"Follow my Finsta": Drinking Trajectories In Relation To Auxiliary Instagram Accounts

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Abstract

Objective: This study explored the burgeoning youth practice of possessing a fake, secondary Instagram account known as a "Finsta" in relation to exposure to alcohol-related content and college drinking.

Participants: First-year university students with at least a primary Instagram account (*N*=296) completed online surveys.

Method: Surveys assessed whether participants did or did not have a Finsta pre-matriculation (T1), Instagram alcohol content exposure one month into college (T2), and alcohol use at T1 and near the end of the first year (T3).

Results: Moderated mediation analysis revealed that having a Finsta at T1 was associated with greater exposure to alcohol-related posts at T2 and, for male but not female students, predicted heavier drinking at T3.

Conclusion: Findings are consistent with previous results suggesting that males may be more behaviorally impacted by peers' depictions of alcohol use on social media. This carries implications for social media-based intervention efforts targeting first-year students.

Keywords

college student drinking; social media; gender differences; Instagram

Introduction

Despite concerted efforts to reduce alcohol use on university campuses, heavy drinking among college students remains a serious public health issue.[1,2] College students' misperceptions of peer drinking (i.e., descriptive drinking norms) is one of the best and strongest predictors of alcohol use in this population.[3–5] According to Social Norms Theory, exposure to peer drinking, which is typical on college campuses, predicts inflated drinking norms, which, in turn, predicts heavier alcohol use.[5–8] Recent studies suggest that this

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pattern of effects generalizes to online social environments, including Social Networking Sites (SNS) such as Facebook and Instagram.[9,10]

College students report that alcohol-related posts on SNS are widespread, despite a growing awareness of SNS accounts being monitored by personally relevant authority figures (e.g., parents, college admissions, employers).[11–17] Not sharing alcohol and other sensitive content on SNS would be the simplest way to avoid consequences that could occur from authority figures seeing anti-normative posts. However, that option may be incongruent with students' motivation to socialize during college, which often involves conforming to peer drinking norms.[7,18,19] The use of a secondary (incognito) account is one method students use to achieve the goal of posting content they believe peers approve of, such as partying and alcohol use, while concealing other potentially harmful SNS behaviors from unsolicited viewers (e.g., parents, teachers, non-close peers).[14,20] Thus, the risk of exposure to alcohol content on SNS and alcohol use may be greater for students who have secondary accounts, such as Finstas (Fake + Instagram=Finsta; i.e., a popular type of secondary Instagram account used by young persons characterized by high privacy restrictions and an extremely small and carefully selected following). Verifying these proposed effects would provide insights on a novel risk factor relevant to norms-based drinking intervention efforts.[21,22]

Alcohol use on Instagram

Founded in 2012, Instagram is an image-based SNS with over 1 billion accounts and over 500 million daily active users.[23] Instagram users commonly generate carefully curated profiles with aesthetically enhanced photos that are often intended to portray idealized and glamorized versions of oneself (e.g., focusing on clearly objectifying features, such as particular poses or particular body parts; establishing a prescribed image or impression in the mind of others about an individual, group, or organization; portraying themselves or their lives as interesting; experimenting with lighting and angles to look more attractive).[24–26] Relative to Facebook and Twitter, recent data suggests that young people engage more frequently with Instagram (e.g., checking the platform multiple times per day), while larger proportions report this platform as their top SNS destination.[9,27–29] Much like other domains of life idealized on this platform, research with college students suggests that alcohol use may be portrayed in a similarly positive light.[9,21,30] These positive portrayals of alcohol-related content on SNS may exclude the negative consequences of drinking, ultimately downplaying its consequences and making it more normative in an everyday sense.[30,31] Ultimately, this type of exposure to alcohol content has the potential to increase alcohol use and SNS posts consistent with that behavior.[9,32–36]

