# A Self-Determination Theory Approach to Understanding Motivational Profiles:

## Links to Academic Emotions and Substance Use

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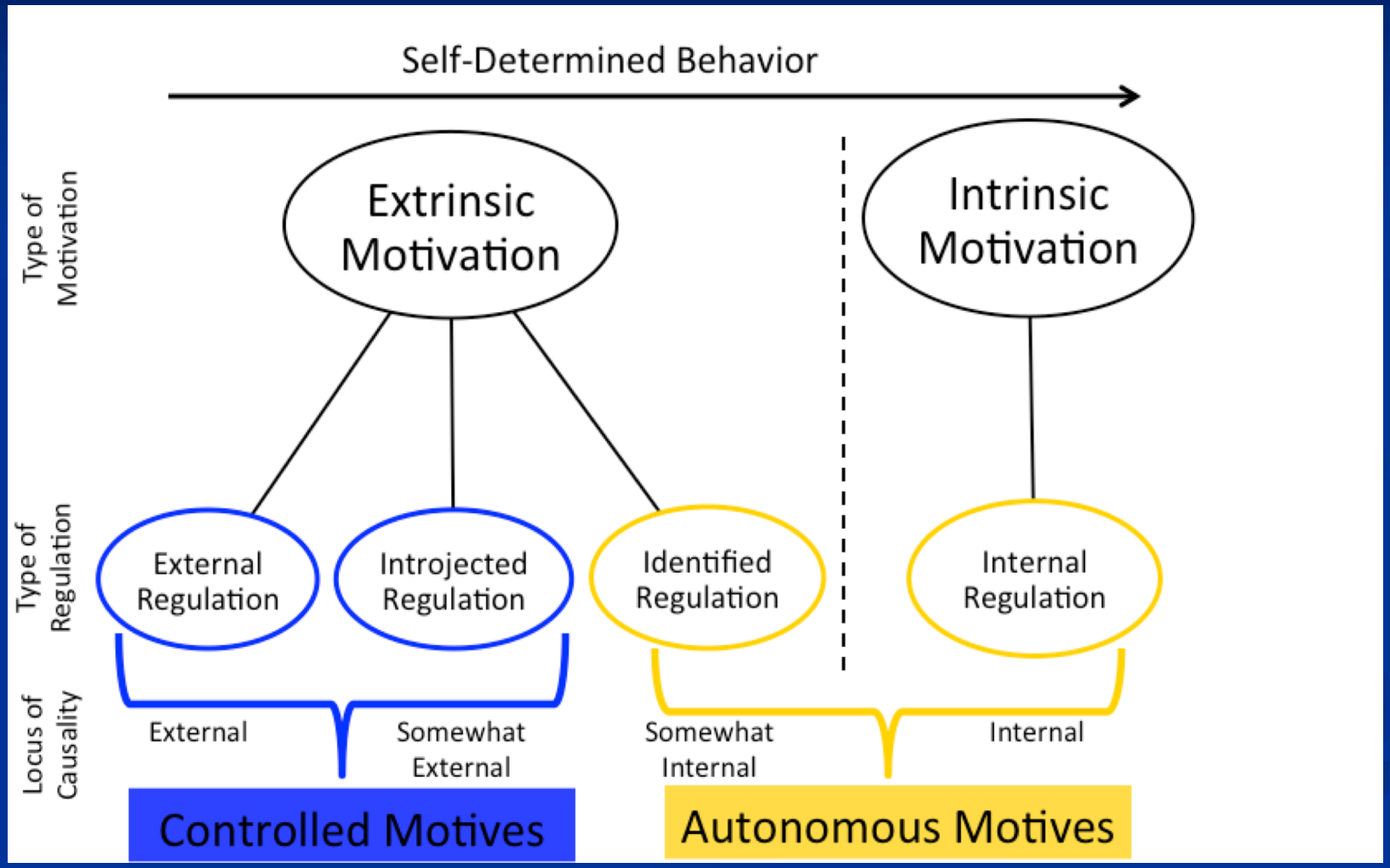
# Self-Determination Theory




Adapted from Ryan & Deci (2000)

# A Person-Centered Approach

- Examines the effects of different *combinations of motives* (i.e., motivational profiles)

- Provides a critical test of SDT's qualitative perspective (i.e., ratio of autonomous to controlled motives is key) versus a more quantitative perspective (i.e., more motivation is better)

# The Current Research

Motivational profiles and….

- Anxiety
- Supports qualitative perspective (i.e., highest anxiety among *controlled* profiles)

- Substance Use
- No person-centered research to date
- Evidence for both quantitative and qualitative perspectives in variable-centered studies

# Study 1: Method

- 270 9th & 10th graders attending public high schools completed anonymous surveys including:
  - Intrinsic, Identified, Introjected, External Motives

    Academic Self-Regulation Scale (Vansteenkiste et al., 2009)
  - Class-Related Anxiety

    Achievement Emotions Questionnaire (Pekrun et al., 2005)
  - Alcohol Use and Drinking Motives

    Drinking Motives Questionnaire: Social, Conformity, Enhancement, Coping (Cooper, 1994)

# Cluster Analysis

- Inputs: Scores from ASRS

intrinsic, identified, introjected, external

- 2-Step Procedure: Hierarchical (Ward's) followed by nonhierarchical (k-means)

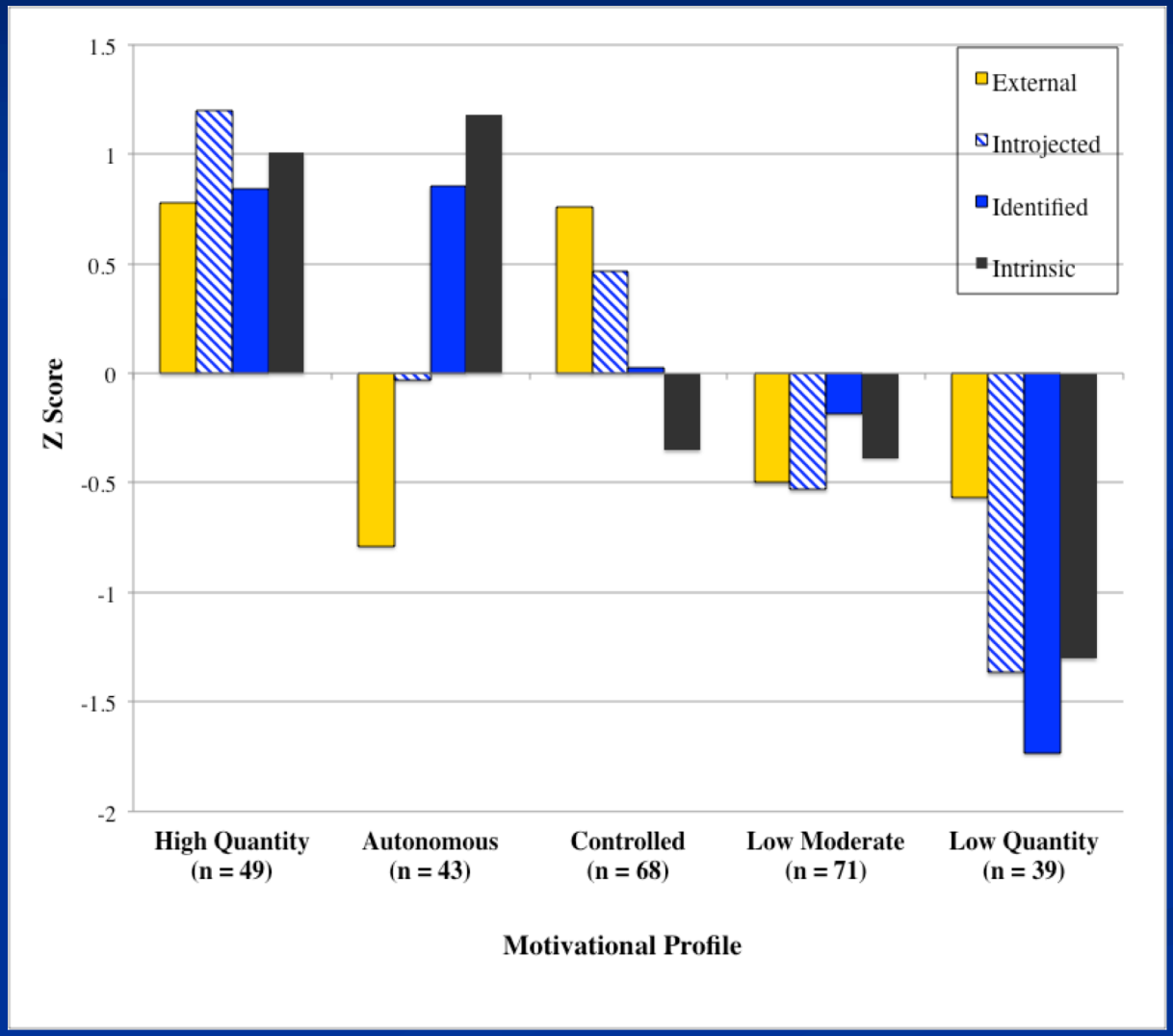
- 5-Group Solution Selected

Explained sufficient variance (47%-73%)

