

Cross-faded: Young Adults' Language of Being Simultaneously Drunk and High

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ABSTRACT

The term “cross-faded,” observed in focus groups and on a variety of websites, appears to refer to overlapping drug effects of multiple substances used at the same time, particularly alcohol and marijuana. This study explores young adult understanding of the cross-faded terminology in order to inform substance use research and intervention. Young adult participants (N=807, ages 18-23) in the screening survey for Project Transitions based in Seattle, WA were asked whether they had heard of being cross-faded, what they thought it meant, and how desirable and risky they thought it was. Cross-faded was a commonly understood term (87% had heard of it), most often described as using alcohol and marijuana simultaneously (43%) and second most as being both drunk and high (25%), specifically. Being cross-faded was seen as moderately risky and not desirable by most, although 18.2% described it as moderately or very desirable. Risk factor differences in perceptions of being cross-faded were found for sex, college status, and alcohol and marijuana use. Cross-faded is a common term for the effects of using multiple substances. As such it merits further research consideration with the aim of optimizing the effectiveness of surveys and programming.

Key words: marijuana, alcohol, college students, daily diary, interpersonal conflict

The term “cross-faded” has entered the young adult lexicon in the past decade, referring to co-use of substances, typically alcohol and marijuana. “Cross-fading” has come up anecdotally in focus groups and has an online presence (Bergado, 2014; “Cross faded”, 2005; Dovey, 2014; Puiiu, 2017; Townsend, 2017) but has not yet been explored in survey research. Use of alcohol or marijuana is common in the US: 82% of young adults have used alcohol and 32% have used marijuana in the past year (Schulenberg et al., 2017). Of those 18 and older who report both alcohol and marijuana use, the majority report

simultaneous use such that the drug effects overlap (Subbaraman & Kerr, 2015). High school seniors who use alcohol and marijuana at higher intensities are more likely to use them at the same time (Patrick, Veliz, & Terry-McElrath, 2017). Simultaneous use is associated with feeling confused, having difficulty concentrating, and impaired driving (Lee, Cadigan, & Patrick, 2017; Ramaekers, Berghaus, van Laar, & Drummer, 2004; Sewell, Poling, & Sofuoglu, 2009; Terry-McElrath, O'Malley, & Johnston, 2014). In human subjects, ethanol (the active ingredient in alcohol) has been shown to increase the absorption and

drug effect of THC (the active ingredient in marijuana) (Lukas & Orozco, 2001).

Understanding young adults' language about substance use is important for gathering accurate information about use and consequences. This study used US-regional survey research to examine: (1) how commonly recognized the term "cross-faded" is among young adults, and what it means to them; (2) to what extent being cross-faded is perceived as desirable and risky; and (3) whether perceptions of being cross-faded differ by sex, college status, or frequency of alcohol and marijuana use.

METHOD

Participants and Procedures

Project Transitions is a longitudinal study based in greater Seattle, WA that explores young adult social role transitions and alcohol use. Young adults were recruited via online and print media ads, flyers, word of mouth, and local community agencies. Eligibility criteria included being 18-23 years old, residing within the Seattle metropolitan area, having an email address, reporting drinking alcohol at least once in prior year, and being willing to come to the project office for consent, identity/age verification, and baseline assessment. Participants were not compensated for completing the eligibility survey. All procedures were approved by the local university Institutional Review Board and covered by a federal certificate of confidentiality. No adverse events were reported.

Questions about the term "cross-faded" were added to the online eligibility survey for the second half of the enrollment period (from February 2015 to January 2016). During this period, 1565 individuals provided consent and completed the survey with 58.2% (n=911) meeting initial eligibility criteria to continue to the substance use questions. Of the 911 individuals, 89% answered the questions about the term "cross-faded" leaving 807 young adults with relevant data (see descriptive statistics in Table 1).