Finsta Accounts

The literature suggests that alcohol-related content is shared widely on college students' SNS accounts, and while being associated with such content can be perceived as beneficial to one's reputation if viewed by peers, it can be damaging if viewed by parents or other adults (i.e., college admissions, future employers).[12–14,16] To avoid this, young persons have created secondary, private SNS accounts in addition to their more public primary account. "Finsta" is the term used to refer these types of accounts on Instagram. In addition to increased privacy settings, Finsta accounts generally only include followers who are close

friends of the account owner and often include content that would be seen as strange or inappropriate to post on one's primary Instagram account.[37–39] While the name implies that Finstas are "fake," students often report these private, pseudonymous accounts as being a much more authentic representation of their daily lives.[37,39,40] This is because students are more willing to include humiliating, negative, vulnerable, and crazy life moments without fear of offense or judgement from friends, family, acquaintances, or potential employers who may follow and view their real accounts.[20]

Mainstream media coverage of the Finsta phenomenon is relatively positive, with Finstas described as intimate spaces that allow young people to escape unrealistic expectations of SNS and truly express themselves.[37,41,42] Young adults will often avoid perceived surveillance on these types of accounts by denying their parents, employers, and other adults access to their Finstas so they can post content freely without fearing negative consequences.[14,37,42] This increased anonymity on a Finsta account may decrease inhibitions and increase self-disclosures, a phenomenon known as the online disinhibition effect.[43] Because Finsta accounts are unfiltered and may lack the pressure to be socially appropriate, it is reasonable that college students' Finstas would contain more explicit content, including overt and unglamorous depictions of alcohol use as well as negative consequences.

Potential Sex Differences in the Associations between Finsta, Exposure to Alcohol-Related Content, and Drinking

There may be sex differences in the degree to which exposure to alcohol-related content on SNS during the transition to college influences students' alcohol use trajectories. Specifically, Boyle et al[9] observed a stronger prospective relationship between self-reported exposure to alcohol-related content posted by peers on Facebook, Instagram, and Snapchat during the first six weeks of college and second semester alcohol consumption among males compared to females. This finding may relate to previous research suggesting that females tend to use SNS to communicate with friends and maintain close relationships, while males are more likely to use SNS for information seeking, entertainment, and making new social connections.[44–46] Due to their information-seeking and social connection motivations, male students may be more likely behaviorally influenced by the content they see peers post across SNS.

The Current Study

This study addresses the dearth in the literature on Finsta as a potential risk factor for college student drinking. The conceptual model illustrated in Figure 1 includes hypothesized pathways through which having both a primary account and a Finsta (P+F users) may directly and indirectly affect later drinking (vs. Primary Account Only [PAO] users). A longitudinal design was used to examine these associations in incoming first-year college students, a population that is considered high risk drinkers.[6,47,48] First-year students are also considered vulnerable to peer influence as they navigate a new college environment, and should be more likely to use Finsta to conceal alcohol use from their parents and other authority figures because they are typically under the age of 21.[49] Participants were invited to complete three surveys: a baseline survey pre-matriculation (July/August; T1), a

follow-up one month into college (October; T2), and a second follow-up survey near the end of the first year in college (March/April; T3). Participants' Instagram account status was assessed at T1 (P+F user vs. PAO users); the hypothesized mediator variable, exposure to alcohol-related content on Instagram, was assessed at T2; and alcohol use was assessed at T1 and T3. Based on the literature described thus far, we hypothesized that that having a Finsta (P+F users) would be positively associated with heavier alcohol use at T3 (direct effect; Hypothesis 1) and greater exposure with our mediator, alcohol-related content on Instagram at T2, relative to PAO users (Hypothesis 2). Exposure to alcohol-related content on Instagram was also expected to predict heavier drinking near the end of the first year in college (Hypothesis 3). In light of recent findings, the current study also explored students' sex as a moderator of the aforementioned effects.[9] Specifically, all of the hypothesized effects were expected to be stronger for males than for females.

Materials and Methods

Participants

Participants were 296 incoming first-year students at a private, mid-sized university on the west coast of the United States. Students were recruited during the summer prior to matriculation to take part in a study investigating the relationship between SNS and drinking during the transition to college. To be eligible for the study, student participants were required to be 18 years of age or older, provide informed consent, plan to live on campus during their freshman year, possess an Apple or an Android smartphone, and have an active Instagram account. The study's sample was representative of the university's typical first-year class (M_{age}= 18.05 years, SD =0.25; 63.2% female; and 47% Caucasian, 16.2% Asian, 8.1% African American, 17.9% Hispanic, 0.7% Native Hawaiian, and 9.1% multi-racial or other).

