# Investigating the Relationship Between Risk Perception and Criminal Offending

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## Background

- Historically, researchers have long theorized what causes crime. In 2020, the FBI reported a violent crime rate of 398.5 per 100,000 people (FBI, 2020). The rate of violent victimization was reported to be 16.5 per 1,000 people in 2021 (Thompson & Tapp, 2022)
- Research indicates that there is not a single cause for crime and there may be multiple factors that influence participation in criminal behavior (Cloward & Ohlin,1960; Esbensen et al., 1991; Gottfredson & Hirschi, 1990).
- Of the multiple theories that speculate that causes of crime, rational choice theory assumes that criminals use a decision making process in which they weigh the benefits and costs of a criminal act. If the benefits outweigh the costs, an individual is more likely to commit a crime (Cornish & Clarke, 1987).
- Risk perception refers to one's ability to identify and evaluate dangers associated with events. In this context, it refers to an individual's perception of themselves and their likelihood of being caught or facing possible sanctions (jail time, arrest, probation, or fines) when committing a crime (Anwar & Loughran, 2011).
- Criminal offending refers to an individual's participation in activities that have been deemed illegal.
- Individuals with experience in committing an offense have lower estimates of the risk of punishment than those with no such experience (Jensen et al., 1978; Horney & Marshall, 1992).
- The present study will examine the relationship between an individual's risk perception and participation in criminal offending in an incarcerated population.

## Objectives

Correlational research to understand:

How does an individual's risk perception relate to their likelihood to be involved in criminal behavior?

Are individuals who believe sanctions are less likely to occur to them more likely to be involved in crime?

## Participants

- From 2021-2023, individuals experiencing incarceration at the Pasco County Jail in Land O' Lakes, Florida volunteered to participate interviews conducted by USF undergraduate research assistants. The data in this study utilizes information collected in 2022-2023.
- A total of 1,417 participants ranging from 18-73 years old (M=37.16;SD=11.13). 75.5% were male, 23.8% were female, and .5% identified as transgender or other.
- Race, education level, and age varied (see *Table 1, 2, & 3*).