Table 1. *Descriptive Statistics*

Variable	%
Heard of cross-faded	
Yes	87.2
No	12.8
Meaning of cross-faded	
Use of alcohol and marijuana (definition or example)	43.3
Drunk and high (no marijuana mention)	25.0
Use of multiple substances	17.5
Other	1.5
Blank response	12.8
Cross-faded desirability	
Not desirable	60.1
Slightly desirable	21.7
Moderately desirable	13.0
Very desirable	5.2
Cross-faded risk	
Not risky	5.6
Slightly risky	16.4
Moderately risky	45.0
Very risky	33.1
Been cross-faded	
Yes	60.4
No	39.7
Sex	
Female	58.6
Male	41.4
College status	
Not a student	24.9
2-year or votech student	24.2
4-year or grad student	50.9
<i>M(SD)</i>	
Alcohol use frequency	2.6 (1.7)
Marijuana use frequency	1.8 (2.5)

Note. N = 807.

Measures

Cross-faded. Participants were asked, "Have you ever heard the term 'cross-faded' with regards to substance use?" with response options Yes, No, or Prefer not to answer. Participants who answered "Yes" were asked, "What does it mean to you?" and could type in an open-ended response. Responses to the meaning of cross-faded items were coded into 4 mutually exclusive categories initially developed by the two authors: 1) use of alcohol and marijuana (i.e., both substances were specifically listed); 2) drunk and high (i.e., the high was not specified as

marijuana); 3) use of multiple substances (i.e., alcohol and marijuana were not specifically listed, but the definition referred to use of more than one substance); and 4) other. Each response was coded by two coders, a graduate student and a paid staff member. Codes had 99.9% match between coders; the few (n=11) inconsistencies were reviewed and final decisions made by the two authors.

All participants were asked, “How desirable is being ‘cross-faded?’” and “How risky is being ‘cross-faded?’” (both with responses from 1 = not to 4 = very, and a code for Prefer not to answer). Finally, they were asked, “Have you ever been ‘cross-faded?’” with response options of Yes, No, or Prefer not to answer.

Demographics. Sex at birth was coded as Female, Male, or Prefer not to answer. Current college status was coded as not currently a student, 2-year college or vocational student, 4-year college student, or Graduate student. Due to small sample sizes, respondents in high school (n = 16) or working toward a General Equivalency Degree (n = 10) were coded as missing on college status.

Previous alcohol and marijuana use. Past-month alcohol use was assessed with, “During the past month, how often did you usually have any kind of drink containing alcohol?” Responses were 0 = Never, 1 = Once a month, 2 = 2 to 3 days a month, 3 = 1 day a week, 4 = 2 days a week, 5 = 3 to 4 days a week, 6 = 5 to 6 days a week, and 7 = Everyday” with a code for Prefer not to answer. Marijuana use was assessed with “During the past month, how often did you usually use marijuana?” with the same responses as alcohol.

RESULTS

Descriptive statistics are shown in Table 1. The majority of participants (87.2%) said they had heard of the term “cross-faded.” Its meaning was described as using both alcohol and marijuana by 43.3%, being both drunk and high by 25.0%, and using multiple substances by 17.5% of participants. Only 1.5% of responses listed another definition for the term, and 12.8% were left blank.

Well over half of the participants (60.1%) said that being cross-faded was not desirable, with only 5.2% saying it was very desirable. Perceived risk showed that only 5.6% rated being cross-

faded as not risky, with most (78.1%) saying it was either moderately or very risky.

Bivariate statistics are shown in Table 2. Compared to females, males more often said that being cross-faded was a specific combination of alcohol and marijuana, rated being cross-faded as less risky, and had a higher endorsement of having been cross-faded themselves. Non-college-students perceived being cross-faded as less risky, compared to 2-year and 4-year college students. More frequent users of alcohol or marijuana were more likely to have heard of being cross-faded, report being cross-faded as more desirable or less risky, and report having been cross-faded themselves.

DISCUSSION

“Cross-faded” emerges as a commonly known term for effects of using multiple substances. It most often refers to using alcohol and marijuana simultaneously, and second-most to being drunk and high at the same time. Among young adults in the Seattle, Washington area who had used alcohol in the past year, the majority (59%) said they had been cross-faded. However, being cross-faded was rated as not very desirable and considered moderately risky. Current evidence corroborates the risks associated with simultaneous alcohol and marijuana (SAM) use (Lee et al., 2017; Lukas & Orozco, 2001; Ramaekers et al., 2004; Sewell et al., 2009; Terry-McElrath et al., 2014), and it appears that young adults have some awareness of the consequences.