Procedure

All study procedures and measures were approved by the university's Institutional Review Board. At the end of July, the Registrar's office emailed incoming first-year students an invitation to participate in the Social MindFeed Study, a research project examining SNS use patterns and influences during the transition to college. The email included a link to the study's informational website, which included a promotional video, a detailed disclosure of all study procedures, and a link to a screening survey. The screening survey was used to determine if students interested in participating in the umbrella study (N=658) were incoming first-years with at least one type of active SNS account (e.g., Instagram, Facebook, Snapchat). Participants who met these criteria (n=457) were then prompted to complete the baseline survey (n=320). Of those who completed the baseline survey, 296 reported having Instagram and were included in this study. We next assessed if they were PAO users (n=201) or P+F users (n=95). Ninety-two percent completed all three assessments. No differences in baseline assessment results were observed between the 296 participants who completed all three assessments and the 24 participants (7.5%) who did not. Participants received $20 electronic gift cards following their completion of each assessment.

Measures

Demographics.—Participants reported basic demographic information including sex, age, race, and ethnicity.

Type of Instagram User.—Participants answered the following set of items to determine if they were PAO or P+F users. First, they were asked if they had an Instagram account in the screening survey. Participants were then asked in the baseline survey to input their Instagram login information (i.e., email and password) to verify that they had an account (i.e., primary account). Participants who reported having a primary account were then asked if they had a secret Instagram account, such as a Finsta that they used to conceal posts from their parents and other adults. Those who reported having one were then asked to provide login information to verify the existence of that account.

Alcohol Exposure on Instagram.—Self-reported frequency of exposure to alcohol use on Instagram at T2 was assessed with the following item: "When you are on Instagram, how often do you see posts of other people focused on alcohol, getting drunk, and being hungover?" Prior to receiving this item, participants were instructed to check all their Instagram accounts to aid them in answering this question. Response options for this item were (0) *Never*, (1) *Rarely*, (2) *Occasionally*, (3) *Often*, (4) *Always*. Consistent with our procedure for computing SNS-based alcohol exposure in previous work, participants' self-reported frequency of seeing alcohol-related content on Instagram was weighted by their frequency of checking this platform at T2 to produce the *Alcohol Exposure on Instagram* variable.[9] Scores on this variable ranged from 0 to 16.

Close Friends' Alcohol Use.—A three-item scale was used to assess alcohol use among students' close friends at T1.[50] Participants estimated numbers of close friends that (1) drink alcohol, (2) get drunk on a regular basis, and (3) drink primarily to get drunk, using a 5-point scale from *None* (0) to *All* (4). All three items were summed to create the Close Friends' Alcohol Use variable (α =.82). Scores on this variable ranged from 0 (*No Close Friend Alcohol Use)* to 12 (*High Close Friend Alcohol Use).*

Drinks per Week.—The Daily Drinking Questionnaire assessed typical drinks consumed per week at both T1 and T3.[51] Participants were asked to think about a typical week during the last 30 days and estimate the number of standard drinks they consumed on each day of the week. The definition (with images) of standard drinks was also provided to participants prior to them answering this item (i.e., a stand drink is 4 oz of wine, a 10-oz wine cooler, 12 oz of beer, or 1.25 oz of 80-proof liquor).[52] Responses were summed to create the *drinks per week* variables at T1 and T3.

Analytic Plan

Preliminary Analyses.—First, the normality of each of the variables' distributions were assessed and necessary transformations were made to meet assumptions of normality. Analyses were then conducted to explore whether P+F users and PAO users differed on demographics (e.g., age, sex, race/ethnicity), self-reported drinking (T1 and T3), close friends' alcohol use (T1), and exposure to alcohol-related Instagram posts (T2). Three

hierarchical regression models were conducted to determine in which paths to include sex as a moderator in the main moderated mediation model (see Main Analysis section). Each of these models included participants' and close friends' drinking as covariates at T1 (Step 1), tested the main effect of sex and pertinent predictors (Step 2), and tested the interaction between sex and pertinent predictors (Step 3).

