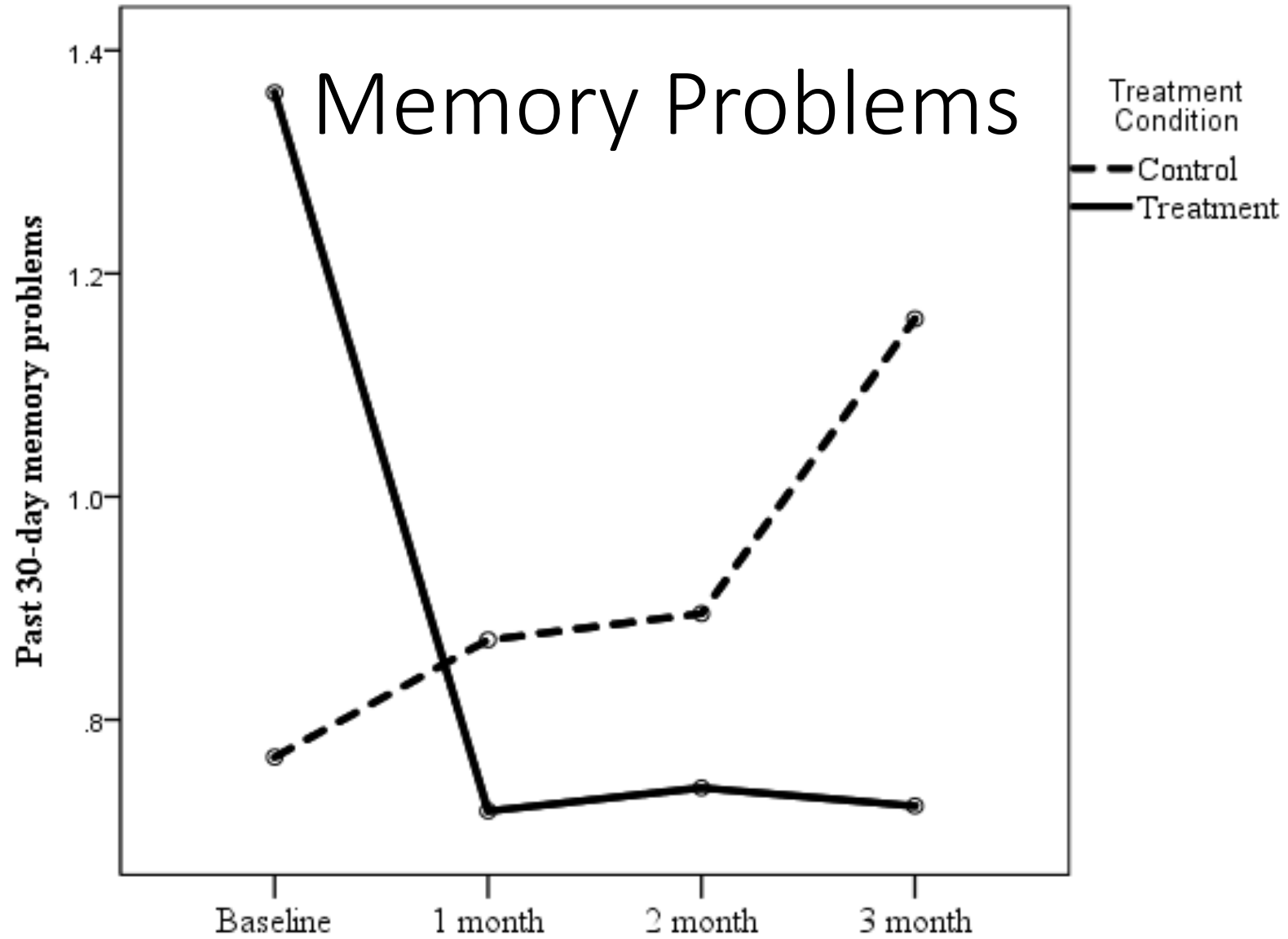
Sub-Group:  
Less CUD Sxs  
N= 45



Sub-Group:  
Less CUD Sxs  
N= 45



Sub-Group:  
Less CUD Sxs  
N= 45



# Treatment Satisfaction

*The texts I received in this study were:*

- Easy to understand 96.7
- The right amount each day 80.0
- Came at a good time of day 83.3
- Were helpful to my cannabis treatment 93.0
- Helped me focus on my friends to meet my goals 85.0

# The End

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