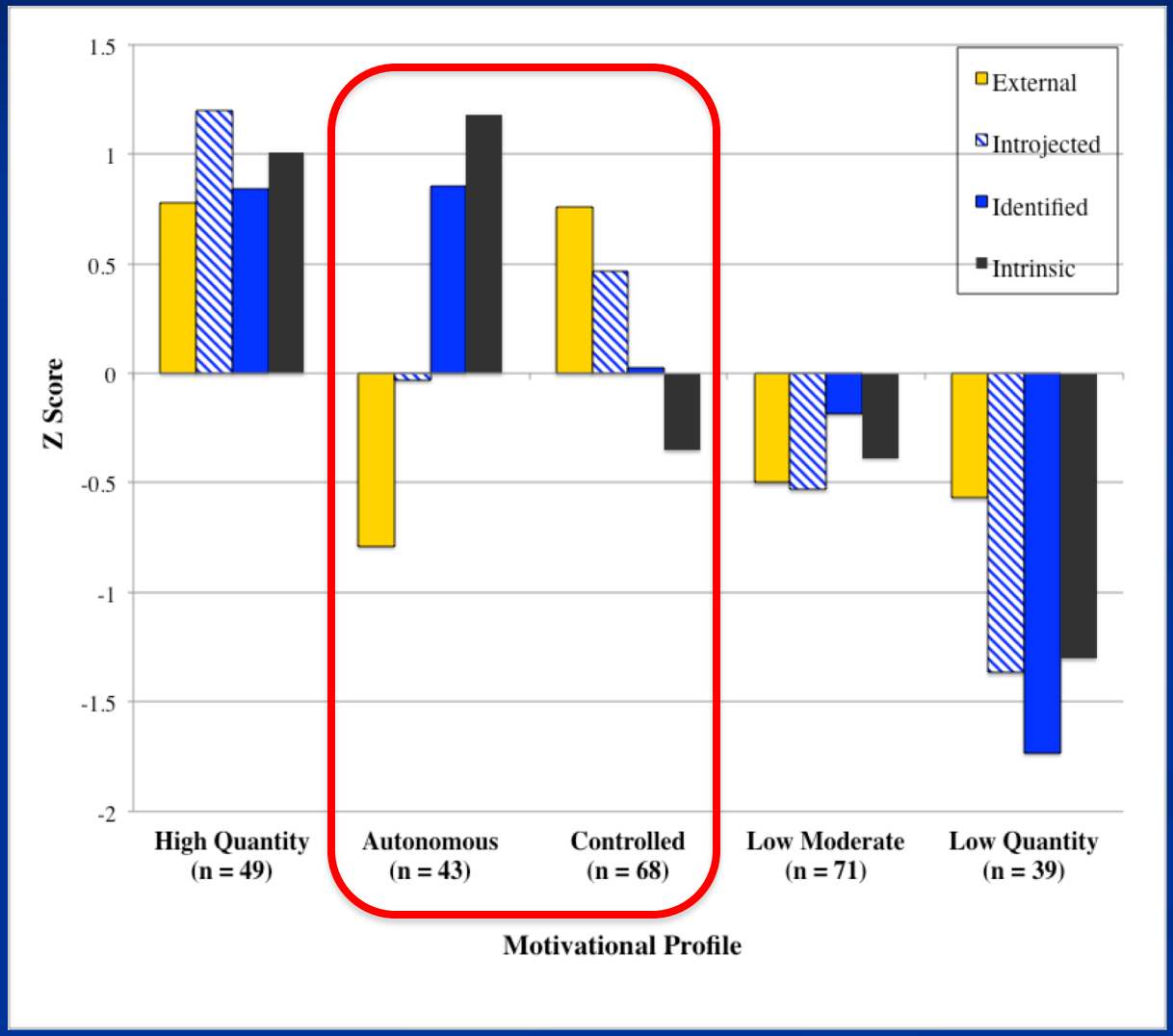
Stable and replicable ($\varkappa$ = .67)