Main Analysis.—Moderated mediation was conducted using Hayes's PROCESS (v3.1; Model 15) for SPSS to examine the hypothesized paths illustrated in Figure 1. Based on the results from the hierarchical regression models (see Preliminary Analyses section), sex was positioned as a moderator of two of the three pathways in the moderated mediation model: (a) Finsta (P+F vs. PAO) → drinks per week, and (b) exposure to alcohol-related Instagram posts → drinks per week. Baseline covariates included in the model were T1 weekly drinking and close friends' drinking. Significant indirect effects were determined based on bootstrapped (N=5,000) 95% bias-corrected confidence intervals (CIs) (i.e., indirect effect was significant at p < .05 if CIs did not include zero).[53]

Results

Preliminary Analyses

Weekly drinking was heavily skewed at T1 (skew = 2.23, SE = .14) and T3 (skew = 2.08, SE = .14). A natural log transformation resulted in acceptably normal distributions of weekly drinking at T1 (skew = 0.81, SE = .14; kurtosis = −.75, SE = .27) and T3 (skew = −.26, SE = .14; kurtosis = −1.42, SE = .28). Sensitivity analyses resulted in similar results when either the non-transformed or transformed variables were used, thus analyses using the non-transformed variables are reported for ease of interpretation.

Differences Between Type of Instagram User (P+F vs. PAO).—Overall, 32% of participants reported being a P+F user and 68% were PAO users. Female participants (38%) were significantly more likely to report being P+F users than were males (22%; $p < .01$). P+F users also reported significantly heavier drinking amongst close friends (T1), and greater exposure to alcohol-related Instagram content (T2) relative to PAO users (see Table 1). As illustrated in Table 1, P+F users also significantly differed from PAO users on weekly drinking at T1 ($p < 0.05$), but they did not differ from each other on drinking at T3 ($p > 0.05$). Instagram user type was not significantly associated with race/ethnicity, or age (all ps > 0.05).

Hierarchical Regression Models.—A series of hierarchical regression models were used to explore which pathways to include sex as a moderator in the subsequent moderated mediation model. As shown in Table 2, regression results indicated that participant sex moderated the relationships between: (a) type of Instagram user (P+F vs. PAO) at T1 and drinks per week at T3 (the hypothesized direct path); and (b) exposure to alcohol-related posts on Instagram at T2 and drinks per week at T3 (the hypothesized second-stage path). Sex did not moderate the relationship between Finsta ownership at T1 and exposure to alcohol on Instagram at T2 (the hypothesized first-stage path). Based on these results,

Hayes's PROCESS (v3.1) Model 15 was selected as the appropriate indirect model due to its inclusion of a moderator on the direct and second stage paths as depicted in Figure 2.

Main Analysis

Moderated Mediation Model.—The moderated mediation model depicted in Figure 2 was conducted to examine the hypothesized direct and indirect effects of being a P+F user on weekly drinking (vs. PAO users), controlling for drinking and close friends' drinking at T1. As shown in Figure 2, results revealed that being a P+F user at T1 was significantly associated with greater exposure to alcohol-related posts on Instagram (the mediator) at T2 relative to being a PAO user ($b = 1.10$, $SE = 0.56$, p=0.050; 95% CI [0.001, 2.21]) (Hypothesis 2). Results also revealed that sex significantly moderated the relationship between the mediator and weekly drinking at T3 (b=−0.63, SE=0.22, p=0.005; 95% CI [−1.06, −0.19]) (Hypothesis 3).

Conditional effects were examined to probe this interaction; exposure to alcohol-related posts was a significant predictor of number of drinks at T3 for male participants, (b=−0.63, SE=0.18, p=0.0006; 95% CI [0.27, 0.99]), but not for female participants, (b=0.004, SE=0.14, p=0.979, 95% CI [−0.28, 2.50]). The indirect path between type of Instagram user (P+F vs. PAO) at T1 and drinks per week at T3 through exposure to alcohol-related Instagram posts at T2 was statistically significant for males, (bootstrapped effect=0.70, SE=0.39, 95% CI [0.01, 1.57]), but not for females (bootstrapped effect=0.004, SE=0.15; 95% CI [−0.31, 0.31]). The difference between these indirect effects was used as an index of moderated mediation; as the bootstrapped 95% CIs did not contain zero [−1.59, −0.003] we can conclude that sex significantly moderated the indirect effect of having a P+F (vs. PAO) on drinks per week through exposure to alcohol-related posts on Instagram.