Males (compared to females), non-students (compared to 2-year and 4-year college students), and more frequent users of alcohol or marijuana were most likely to report having been cross-faded. The latter were also most likely to rate being cross-faded as more desirable and less risky. This finding is similar to previous research documenting that higher intensity drinkers and marijuana users are more likely to report SAM use (Patrick et al., 2017).

Additional research is needed to understand specific risk factors associated with being cross-faded, beyond heavier drinking and marijuana use. Both the language of and motivations (Patrick, Fairlie, & Lee, 2018) for SAM use suggest it to be a distinct behavior in young adult experience. The current study is limited by its

Table 2. Bivariate Statistics

Cross-Fading Variable	Sex		<i>p</i>	College Status			<i>p</i>	Alcohol Use Freq.		Marijuana Use Freq.	
	Female %	Male %		Non-student %	2-Year %	4-Year %		Mean (SD)	<i>p</i>	Mean (SD)	<i>p</i>
Heard of cross-faded			0.065				0.079		<0.001		<0.001
Yes	85.4	89.8		89.1	82.6	88.6		2.7 (1.7)		2.1 (2.6)	
No	14.6	10.2		11.0	17.4	11.4		1.8 (1.7)		0.4 (1.1)	
Meaning of cross-faded			0.036				0.210		<0.001		<0.001
Alcohol and marijuana	40.0*	47.9		45.3	39.5	44.0		2.9 (1.7)		2.2 (2.6)	
Drunk and high	26.0	23.7		23.4	22.1	27.3		2.7 (1.7)		1.8 (2.5)	
Multiple substances	18.6	15.9		17.9	19.0	16.6		2.3 (1.7)		2.0 (2.7)	
Other	0.9	2.4		2.5	2.1	0.7		1.7 (1.4)		1.3 (2.3)	
Blank response	14.6	10.2		11.0	17.4	11.4		1.8 (1.7)		0.4 (1.1)	
Cross-faded desirability			0.099				0.782		<0.001		<0.001
Not desirable	62.6	56.6		58.7	63.1	59.4		2.2 (1.6)		0.9 (1.9)	
Slightly desirable	21.6	21.9		24.9	18.0	21.9		2.9 (1.7)		2.5 (2.4)	
Moderately desirable	12.1	14.4		11.9	13.9	13.1		3.3 (1.6)		4.2 (2.6)	
Very desirable	3.8	7.2		4.5	5.1	5.6		3.9 (1.9)		4.1 (2.7)	
Cross-faded risk			<0.001				0.010		<0.001		<0.001
Not risky	3.4*	8.7		10.5 ^{b,c}	4.6 ^a	3.7 ^a		3.0 (2.0)		3.7 (2.9)	
Slightly risky	14.0*	19.8		16.4	14.4	17.3		3.1 (1.6)		2.7 (2.6)	
Moderately risky	44.2	46.1		43.3	41.5	47.5		2.7 (1.7)		2.0 (2.5)	
Very risky	38.5***	25.5		29.9 ^b	39.5 ^a	31.6		2.2 (1.7)		0.9 (2.0)	
Been cross-faded			<0.001				0.009		<0.001		<0.001
Yes	54.6	68.6		69.2 ^{b,c}	54.9 ^a	58.6 ^a		3.1 (1.7)		2.9 (2.6)	
No	45.5	31.4		30.9	45.1	41.4		1.9 (1.5)		0.2 (0.9)	

Note. *N* = 807. Reported *p*-values are based on chi-square tests (for two categorical variables), *t*-tests or ANOVAs (for a combination of continuous and categorical variables). Asterisks [**p* < .05, ****p* < .001] indicate significance for follow-up comparisons of specific categories. Superscripts indicate significant differences for college status, whereby ^a=significantly different from non-student, ^b=significantly different from 2-year, and ^c=significantly different from 4-year.

regional, urban, community sample in Washington state where recreational marijuana is legal for those aged 21+. However, the common understanding and experience of being cross-faded suggests that it is a behavior worthy of further research consideration. Documenting young adult terminology for poly- and simultaneous substance use can help optimize the effectiveness of surveys and ensure that prevention and intervention efforts are relatable and accessible for young adults.

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