Largely consistent with extant theory and research

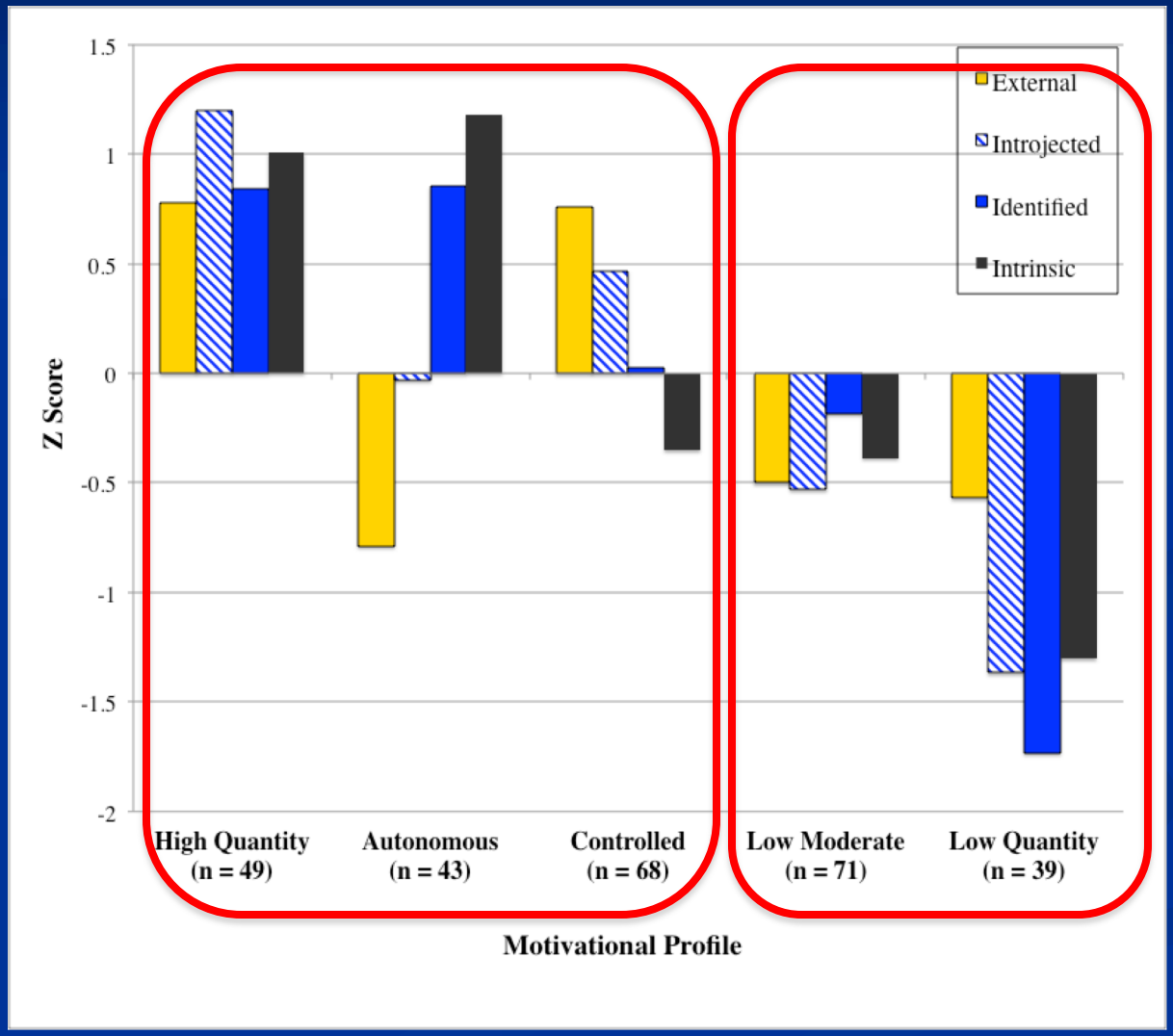
# Study 1: Cluster Solution



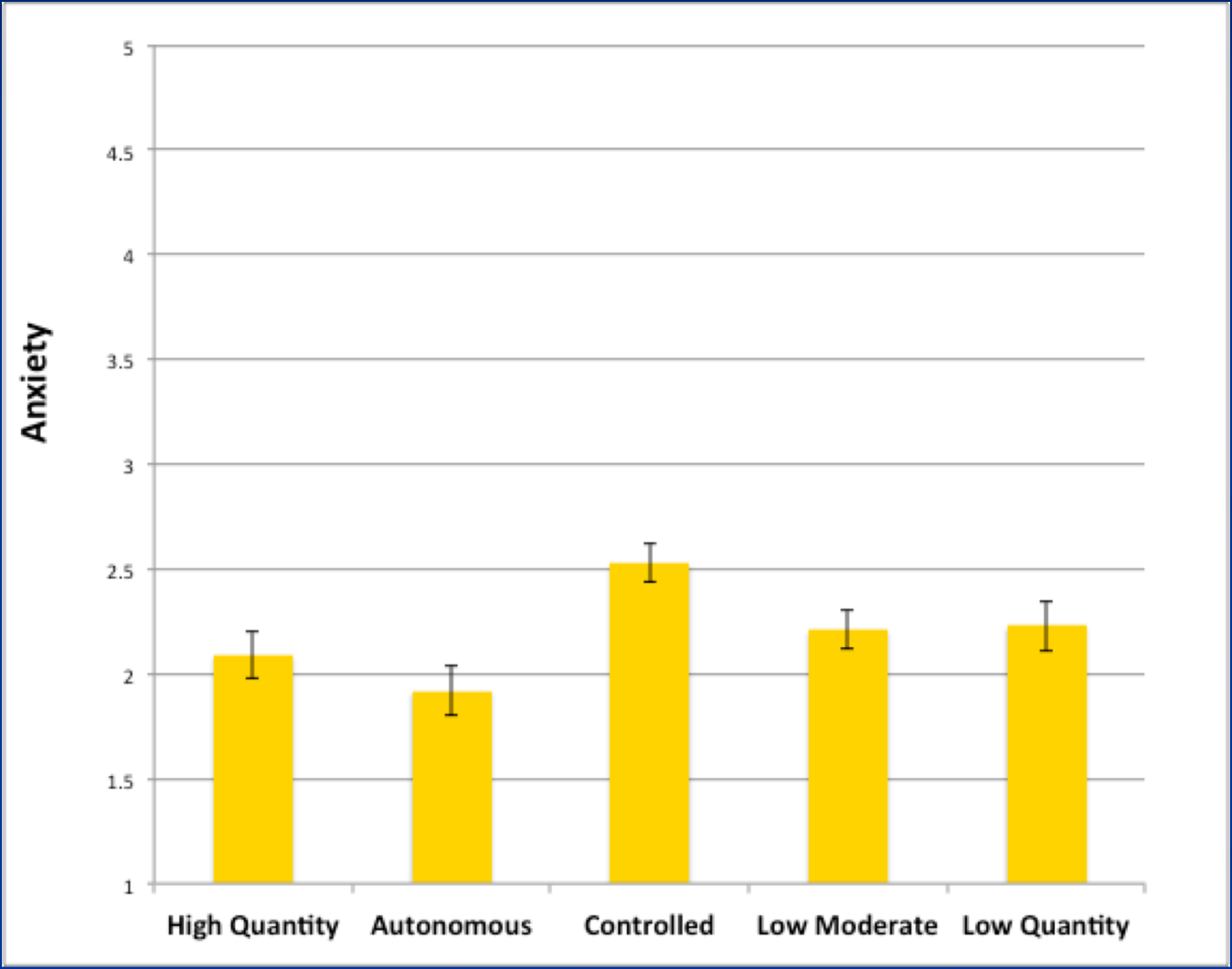
# Quality Comparison



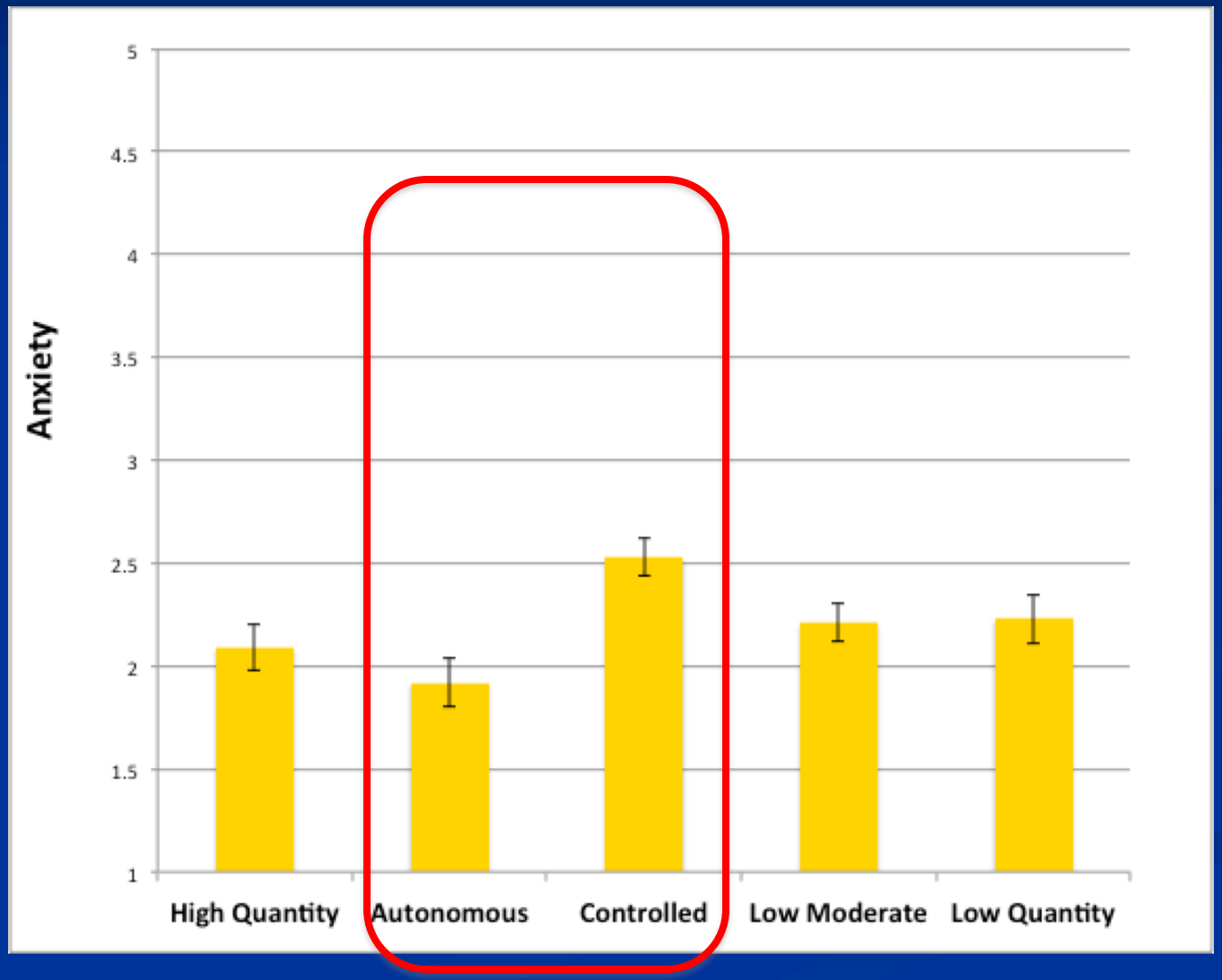
# Quantity Comparison



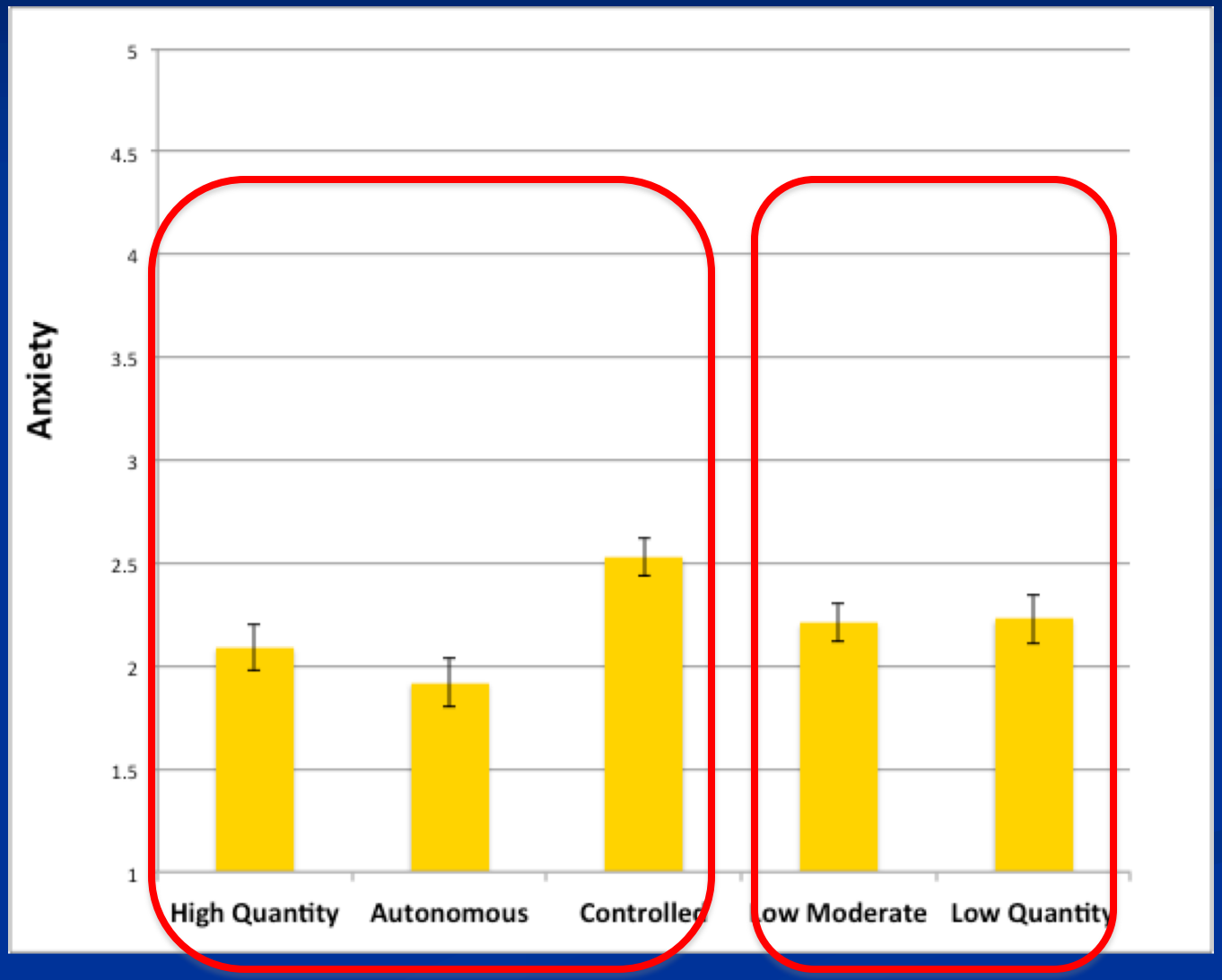
# Study 1: Anxiety



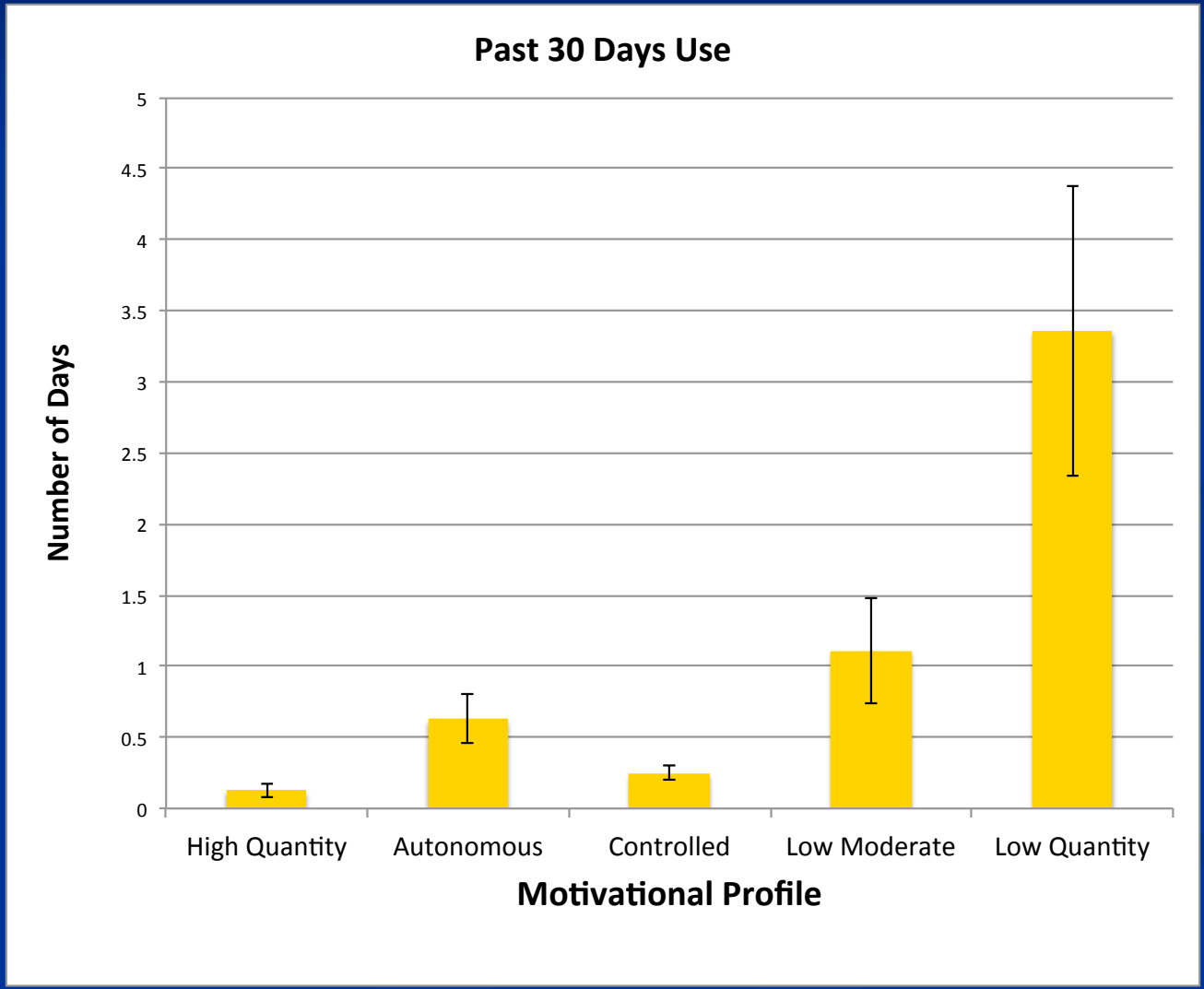
# Anxiety: Quality Comparison



# Anxiety: Quantity Comparison



# Study 1: Alcohol Use



# Study 1: Key Findings

- **Qualitative Perspective:** Supported by Emotions data
- Anxiety highest in Controlled profile, lowest in Autonomous profile