Results for the direct effect in the moderated mediation model revealed that after controlling for the covariates and indirect paths, there was a significant interaction between type of Instagram user (P+F vs. PAO) and participant sex on drinks per week (b=−4.80, SE=2.43, p=0.049, 95% CI [−9.58, −0.02]). Examination of the conditional effects revealed that female P+F users did not significantly differ from Female PAO users on drinks per week at T3 (b=−0.20, SE=1.37, p=0.886, 95% CI −2.89, 2.50]); however, male P+F users drank significantly more per week at T3 than male PAO users (b=−4.60, SE=2.01, p=0.023, 95% CI [0.63, 8.57]).

Effects of baseline covariates.—Not shown in Figure 2 are the effects of the baseline covariates, close friends' drinking and participants' own drinking, on T2 alcohol-related Instagram posts and T3 drinking. Results revealed that close friends' drinking at T1 was significantly associated with more alcohol-related Instagram posts at T2 (b=1.60, SE=0.55, p=0.004; 95% CI [0.52, 2.70]) and heavier drinking at T3 (b=1.60, SE=0.55, p=0.004; 95% CI [0.52, 2.70]). T1 drinking was also significantly associated with heavier alcohol use at T3 (b=0.37, SE=0.11, p=0.001; 95% CI [0.15, 0.59]), but it was not significantly associated with T2 alcohol-related Instagram posts (b=0.10, SE=0.06, p=0.084; 95% CI [−0.01, 0.20]).

Discussion

Despite positive popular media coverage of the Finsta phenomenon, results of the present study suggest that Finsta ownership can increase alcohol-related risks during the transition to college, especially among male students.[37,41,42] Students who had a Finsta (P+F) consumed more alcohol and reported more alcohol use among their close friends pre-matriculation compared to students who only had a primary account before arriving at college. Further, students with a Finsta reported seeing more alcohol content on the Instagram platform (not account specific) during their first month of college. This, in turn, predicted increased drinking during their second semester.

The finding that students who have a Finsta in addition to their primary Instagram account drink more and report more alcohol use among their close friends prior to arriving on campus suggests that having a Finsta can be a risk factor for heavy drinking and alcohol problems in college. However, this relationship between having a Finsta and drinking may also be explained by heavy drinkers' preexisting need to express their drinking identity. College students who adopt an alcohol identity are more likely to drink and post alcohol related content on SNS.[54] Of these students, those who are concerned with surveillance may be more likely to use a Finsta to conceal this behavior from non-peers (i.e., parents, college admissions, future employers).[14,16] Moreover, students who drink are also more likely to have close friends that drink, making it potentially more likely to have an Instagram account devoted to sharing risky content with a close network of peers.[55] This may explain why students with Finsta accounts report that their close friends are heavier drinkers. Nonetheless, it does seem like possessing a secondary account is a marker of risky drinking during the first year of college.

Participants who reported having a Finsta account pre-matriculation also reported seeing more alcohol related content on Instagram one month into college. This relationship emerged even when controlling for students' and close friends' drinking at the beginning of college. These findings suggest that alcohol content seen on Instagram, and perhaps especially Finsta accounts, reflects more than the drinking students otherwise observe offline. Further, both males and females who had Finsta accounts both reported seeing more alcohol content on Instagram one month into college compared to their PAO peers. However, the increased exposure to alcohol content appears to influence later drinking more for men than for women, even when controlling for baseline alcohol use and close friends' drinking. These results mirror previous findings that male emerging adults may be more impacted by exposure to alcohol content posted by peers on SNS, potentially due to their greater information-seeking and social connection motives.[9,33,44–46]

A potential alternative explanation for this pattern of results is that although male and female students reported similar levels of alcohol exposure on Instagram as a function of their Finsta ownership, there may be qualitative differences in the nature of alcohol-related content populating the newsfeeds of male and female students. That is, given that Finsta accounts are typically private and followed by a small number of close friends, the sex composition of a student's close friend circle may make one's Finsta newsfeed more likely to be populated by posts from same-sex, rather than opposite sex peers.[20,40,56] As previous

work suggests that males post more explicit content on SNS, whereas females are more likely to post content referring to positive consequences of alcohol use, a male student's Finsta feed may contain more depictions of alcohol use and risky behaviors than a female's Finsta feed.[57,58] The current study used a single self-report item to assess several different varieties of alcohol exposure on Instagram (alcohol, drinking, getting drunk, and being hungover), and, thus, the qualitative nature of posts made and seen by males and females remains to be investigated by future studies employing more elaborate survey measures or newsfeed coding methods.