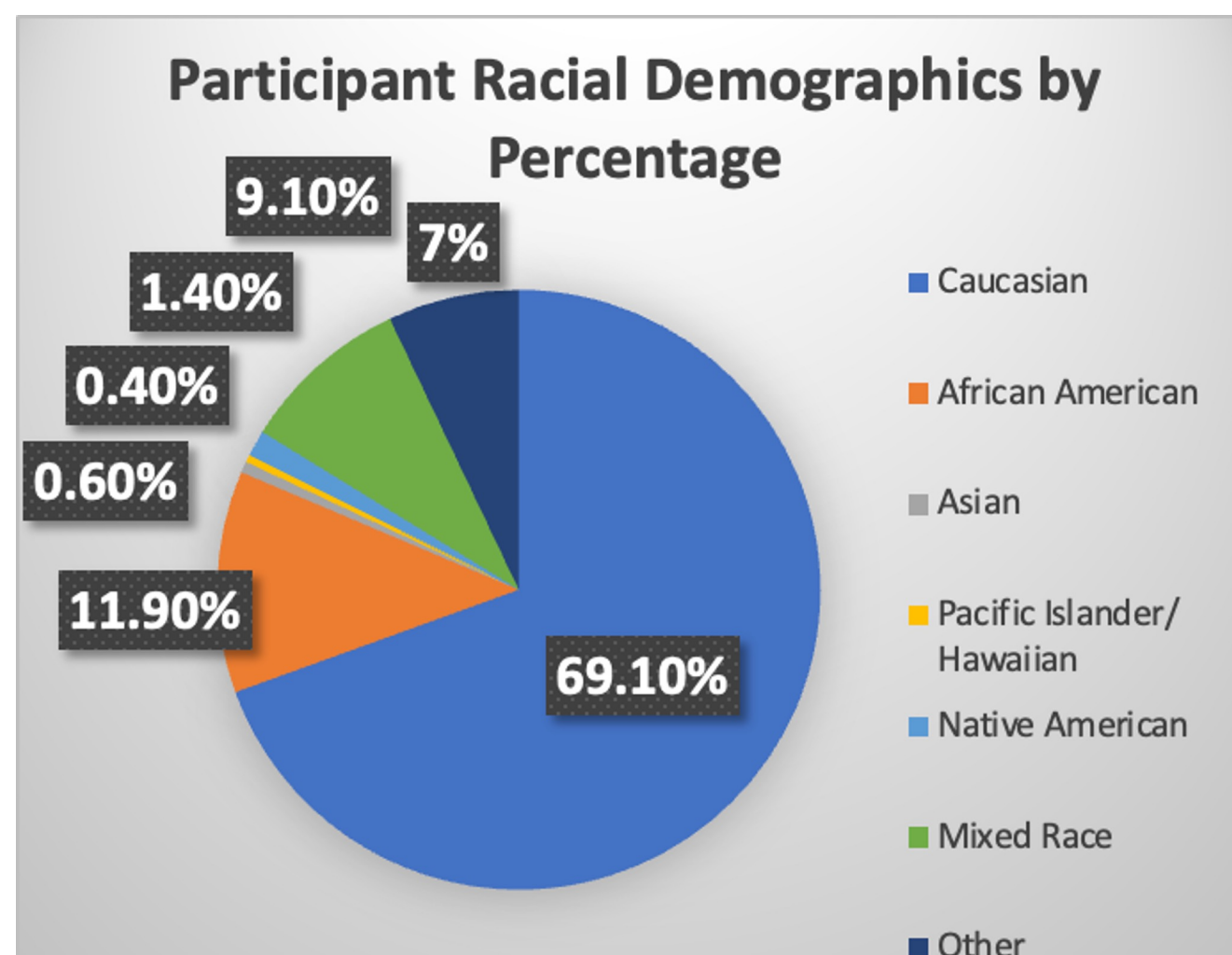Table 1. Participant (%) by Racial and Ethnic Group