- **Quantitative Perspective:** Supported by Alcohol use data
- Heaviest use in Low Quantity and Low Moderate profiles

# Study 2

- 208 undergraduates from Reed College

"Life of the mind" approach

Liberal attitude toward marijuana use

- Anonymous online surveys including:

- Intrinsic, Identified, Introjected, External Regulation

Academic Self-Regulation Scale (Vansteenkiste et al., 2009)

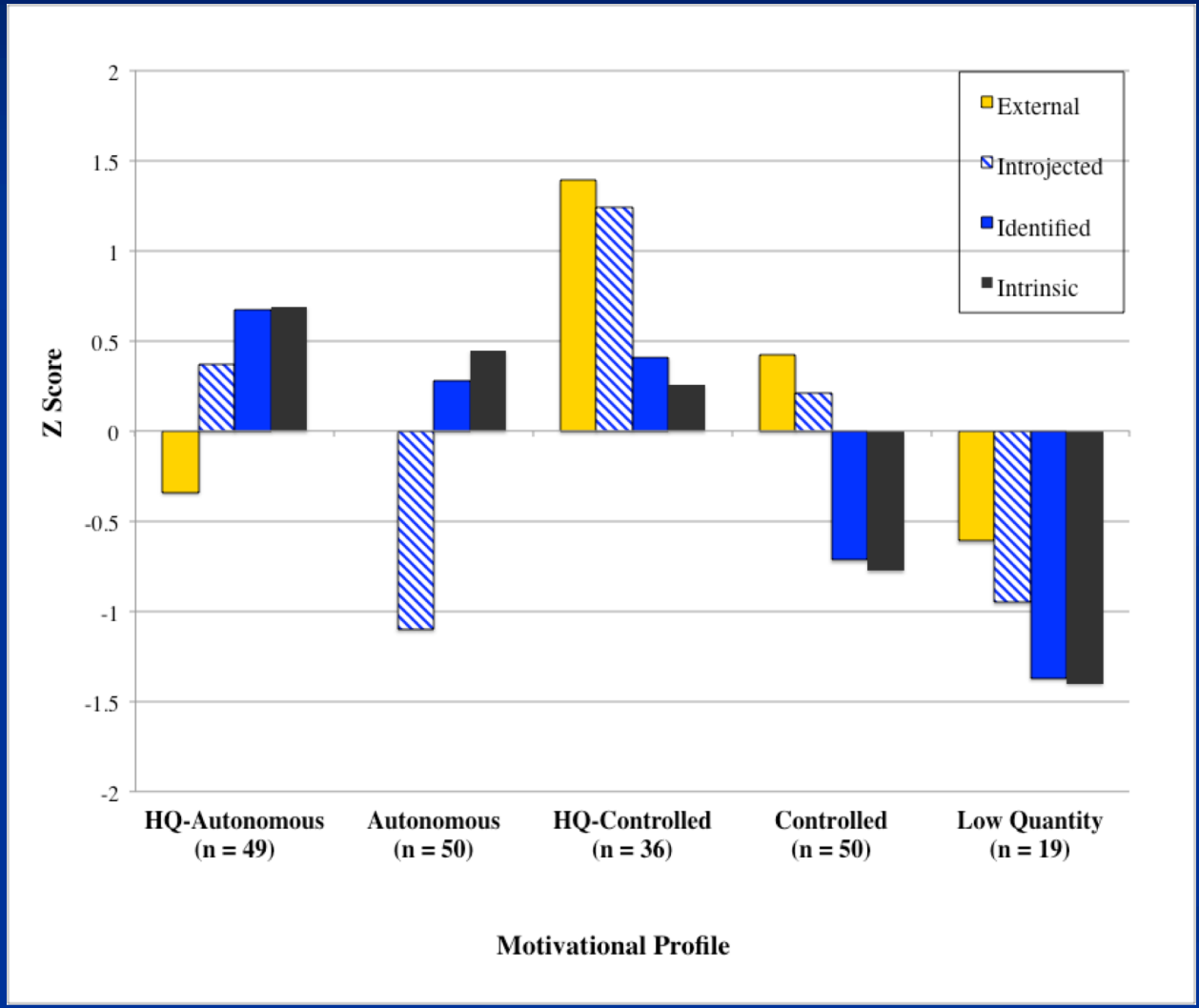
- Learning & Class-Related Anxiety

Achievement Emotions Questionnaire (Pekrun et al., 2005)

- Marijuana Use and Marijuana Motives

Social, Conformity, Enhancement, Coping (Simons et al., 1998)