Implications

Efforts to understand and reduce risky college student drinking can benefit from utilizing SNS, but it is necessary to understand what platforms students are using, the types of content they post, and the context in which the platforms are used to intervene effectively. Much of the research regarding exposure to alcohol-related content on SNS has focused primarily on Facebook, and the existing research on Instagram fails to address the possibility of students owning "fake"/auxiliary accounts.[9,31,59,60] While this is the first empirical study that examined Finstas in relation to college drinking, the significant results suggest that future research exploring this type of Instagram account is an important next step in discerning the effects of SNS on alcohol use. Thus, given the results of the present study, researchers should ask college students about Finstas and other secondary accounts when assessing alcohol on SNS, since they may contain more alcohol-related content that their primary accounts. More importantly, high school and college personnel and parents need to be aware of the Finsta phenomenon and how it plays a role in increased alcohol-related risks. Awareness of this potential risk factor can lead to more effective parental communication and assist university student life and health professionals to better identify and target risky drinkers in interventions. As students arrive at college, they often share their SNS accounts with their new peers. This might be a good opportunity for student peer health advisors, orientation counselors, and Resident Advisors to assess non-confrontationally who has secondary accounts like Finstas and design programming to reduce alcohol risk among these new students. Further, because exposure to alcohol on SNS seems to contain added risk for drinking, perhaps by increasing perceived norms this exposure may undermine the ubiquitous personalized normative feedback interventions that occur on college campuses.[21,22,32,61] Newer efforts that incorporate SNS-inspired gamification elements (e.g., virtual copresence, profiles of students from when the norms are derived) into normative feedback interventions appear to improve the effectiveness of these interventions.[21,62]

Limitations and Directions for Future Research

The current study is limited in its demographics and use of brief, self-report survey measures of Finsta account ownership and Instagram alcohol exposure. First, findings are specific to incoming students from a single west coast university and thus further studies with larger and more diverse cohorts of college students from multiple universities are necessary. Secondly, the study relied on college students' self-reported frequency of checking Instagram and exposure to alcohol-related content on Instagram. As students' self-reports may be inaccurate, future research would benefit immensely from more objective

assessments of Instagram use and alcohol exposure. Additionally, we were not able to separate what participants were exposed to via their primary accounts versus their Finstas. However, our findings indicate that what is impacting students in terms of norms and their drinking patterns is how they process what they are seeing on their feed, suggesting that this is not a big limitation. Thus, while we were not able to differentiate what participants saw on their Finsta compared to their primary accounts, our findings show that participants who have both a primary account and a Finsta are more likely to see alcohol-related content and thus are more likely to drink. An additional limitation is related to the single, pre-matriculation assessment of Finsta ownership. Finsta ownership was not assessed at T2 or T3, therefore, we were unable to ascertain the number of students who became Finsta owners once they arrived on campus. In addition, although Finsta account owners typically follow the Finsta accounts of their friends, we did not assess the number of Finsta accounts followed by participants. Therefore, it is possible that some Instagram users may have followed friends' Finsta accounts with their primary account, without themselves having a Finsta. Future research will benefit from asking Instagram users how many Finstas they follow in addition to whether they have a Finsta themselves. Finally, while Finsta ownership at T1 was related to elevated exposure to alcohol-related content at T2, the actual content on Finsta newsfeeds was not examined. While qualitative and mainstream media coverage suggest that young people post riskier and less flattering content on their Finsta than their primary Instagram account, this was not directly measured in this study.[20,37–39,40] Future research would benefit from an exploration of the frequency in which alcohol-related content is posted and the types of alcohol-related content appearing on college students' Finsta newsfeeds, with attention to potential differences in the extremity of alcohol-related posts among male and females. Future studies would also benefit from measuring content creation or other means of engagement and could ultimately bolster the contributions of this study. Finally, future research would benefit from finding ways to examine alcohol content in other secondary or more private accounts, especially the platform Snapchat on which postings are ephemeral (disappearing) and may also contain more risk-inducing material.