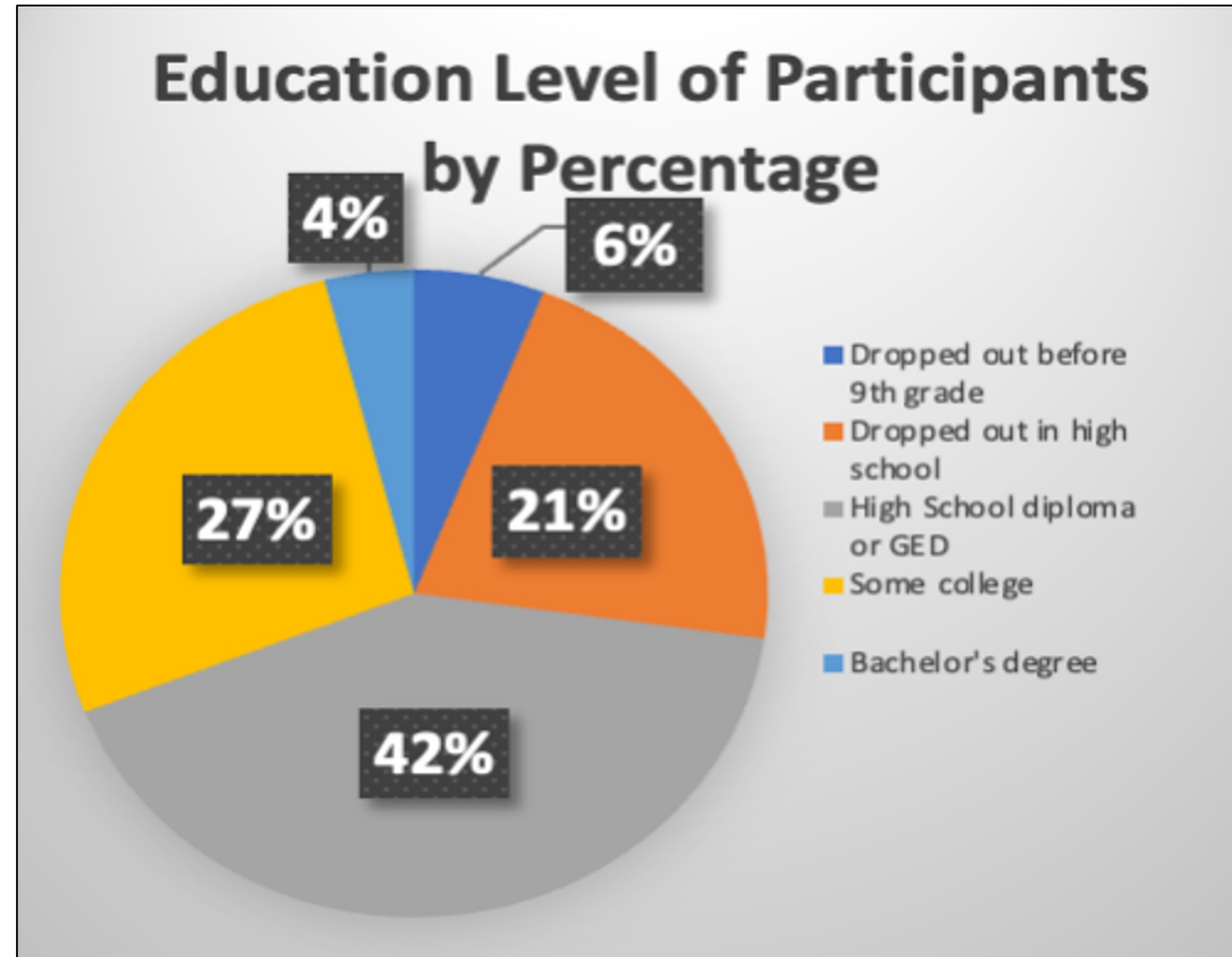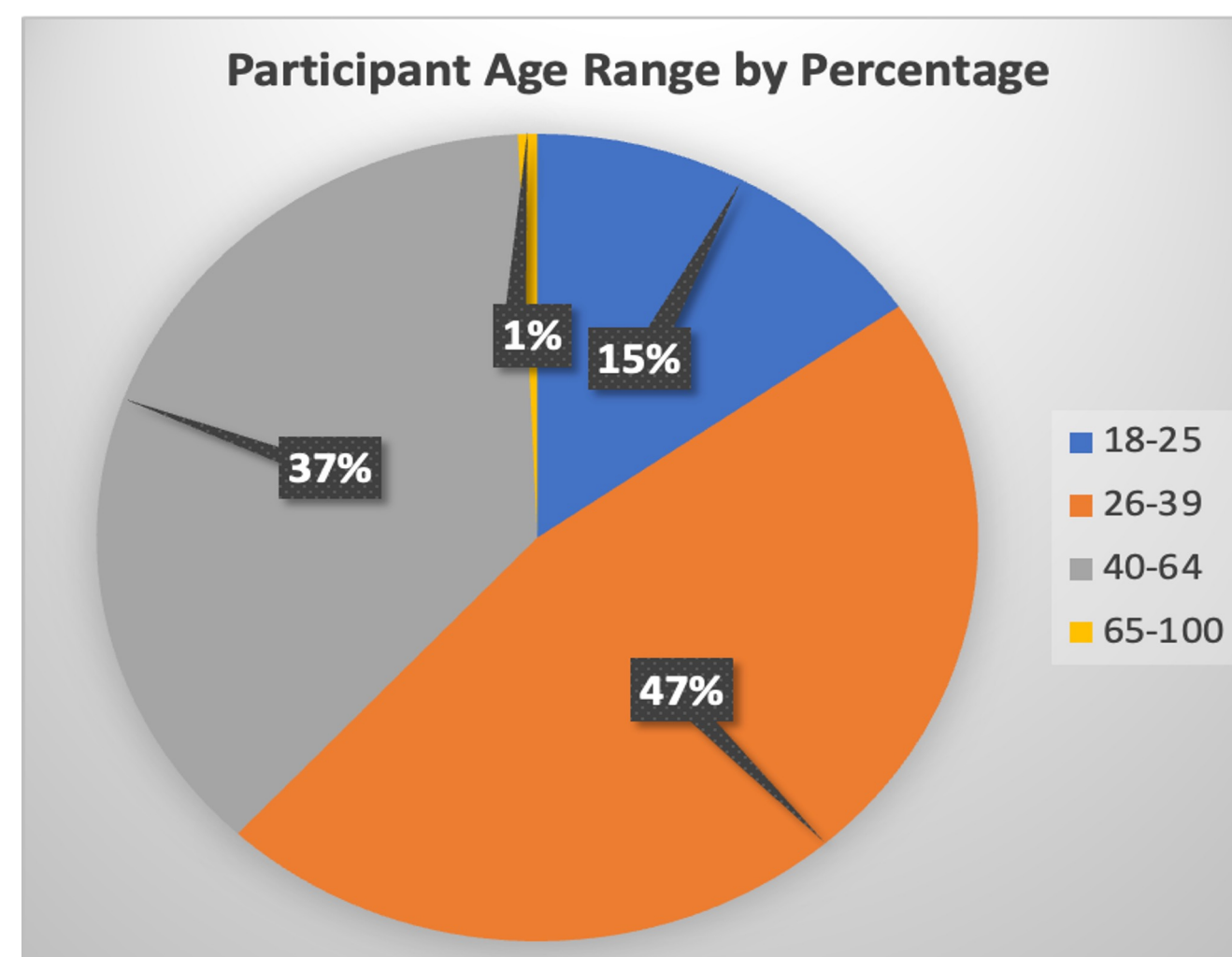
Table 2. Participant (%) by Education Level