# Study 2: Cluster Solution



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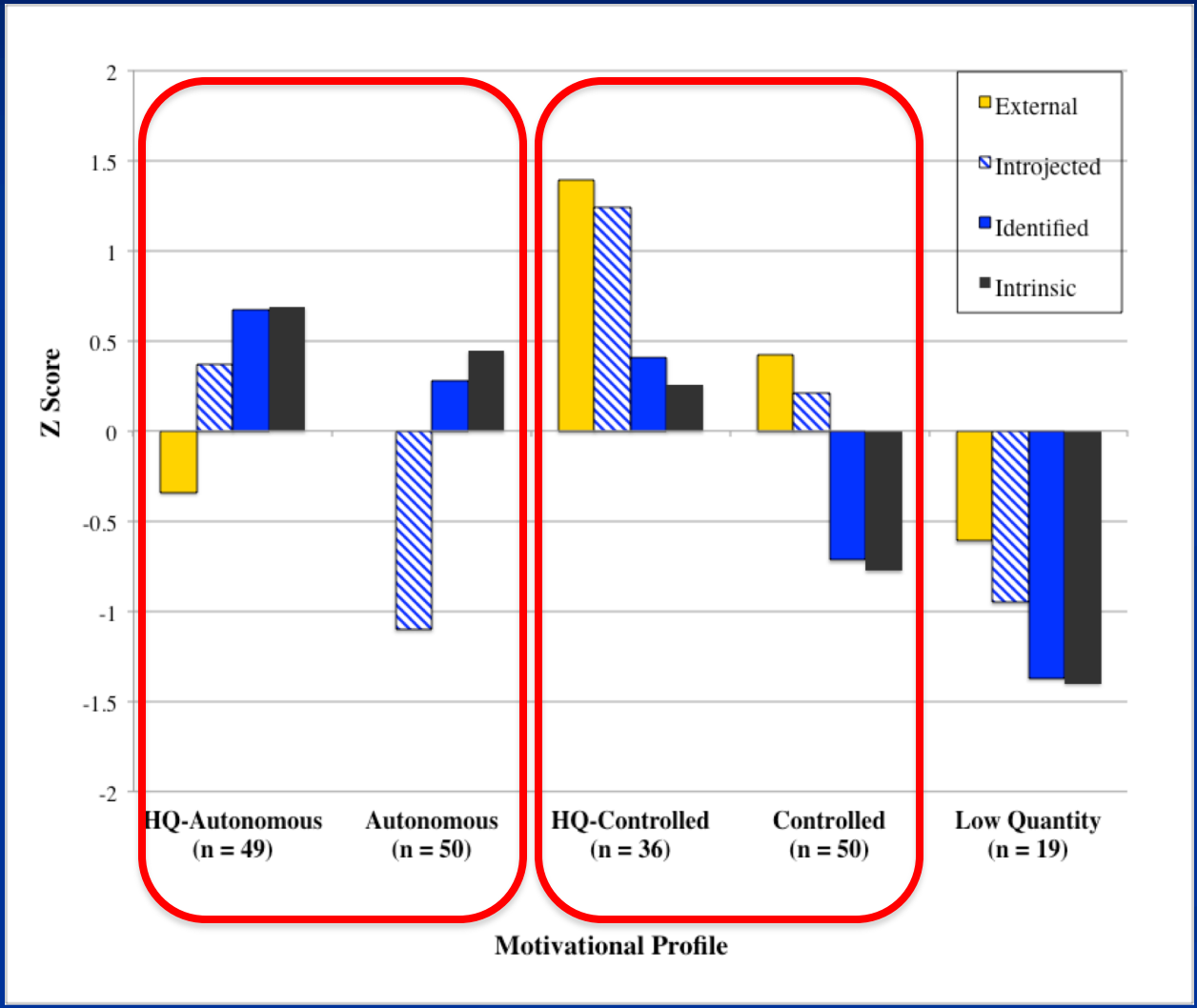

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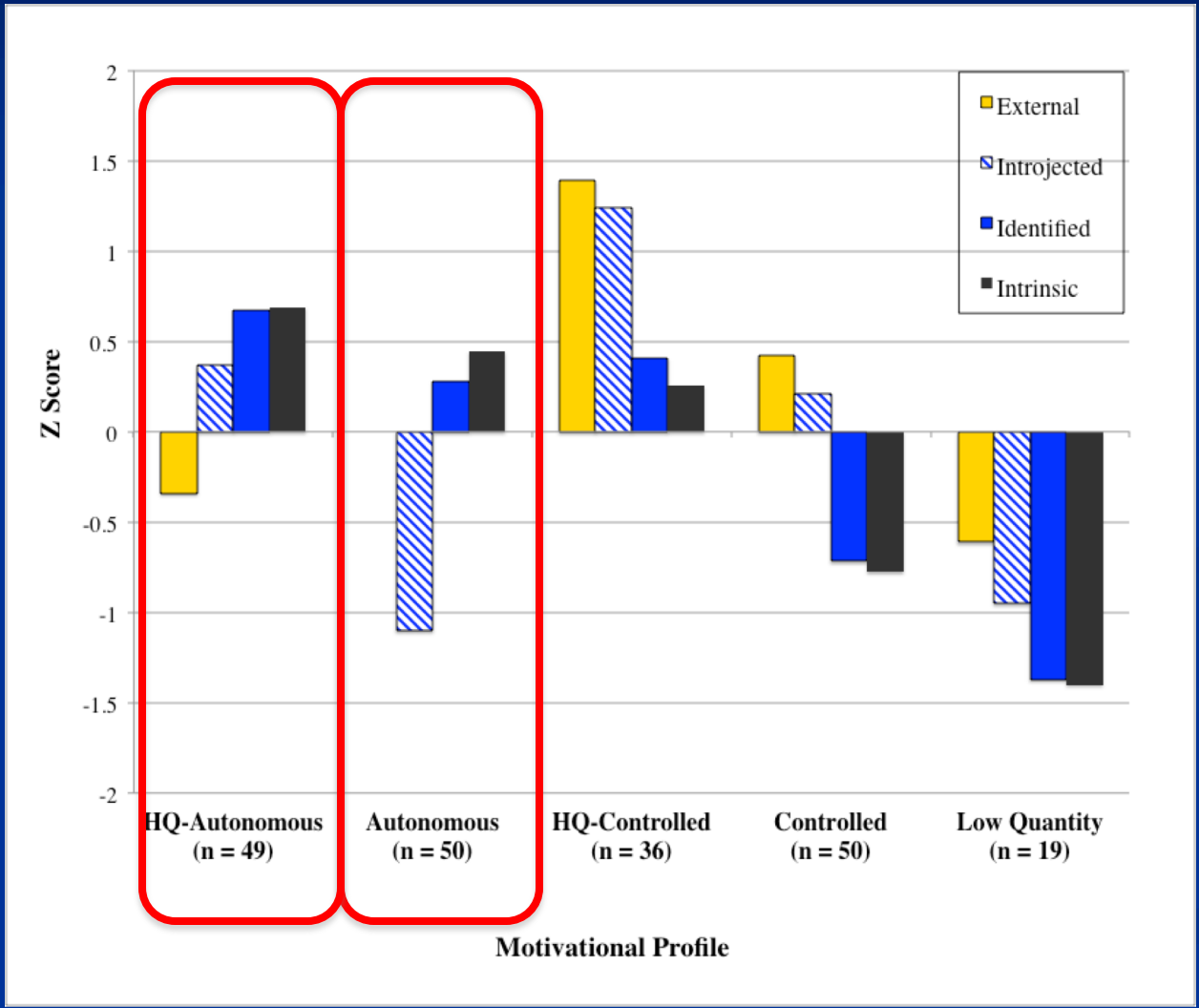

