Same-age Peer Norms Mediate the Association Between Viewing Social Media Influencer Alcohol-related Content and College Drinking

Megan Strowger, M.S.[1], Rachel Ayala Guzman, B.S.[1], Rachel Geyer, M.A.[2], Mai-Ly N. Steers, Ph.D.[3], Rose Marie Ward, Ph.D[4], Abby L. Braitman, Ph.D.[1]

[1]Old Dominion University [2]Miami University [3]Duquesne University [4]University of Cincinnati

Introduction

Descriptive drinking norms are shaped by personal observation (Jackson & Bartholow, 2020; Kantawong et al., 2022). Greater and more frequent exposure to peer-generated alcohol-related content (ARC) shared on social media is consistently associated with college drinking (Alhabash et al., 2022; Curtis et al., 2018; Groth et al., 2017; Gupta et al., 2016). An understudied source of ARC are social media influencers who are widely followed by college students and are sometimes viewed as peers (Hendriks et al., 2020; Vranken et al., 2022). Limited evidence suggests that close friend norms mediate associations between exposure to ARC shared by influential figures (e.g., celebrities, athletes, musicians) and alcohol use among adolescents (Cristello et al., 2023).

The current study examined if the association between viewing influencer ARC and college drinking is explained by same-age peer descriptive drinking norms. This study also examined whether same age peer descriptive drinking norms mediated associations between the frequency of influencers sharing ARC and drinking outcomes.

Method

Participants and Procedure
- *528* college student drinkers from two universities
- Mean age = 20.19, *SD* = 1.86
- 74.6% female; 69.1% White, 26.7% Black
- Data collected between August 2021 through May 2022
- Online survey for course credit or raffle entry

Materials
Egocentric Social Network
- Brief Important People Interview (BIPI; DeMartini et al., 2013; Zywiak & Longabaugh, 2002)
- Identified the top 5 influencers/content creators who they follow and see the most content from, with follow-up questions about each influencer:
  - E.g., if they post alcohol content (ARC) on social media (1 = *yes, 0 = no*), how often they share alcohol posts on social media (1 = *Never* to 7 = *Daily or almost daily*)
  - To calculate the proportion of influencers sharing ARC, the number of 1 = *yes* responses were added and divided by the number of influencers listed
  - To calculate the frequency of influencers sharing ARC, the frequency values were summed and divided by the number of influencers who shared ARC

Descriptive Drinking Norms
- Descriptive Norms Rating Form (DNRF; Baer et al., 1991)
- Asked how often same age peers drink alcohol (descriptive frequency norms; 1 = *never* to 8 = *once a day*) and how much they drink on a typical weekend evening (descriptive quantity norms; 1 = *0 drinks* to 6 = *More than 8 drinks*)

Alcohol Consumption
- Daily Drinking Questionnaire (DDQ; Collins et al., 1985)
- Standard drinks consumed each day of a typical week for the past 30 days
- Quantity = total number of drinks consumed in a typical week
- Frequency = total number of drinking days in a typical week
- Peak drinks = largest number of drinks on a drinking day in a typical week

Method (cont.)

Alcohol Consequences
- Brief Young Adult Alcohol Consequences Questionnaire (BYAACQ; Kahler et al., 2005)
- Presented with list of 24 consequences and were asked to select which ones they had experienced in the past 30 days (1 = *Yes*, 0 = *No*)

Social Media Usage
- Participants were asked how often they checked their social media accounts (1 = *Never* to 7 = *7 or more times a day*)

Analysis Approach
- A series of mediation models were conducted using the PROCESS macro (version 3.5)
- **Predictors**: proportion of influencers sharing ARC, frequency of influencers sharing ARC
- **Mediators**: same age peer descriptive quantity norms, same age peer descriptive frequency norms
- **Outcomes**: 4 alcohol indicators in separate models (quantity, frequency, peak drinks, consequences)
- **Covariates**: age, gender, university, frequency of social media checking, and quantity (in consequences models)
- Significance of the indirect effects was determined by the 95% percentile bootstrapped confidence intervals (based on 10,000 replications) not containing zero