Table 3. Participant (%) by Racial and Ethnic Group


Participant Racial Demographics by Percentage: Caucasian 69.10%, African American 11.90%, Asian 0.60%, Pacific Islander/Hawaiian 0.40%, Native American 1.40%, Mixed Race 9.10%, Other 7%


Education Level of Participants by Percentage: Dropped out before 9th grade 6%, Dropped out in high school 21%, High School diploma or GED 42%, Some college 27%, Bachelor's degree 4%


Participant Age Range by Percentage: 18-25 15%, 26-39 47%, 40-64 37%, 65-100 1%

## Methods

**Measures of Criminal Offending**

- Criminal offending was measured using a Self Reported Offenses (SRO) questionnaire which was adapted from Esbensen et. al (1991) and adapted. The questionnaire is a self report survey that uses a 6 point Likert-type scale response.
- The Self Reported Offenses questionnaire is broken into two different sections that reflect each subscale: Past 12 Months and Lifetime.
  - The SRO Past 12 Months subscale asks: "How many times have you done the following actions in the past 12 months" (shoplifted, sold drugs, got in a fight, etc.)
  - The SRO Lifetime subscale asks: "How many times have you done the following actions in your lifetime?" (Been arrested.)
  - We found that the SRO Lifetime subscale correlated with the Lifetime History of Aggression lifetime arrests question (r=.382, p<.01) supporting convergent validity.

**Measures of Risk Perception**

- Risk perception was measured using a Risk Perception Questionnaire which was adapted from Bruine de Bruin et. al (2007). This questionnaire used a percent scale and contains 27 questions. The measure has three subscales: Future, Risk, and Arrest
- Participants were asked to consider each case and respond with how likely each event was to occur to them on a scale of 0-100%.
- The questionnaire is broken into three sections that reflects each subscale:
  - The first section (RPQ Future) measures future outcomes and asked "what is the chance in the next 12 months you will…." (get a job, own a gun, etc.).
  - The second section (RPQ Risk) measures risk and asks "what do you think the percent chance of the following occurring to you after committing a crime is" (get arrested, get convicted if I go to trial, go to federal prison if I get convicted, etc.).
  - The third section (RPQ Arrest) measures arrest likelihood and asks "What do you think is the percent chance that you would be arrested if you were to ever commit any of these crimes" (carry a large amount of illegal drugs, kill someone, etc.).
  - The RPQ arrest subscale was significantly correlated with the Criminogenic Risk and Protective Factors impulse control subscale, suggesting possible convergent validity ($\rho$=.09, p>.01). The RPQ has not been psychometrically validated and more research is needed.