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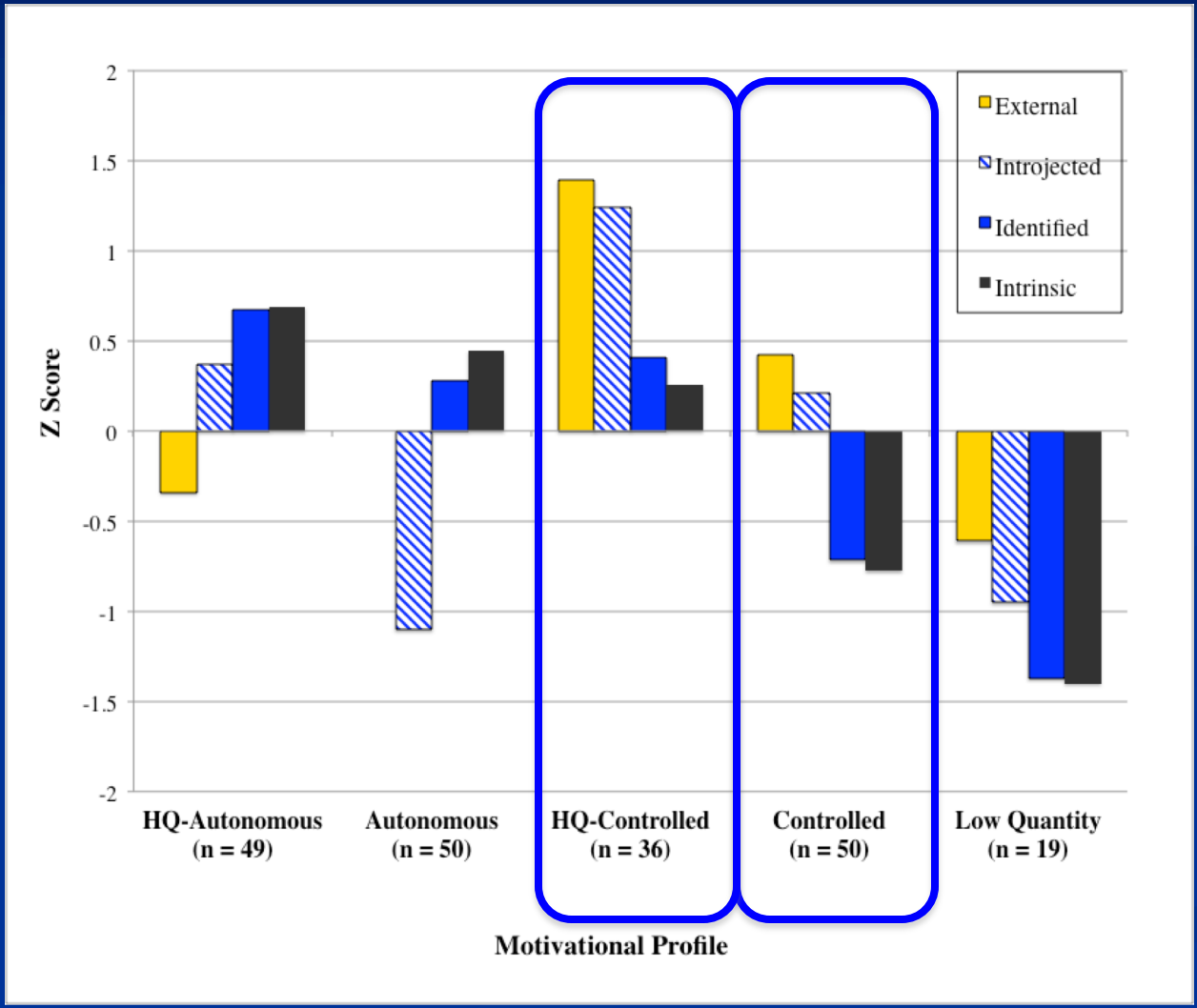
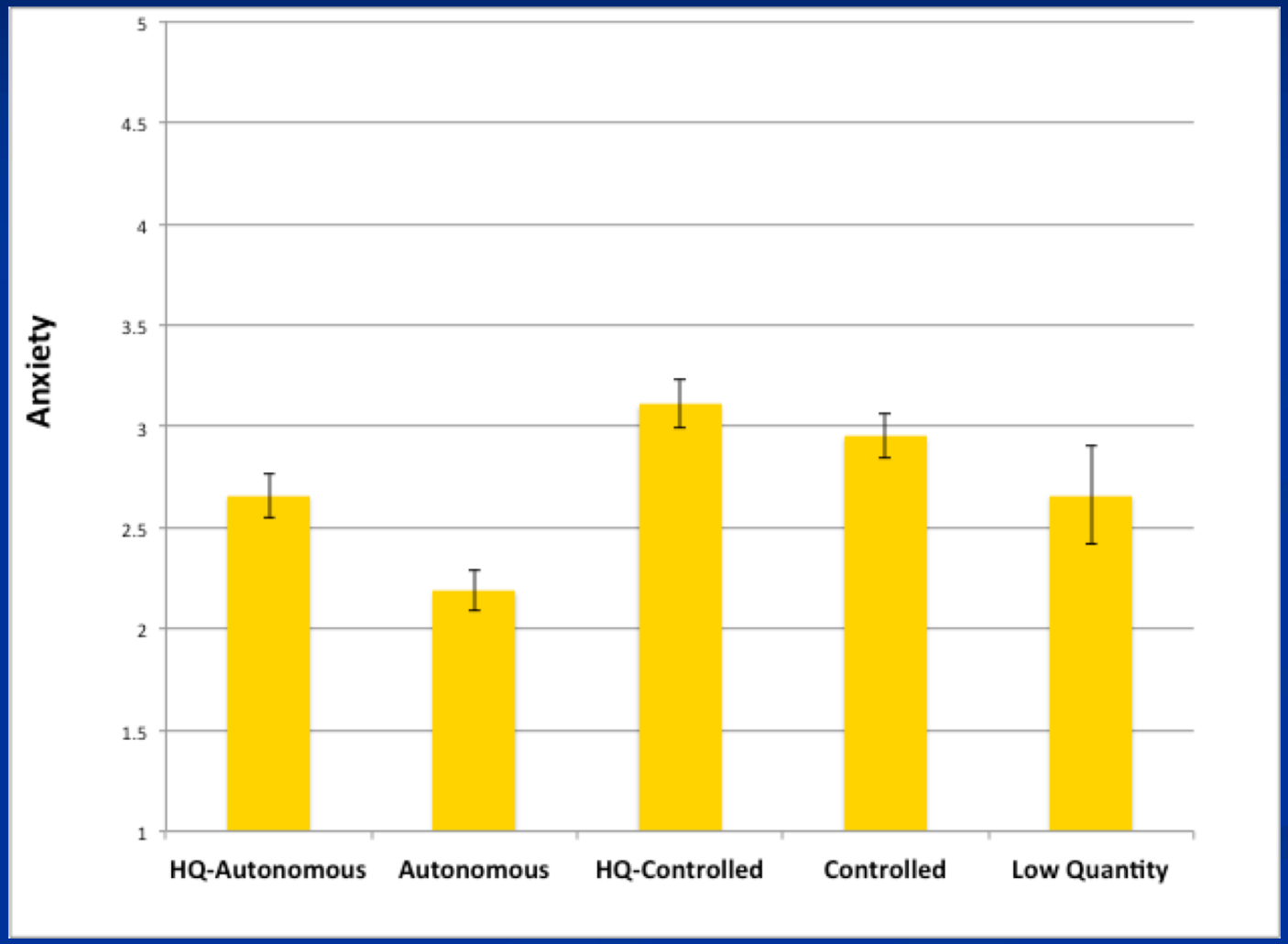


