Descriptive and injunctive norms for e-cigarettes significantly predicted past 30-day e-cigarette use, controlling for demographics and party behaviors

INTRODUCTION
Social norms for e-cigarettes may predict e-cigarette use (Argawal et al., 2018; Katz et al., 2019), however, one’s perception of e-cigarette use behaviors (descriptive norms; DN) and approval by peers (injunctive norms; IN) have yet to be studied in college students. DN and IN have been identified as significant predictors of alcohol use, and may be prevalent for e-cigarettes. Increased e-cigarette use and device sharing, especially in party settings, could increase the risk of contracting COVID-19 (Buu et al., 2020). This study sought to: (1) to explore the relationships between COVID-19 non-compliant party attendance (e.g., without social distancing, masks, or hand washing), on- and off-campus, alcohol use, binge drinking, and e-cigarette use; and (2) to determine whether DN and IN are unique predictors of e-cigarette use after controlling for demographic characteristics and party behaviors.

METHODS
Data were collected from a small private university in the northeastern United States 6 weeks into the Fall 2020 semester (N = 207; 148 women). Students completed an omnibus survey consisting of demographic characteristics (age, gender, race, athlete status, campus living), past 30-day e-cigarette and alcohol use, COVID-19 noncompliant party attendance (on- and off-campus), and DN and IN for e-cigarette use. Two hierarchical regression models tested the relationships between the independent variables and e-cigarette use. Students used e-cigarettes 3.59 days (SD = 8.67), on average, but estimated 16.18 days (SD = 11.98) of use by their peers; average peer approval of e-cigarette use was 2.45 (SD = 1.07).

RESULTS (Table 1)

• Social Norms Model
Demographics did not predict e-cigarette use. DN and IN accounted for 18.7% of the variability in e-cigarette use; both variables were significant.

• Party Behaviors Model
Party behaviors predicted 16.4% of the variability in e-cigarette use beyond demographics; off-campus party attendance was significant. DN and IN accounted for 11% of the variability in e-cigarette use, above and beyond demographics and party behaviors. Both variables were significant. Binge drinking approached significance.

DISCUSSION
Increased attendance at COVID-19 noncompliant parties off campus was related to increased e-cigarette use. Students tend to overestimate e-cigarette use by their peers, and both descriptive and injunctive e-cigarette norms were related to greater e-cigarette use. In the era of COVID-19, e-cigarette usage is especially dangerous given that the virus can be deadly for those with impaired respiratory systems. This study demonstrates that social norms are paramount predictors of e-cigarette use in college students, a health risk behavior that was increasingly prevalent in our sample. This research informs school administrators and public health officials about the importance of the social influence as it relates to current and future e-cigarette use, highlighting a critical point for intervention in school settings where socialization and partying often occur.

Crdoxbec@buffalo.edu