**To view the full list of SRO and RPQ questions and subscales, please visit the QR code.**
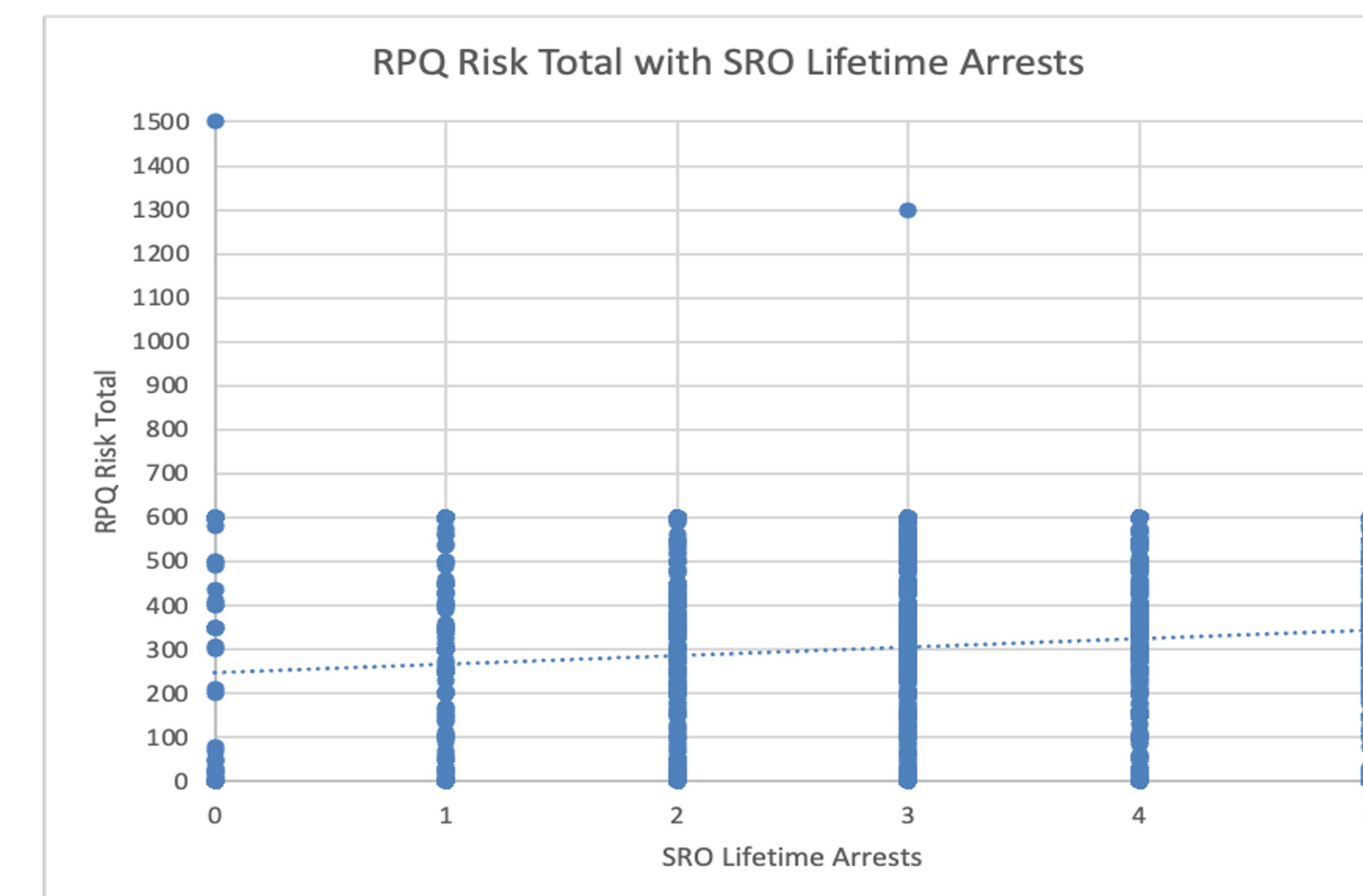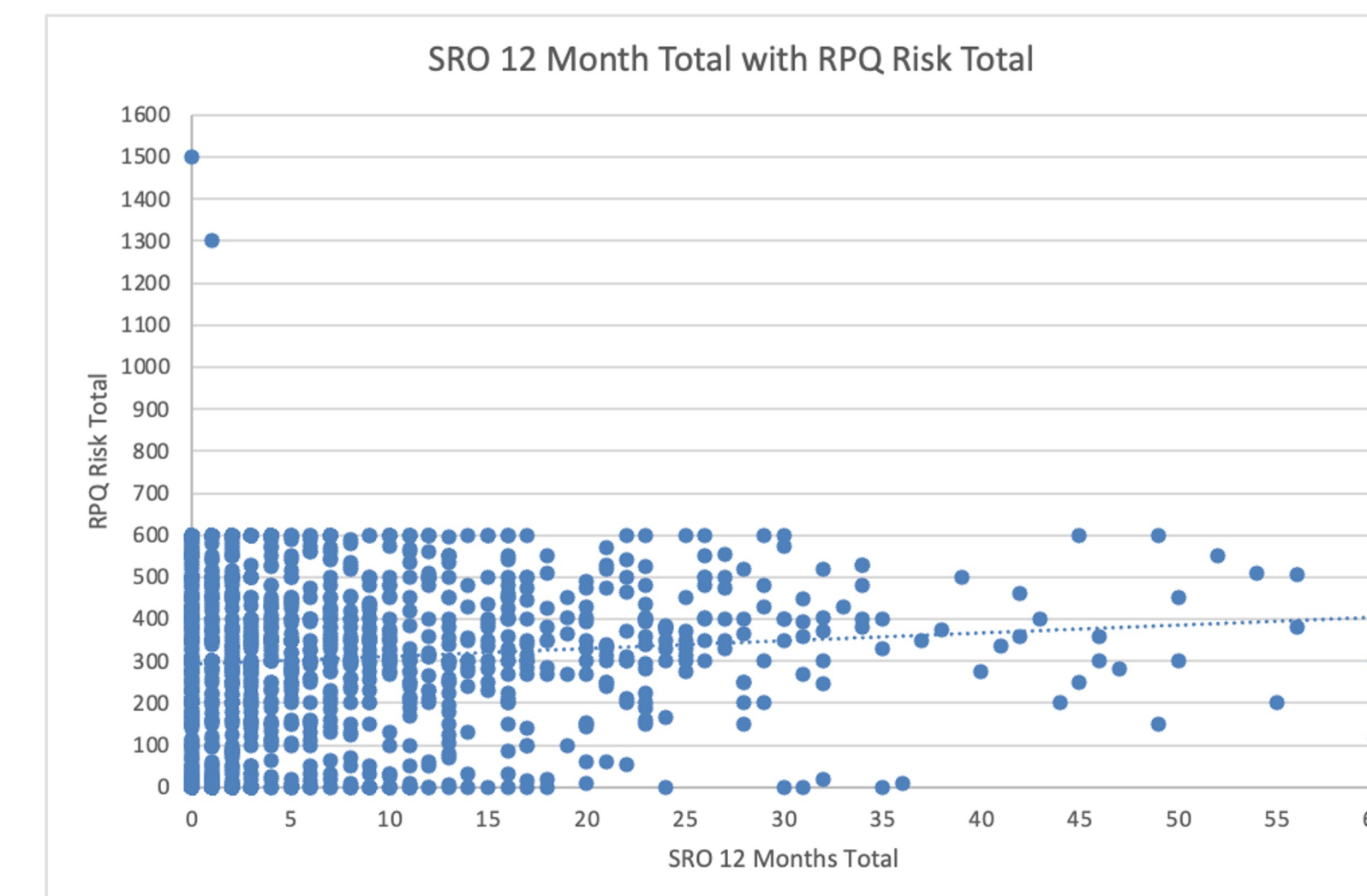
**Collection**