Results
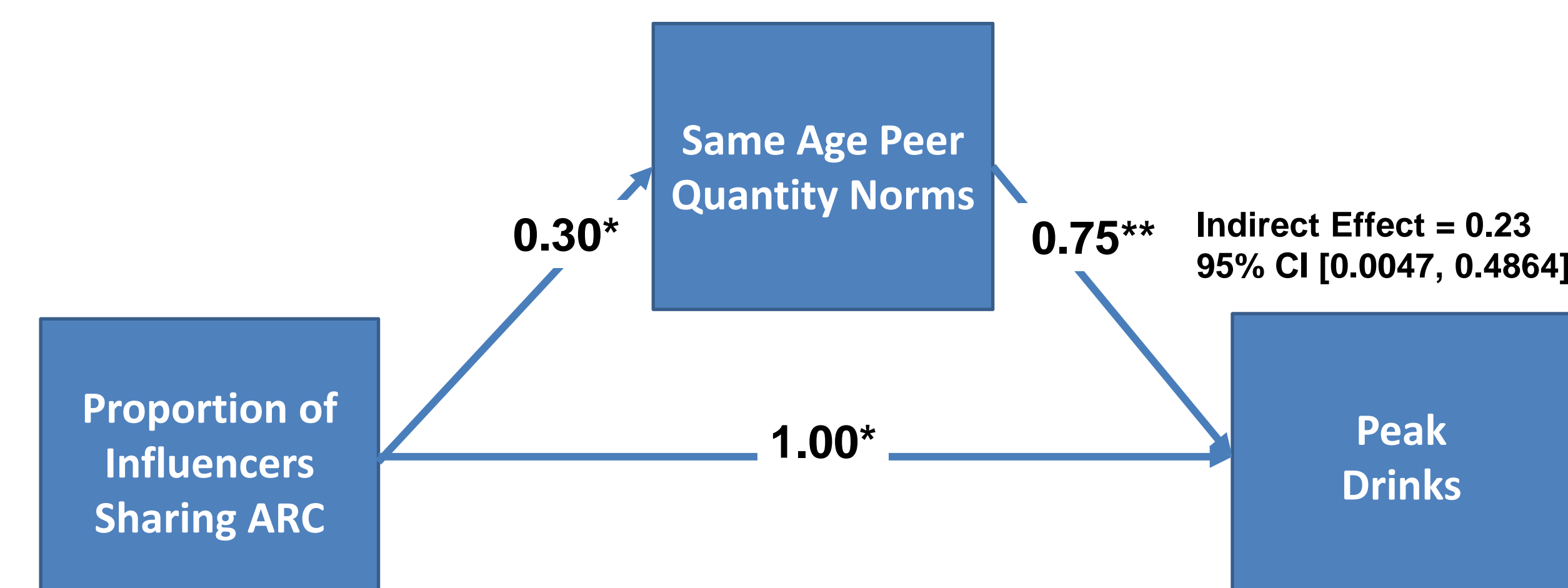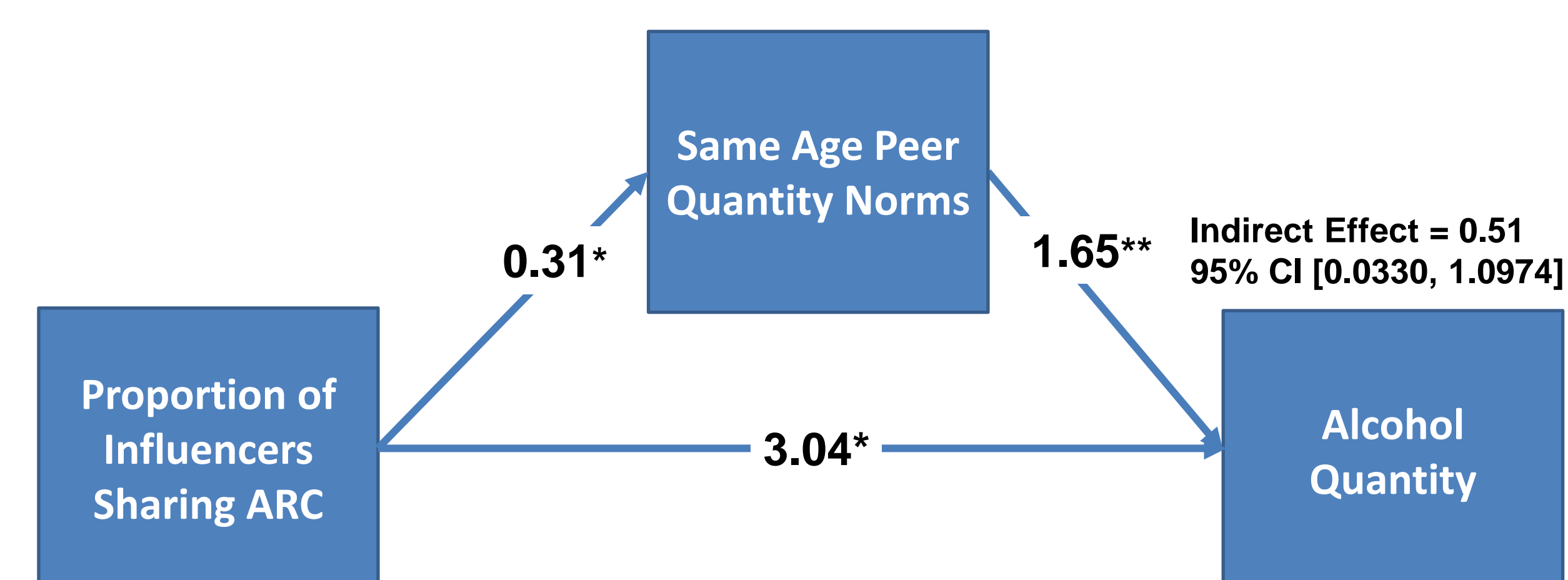
Results (cont.)