# Study 2: Anxiety



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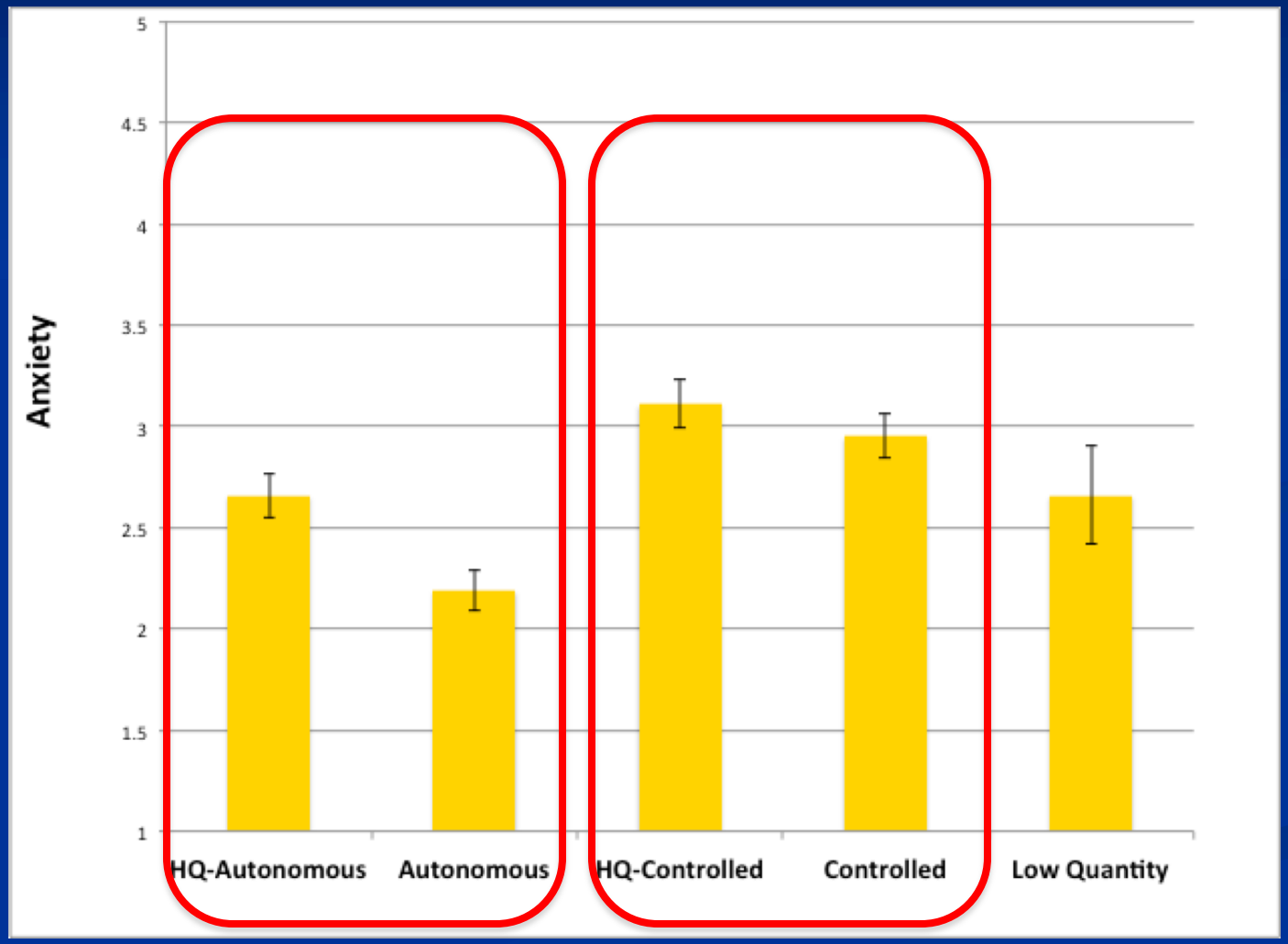
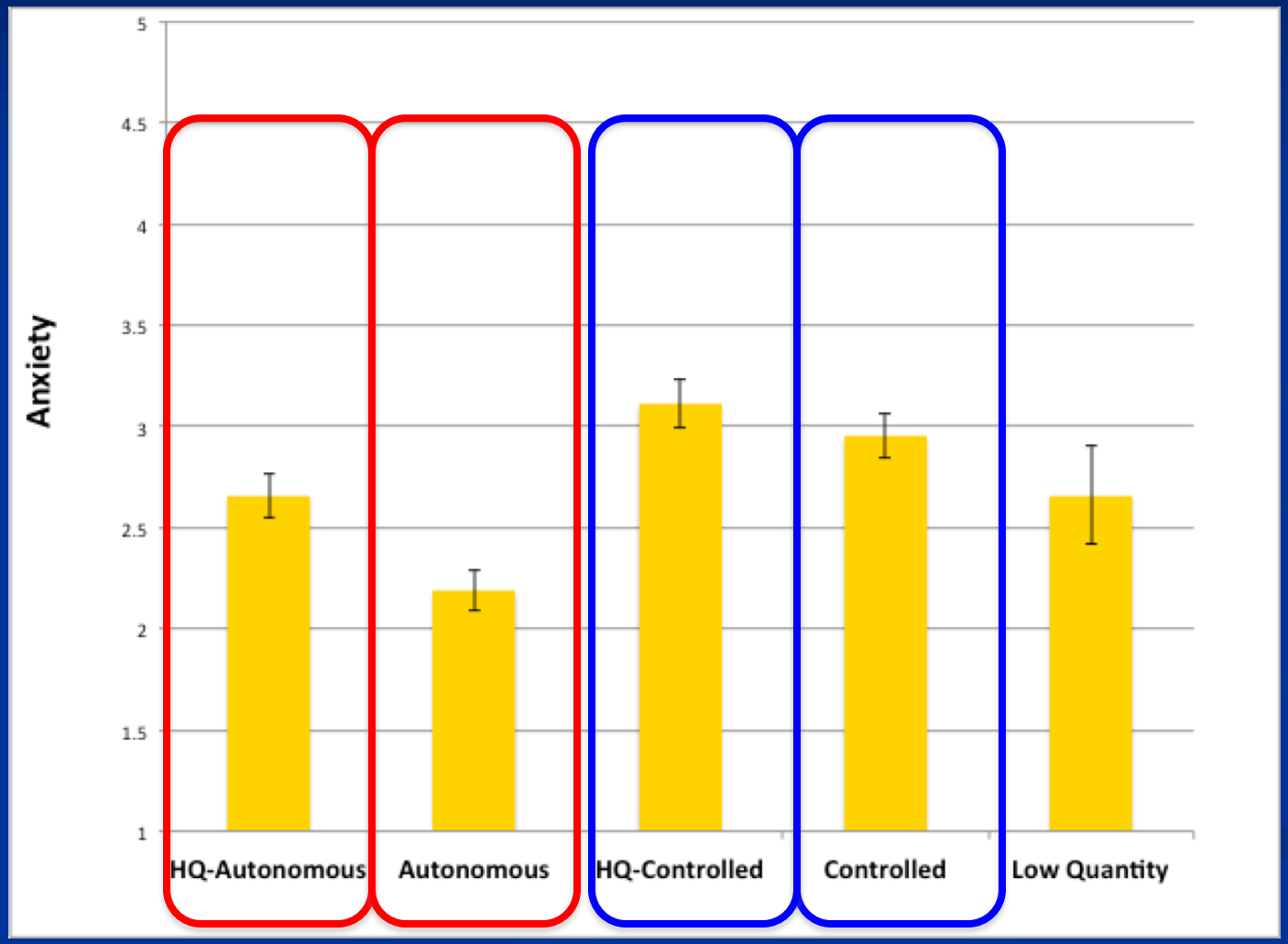
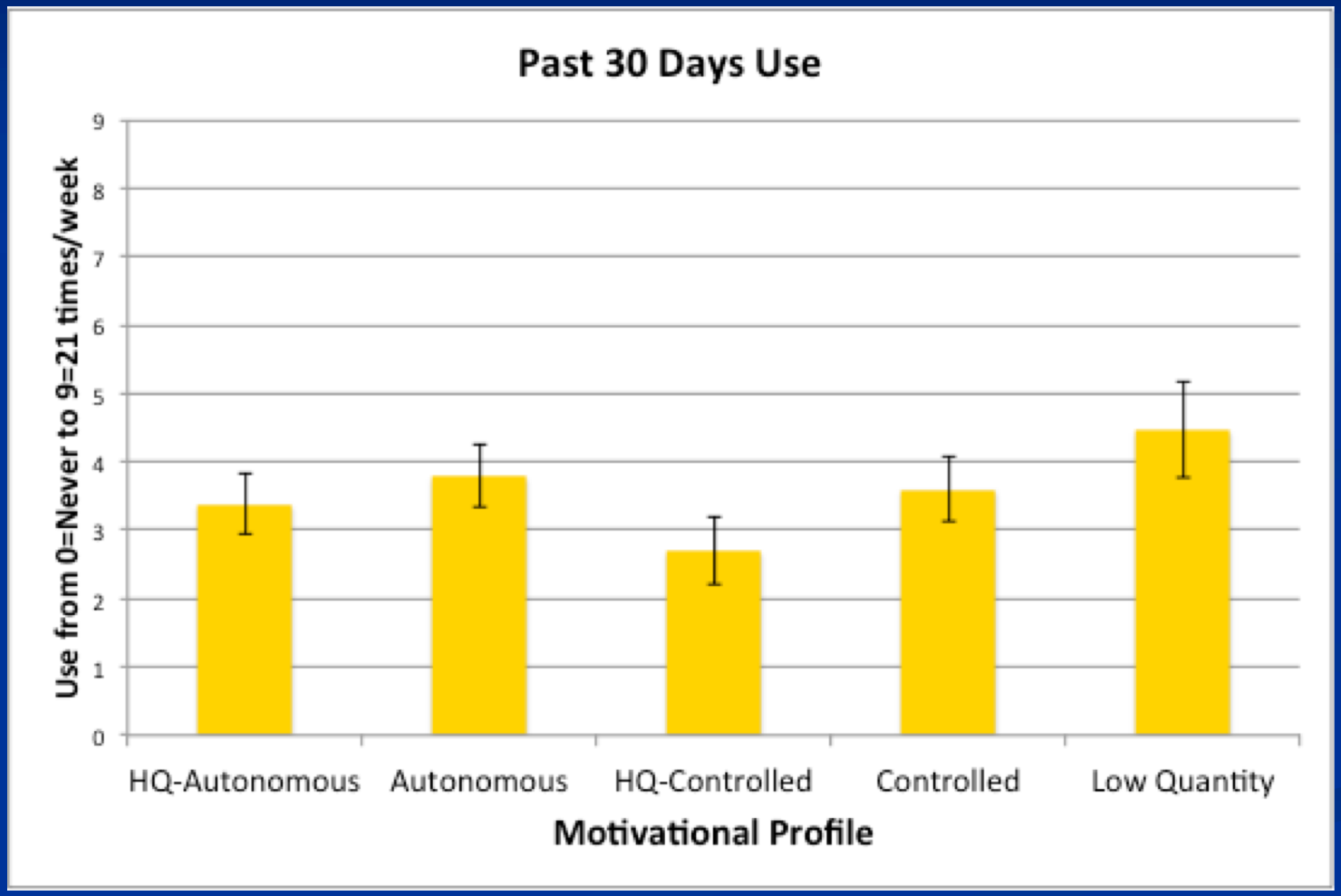