- Participants volunteered to participant in the study from the Land O' Lakes jail. Once they volunteered, a USF undergraduate research assistant would follow up with them in the jail. The baseline interview consisted of screening questions to ensure participants were eligible to participate in the study. Afterwards, multiple questionnaires were administered, each section was thoroughly explained by the student.
- Both questionnaires were administered:
  - During a participants baseline interview
  - Again a year after a participants release from jail during a post-release interview.

## Analysis & Results

- Only the baseline interviews and data were used.
- For the analysis, the subscales SRO Past 12 Months (M=7.23;SD=9.71), SRO lifetime (M=2.96;SD=1.32), and RPQ Risk (M=303.33;SD=199.11) were used.
- To assess internal consistency, we calculated Cronbach's Alpha for the measures. Our findings are as follows:
  - RPQ Risk: $\alpha$ = .869
  - SRO 12 Months: $\alpha$ = .847
- To test our hypothesis, we conducted a Pearson's correlation ($r$) analysis. Using a two-tailed test, we found:
  - **Small significant positive correlation** between participants RPQ risk scores and their 12 Month SRO ($r$ = .090, p < .01)
  - **Small significant positive correction** between a participants RPQ risk scores and their lifetime SRO ($r$ = .131 p < .0)1

## Discussion, Conclusion & Directions


SRO 12 Month Total with RPQ Risk Total


RPQ Risk Total with SRO Lifetime Arrests

**Discussion:**

- Overall, the findings reveal a positive correlation between the two variables.
- This suggests that, in this sample, an individual's' perceptions on the risk of sanctions is correlated with their lifetime number of self reported arrests.
- This also suggests that, in this sample, an individual's' perceptions on the risk of sanctions is correlated with their self-reported criminal involvement.
- Our findings contrast with prior research that has often reported an inverse relationship between criminal offending and perceived risk (Jensen et al., 1978). Notably, prior research did not consider criminal justice involvement and focused on non-inmate populations.

**Limitations:**

- Validity concerns for the RPQ, many participants struggled to understand the questions in terms of hypotheticals. Participants often respond with 0% for all questions because they are not planning to be arrested again.
- The RPQ has not been psychometrically validated.

**Conclusion & Future Directions**

- To address potential validity concerns, it is advisable to refine and provide a more comprehensive definition and explanation of 'hypothetical' within the RPQ section of the survey.
- Additional research on the relationship between risk perception and self-reported offenses is warranted.
- Notably, a correlational investigation between criminal involvement and risk perception has been unexplored within incarcerated populations.

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**References**
A full list of references can be accessed using the QR code