Conclusion

In summary, this is the first study to examine Finsta accounts in relation to alcohol exposure and prospective drinking outcomes among students transitioning to college. We found that possessing a Finsta account was associated with greater alcohol risk, as measured by students' and close friends' drinking prior to arriving at college. More importantly, Finsta ownership was prospectively related to increased exposure to alcohol related content on Instagram among both male and female students. In turn, this increased exposure to alcohol-related content predicted greater second semester drinking among males but not females. Given the popularity of secondary Finsta accounts among adolescents and emerging adults, this type of SNS account warrants more research and the attention of parents and high school and college personnel in finding ways to mitigate the risk associated with Finstas.

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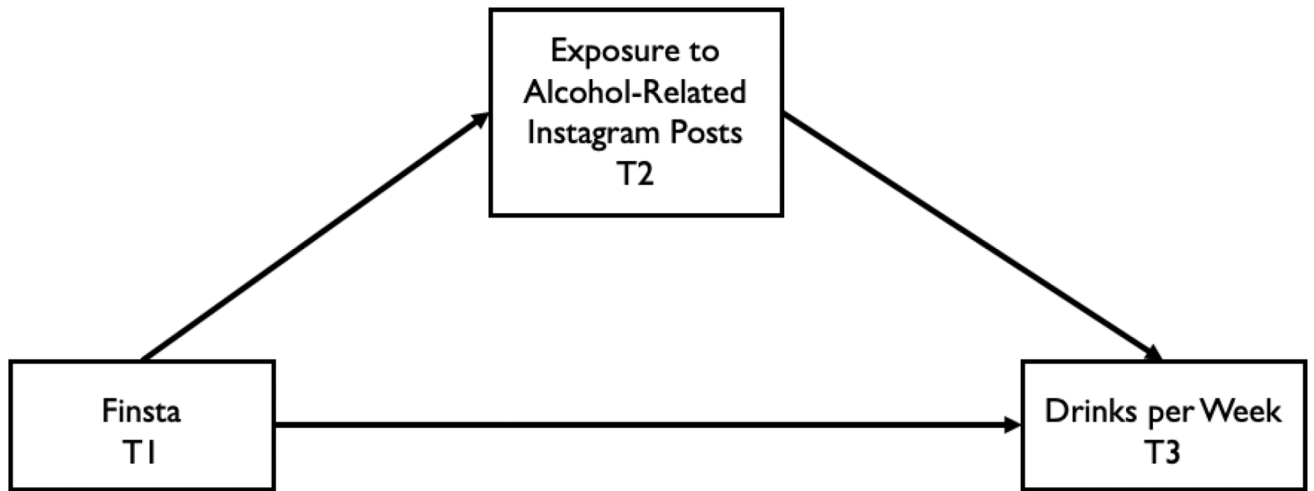
Figure 1.
Conceptual model of indirect relationship between Finsta at T1 and the number of drinks per week at T3. Finsta (Primary + Finsta account user; Primary Account Only user).
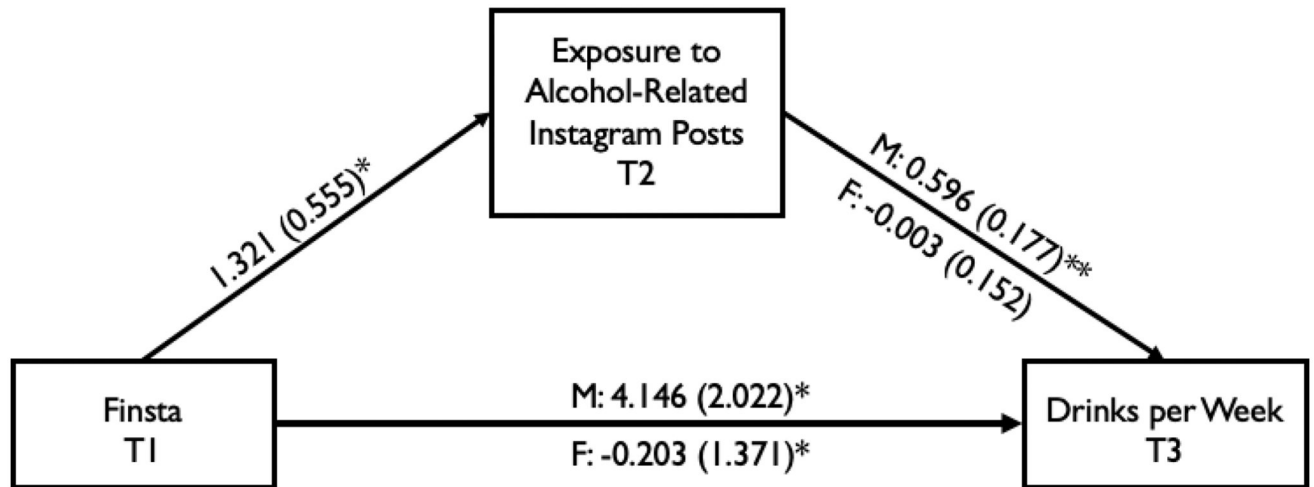
Figure 2.
Unstandardized coefficients (standard errors) for pathways examined in the moderated mediation model (Main Analysis). M = conditional effect for male participants, F = conditional effect for female participants. Finsta (Primary + Finsta account user = 1; Primary Account Only user = 0). *p < 0.05, **p < 0.001.