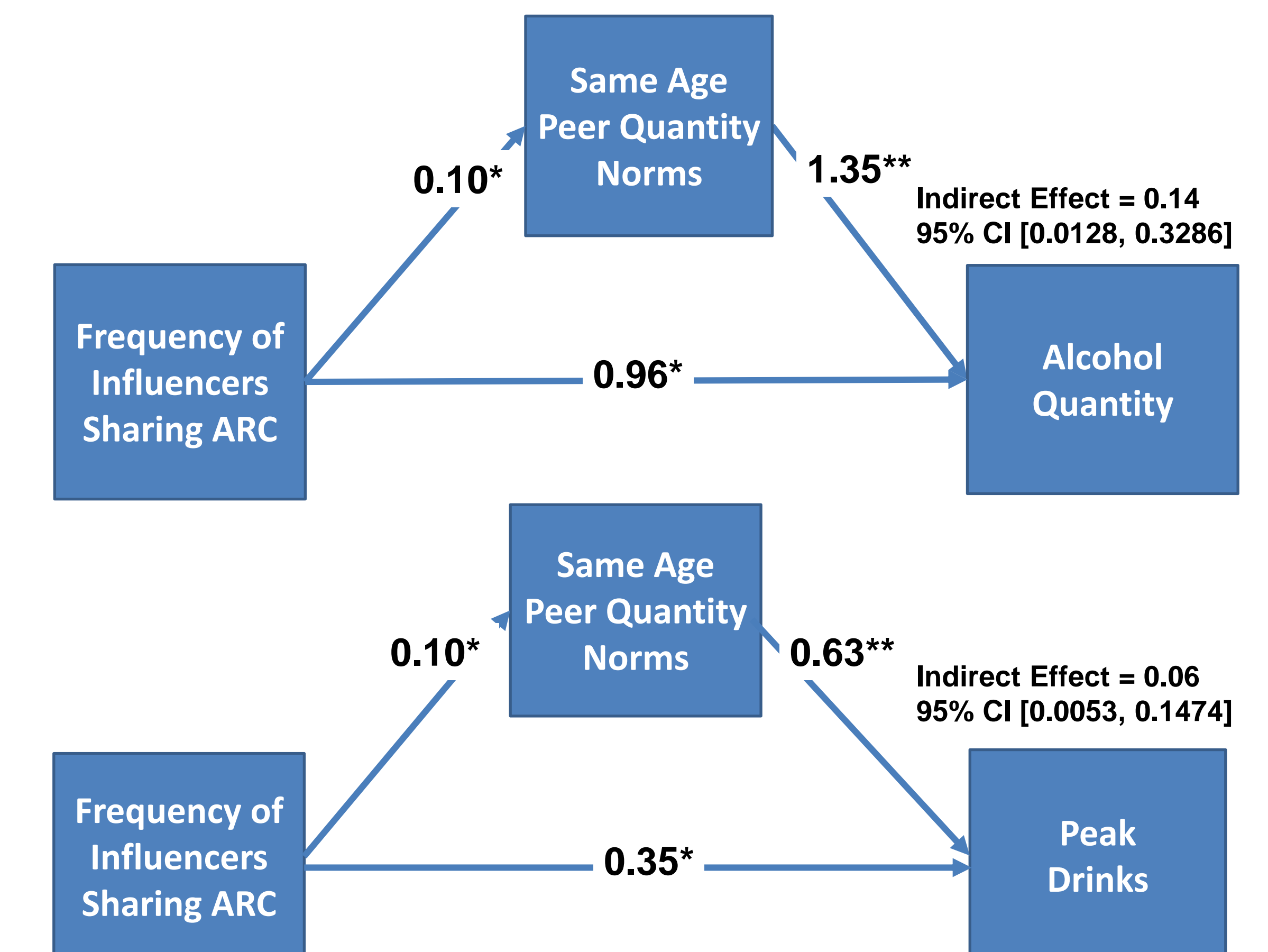
*Note.* Unstandardized coefficients are shown in all figures.
*p < .05, **p < .001.