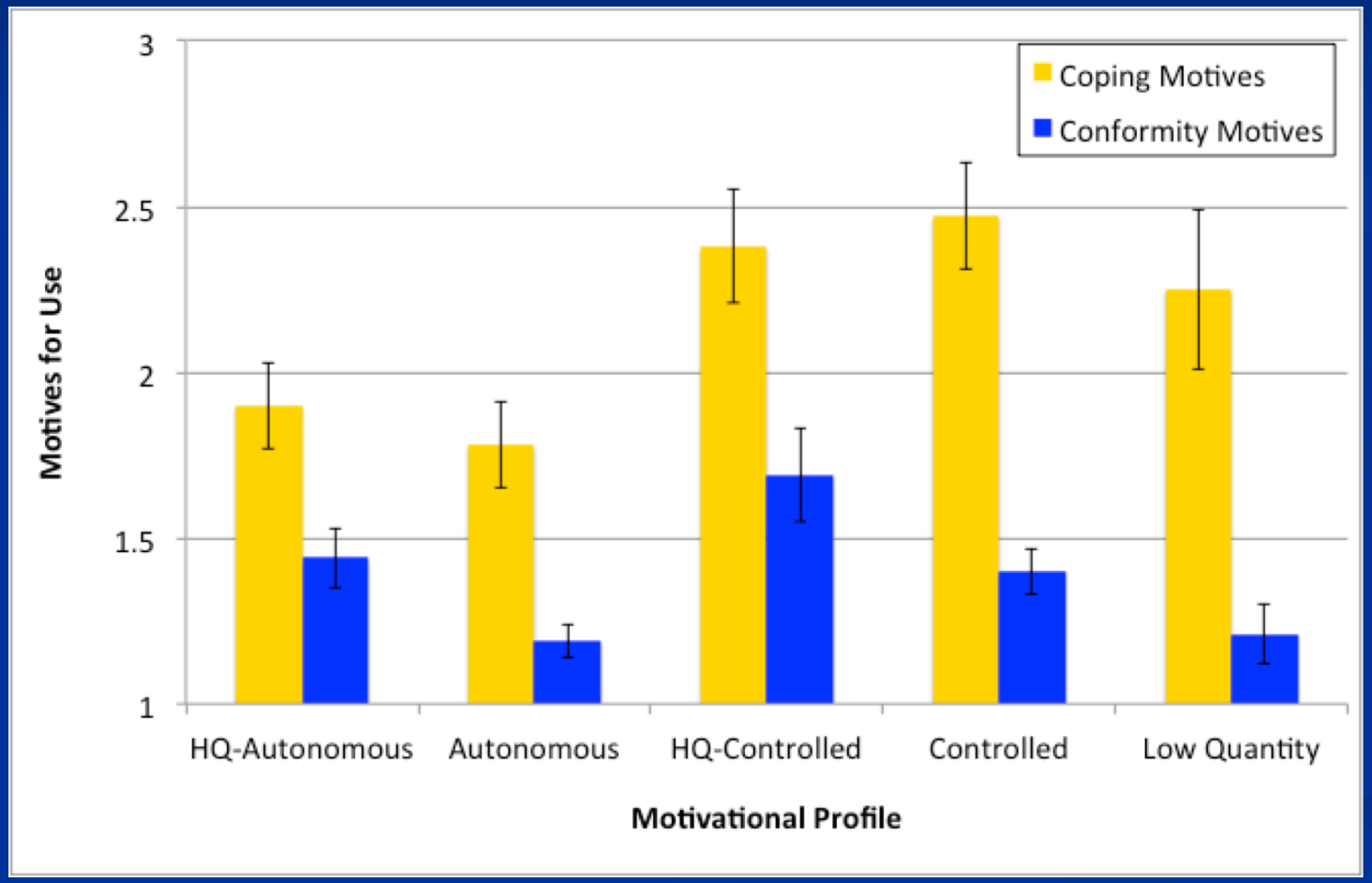
# Quantity Comparisons



# Study 2: Marijuana Use



# Study 2: Use Motives



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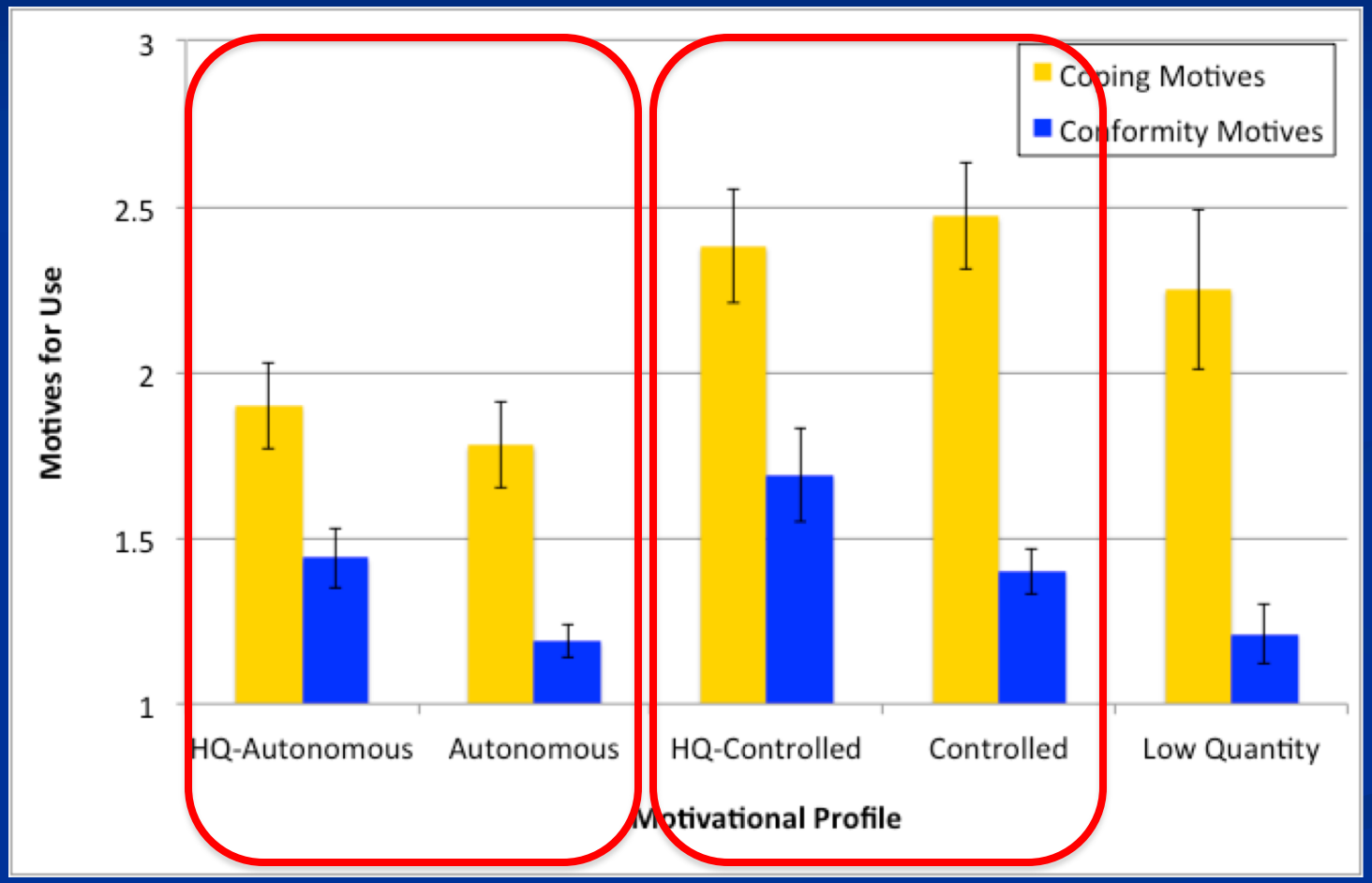
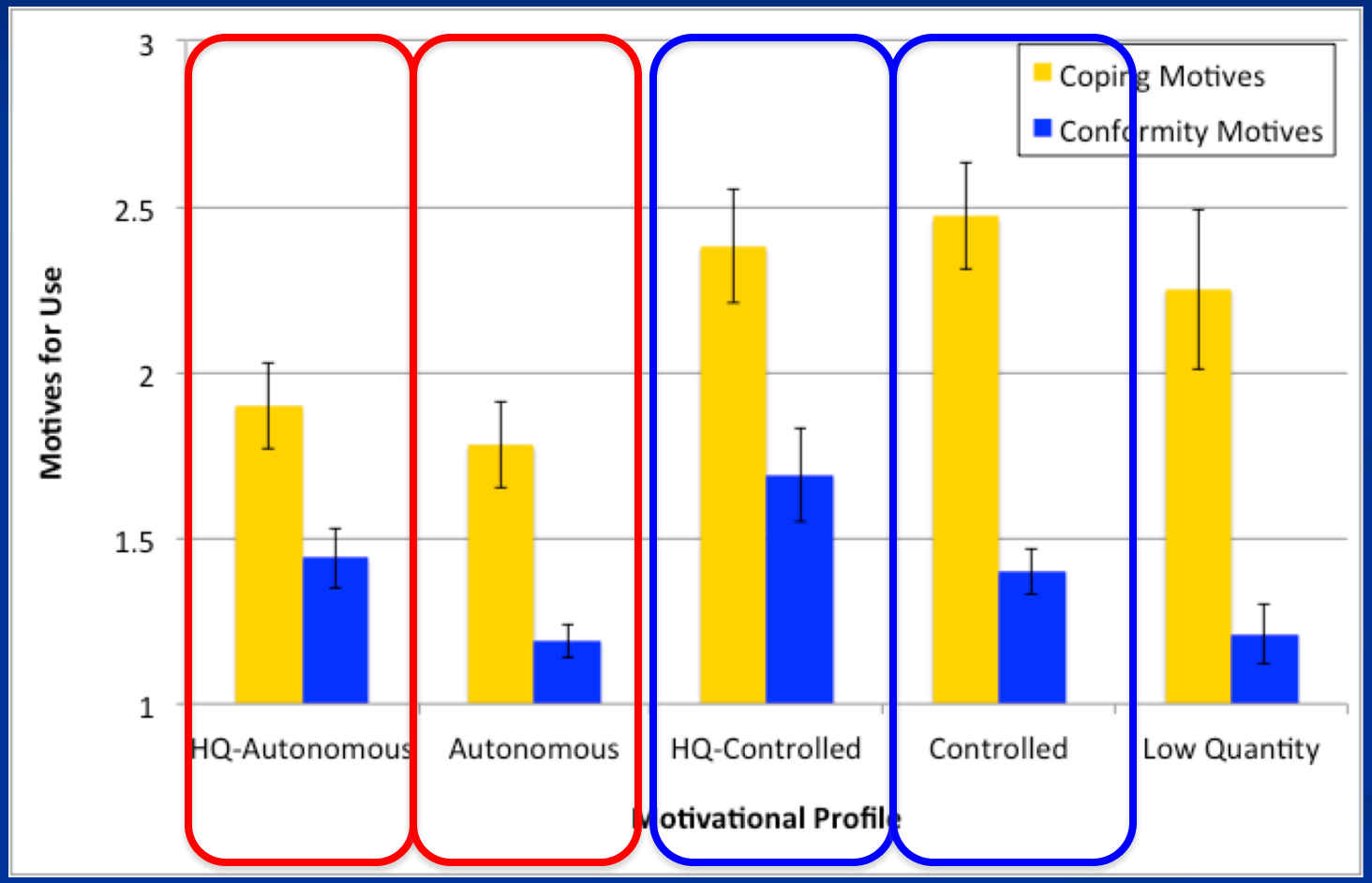


# Quantity Comparison



# Study 2: Key Findings

- **Qualitative Perspective:** Supported by Emotions data and Marijuana Motives data
  - Anxiety and Coping Motives highest in two Controlled profiles, lowest in Autonomous profiles
  - Conformity motives lowest in Autonomous profile

# Conclusions

- Anxiety Data: Support Qualitative Perspective
- Substance Use Data: Support both Qualitative (Study 2) and Quantitative (Study 1) Perspectives
  - Different Age Groups: Controlled motives more functional in high school than college?
  - Different Cultural Norms: Controlled motives more functional when substance use is non-normative?