Table 1

Descriptive Statistics for study variables assessed at T1, T2, and T3

	Overall (*N* = 296)	PAO (*n* = 201)	P+F (*n* = 95)
	M (SD)	*M* (SD)	*M* (SD)
T1			
Drinks per week	3.118 (5.228) [*]	2.597 (4.840)	4.221 (5.842)
Close friends' alcohol use	2.678 (1.091) [**]	2.552 (1.081)	2.944 (1.069)
T2			
Exposure to alcohol-related Instagram posts	11.211 (4.706) [***]	10.590 (4.896)	12.526 (3.988)
T3			
Drinks per week	8.765 (9.816)	8.164 (9.068)	10.037 (11.181)

Note. *s denote differences between primary account only (PAO) users and primary account and Finsta (P+F) users.

[*] p < .05,

[**] p < .01,

[***] p < .001

Table 2

Results from the preliminary analyses (hierarchical regression models) used to select which pathways to include gender as a moderator on in the subsequent main mediation model.

Step	Predictors	B (SEB)	β	R^2_{change}	F_{change}	df
Dependent Variable						
Drinks per week[3] (Y)						
1	Drinks per week[1]	0.424(0.112)	.226***	.161***	28.108	2, 293
	Close friends' alcohol use[1]	2.214(0.537)	.256***			
2	Finsta	1.008(1.149)	.048	.027**	4.898	2, 291
	Sex	−3.432(1.101)	−.169**			
3	Finsta * Sex	−4.971(2.452)	−.217*	.011*	4.112	1, 290
Exposure to alcohol-related Instagram posts[2] (M)						
1	Drinks per week[1]	0.112(0.055)	.125*	.127***	21.311	2, 293
	Close friends' alcohol use[1]	1.221(0.263)	.284***			
2	Finsta	0.985(0.556)	.098†	.046***	8.023	2, 291
	Sex	1.701(0.533)	.175**			
3	Finsta * Sex	0.878(1.194)	.080	.002	0.541	1, 290
Drinks per week[3] including indirect path (Y')						
1	Drinks per week[1]	0.424(0.112)	.226***	.161***	28.108	2, 293
	Close friends' alcohol use[1]	2.214(0.537)	.256***			
2	Finsta	0.775(1.150)	.037	.038**	4.588	3, 290
	Sex	−3.836(1.115)	−.189***			
	Alcohol-related posts[2]	0.237 (0.121)	.114*			
3	Finsta * Sex	−4.349 (2.435)	−.189†			
	Alcohol-related posts * Sex	−0.600 (0.225)	−.408**	.031**	5.848	2, 288

Note. Superscripts denote time of measurement. Coefficients are presented for the model step in which predictors were first entered. Finsta (Primary + Finsta account user = 1; Primary Account Only user = 0); Sex (males = 1; females = 0); *B* = unstandardized beta; β = standardized beta

†
p < .10,

*
p < .05,

**
p < .01,

***
p < .001