- **Significant indirect effects were observed for the same age peer quantity norms models with quantity and peak drinks as outcomes**
- No significant direct or indirect effects were found for same age peer frequency norms
- Further, no significant direct or indirect effects were found with participant drinking frequency or consequences as outcomes
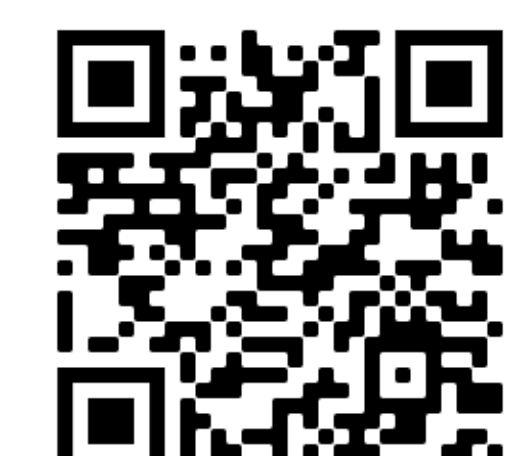
Discussion

Overall, we found that same age peer quantity norms (but not frequency norms) significantly mediated associations between following more influencers who share ARC as well as the frequency of influencers sharing ARC and participant quantity and peak drinks (but not frequency or consequences). Further, significant direct effects on college drinking were still observed.

These findings underscore that ARC posted by influencers not only influences peer norms, but also exhibits unique associations with drinking after controlling for peer norms, suggesting this content should also be addressed in college drinking interventions. Limitations to this study include a convenience sample of university students (most enrolled in psychology classes), the use of self-report measures, and a cross-sectional design.
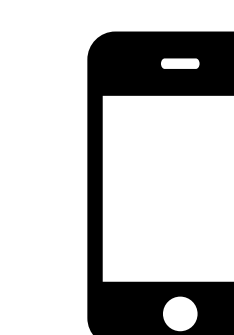
Take a picture to download more information

✉ mstro006@odu.edu