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An Introduction to Body Vandalism: What is it? Who does it? When does it happen?

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Abstract

A number of typical consequences for alcohol and other substances have been well documented. However, a specific category of consequences which has received no attention in the existing literature includes acts (other than sexual assault) committed upon incapacitated individuals. We have termed this behavior Body Vandalism (BV), defined as the direct manipulation of an incapacitated individual through the addition of markings, objects or substances, removal of property or hair, or relocation of a body. The purpose of this paper is to provide a preliminary examination of rates of experiencing and variations in positive and negative perceptions of this behavior from victim's perspective. A pilot study was conducted aimed at examining the rates and demographic characteristics of body vandalism in a national sample of 981 adults. The majority of individuals had witnessed BV, half had perpetrated, and over 40% had been a victim in their lifetime. Rates of lifetime victimization and perpetration were low (1-2 times). Perpetrators most often targeted their friends and alcohol was typically a factor in victimization. Over half of victims reported experiencing positive social outcomes as a result of being victimized and about a third reported negative emotional outcomes. Findings suggest that experiences of body vandalism are relatively common, especially in young adults, associated with alcohol consumption, and result in both positive and negative outcomes for victims. This study offers evidence for BV as an outcome of social drinking, suggests contexts that increase the risk of BV occurrence, and provides a foundation from which future studies can build.

Keywords

Body Vandalism; Alcohol use; Consequences

1. Introduction

Hazardous alcohol consumption has been consistently found to be associated with negative consequences (e.g. Kahler, Strong, Read, 2005; White & Labouvie, 1988). Many of these consequences, including hangovers, increased tolerance, fights, and problems sleeping, have been regularly studied. However, personal reports, social media postings (Krieger, et al.,

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2015), and recent news articles (The Associated Press, 2007; New York Times, 2008) have brought to light a behavior related to drinking not previously studied. We labeled this behavior body vandalism (henceforth BV) and define it as the deliberate manipulation of an incapacitated individual by the addition of markings, objects or substances, removal of clothing or hair, or relocation of their body. BV is restricted to the defacement of an incapacitated individual and does not include actions that fall under legal and research definitions of sexual assault, molestation, or physical violence (Abbey, 2002; Eaton, et al., 2012; Singh, et al., 2015; The United States Department of Justice, 2013). An individual is considered incapacitated if they are unable to verbally or physically object, resist, or deflect the actions of others.

Archival and social media data (Krieger, et al., 2015) suggest that images of BV are posted and discussed on social media sites, that there are different types of BV, and that alcohol is a contributing factor in many experiences. In addition, there have been reports of body vandalism behaviors in the news. These reports demonstrate the negative physical and emotional outcomes that can result from BV behaviors and suggest that victimization may result in harm or death (e.g. The Associated Press, 2007; New York Times, 2008). Despite this emerging evidence no published research of which we are aware has examined BV and the possible negative experiences that may result. To assess the impact of BV on individuals, we conducted an exploratory study on BV behaviors.

We designed a pilot study to examine how often BV occurs over the lifespan, what percentage of people have experienced BV, and specific characteristics associated with individuals who have been perpetrators or victims of BV. Of particular interest, we assessed the positive and negative consequences associated with BV victimization. As there was no empirical basis for specific hypotheses, the results of this study are descriptive, and no specific hypotheses were made regarding the associations between study variables. However, given the social media studies and news reports, we expected that BV would be experienced by a moderate proportion of individuals and that it would be accompanied by reported negative outcomes by victims.

2. Materials and Methods

2.1 Participants and Procedure

A total of 1003 people (51.99% men) participated in the survey, of which 981 provided complete data. Participants were recruited from an online community to complete a brief online survey using Amazon's Mechanical Turk (Mturk) system (<https://www.mturk.com>). Mturk is an online forum for completing tasks in exchange for money credited to an [Amazon.com](https://www.amazon.com) account. This recruitment system has been found to be a valid method of conducting online research, as it is similar to online sampling in college populations but targets a more diverse participant pool (Buhrmester, Kwang, & Gosling, 2011; Casler, Bickel, Hackett, 2013). After reading a short study description, interested participants clicked on the link and consented. In exchange for completing the 5 minute survey, participants received \$0.10. Inclusion criteria was living within the United States, having a 95% approval rating on Mturk, and having completed at least 50 prior tasks. The sample was

not restricted by age or ethnicity and the mean age was 31.80 ($SD = 10.03$). Details regarding the demographic breakdown of the sample are presented in Table 1.

2.3 Measures

2.3.1 Lifetime Body Vandalism—Participants completed eight questions pertaining to their lifetime rate of experiencing BV. Examples were described and categorically labeled as “practical jokes”. Perpetration and victimization were phrased as participation and being a target. This phrasing was used to reduce defensiveness. Two questions provided photo examples (see Appendix A for example images) and verbal descriptions of six different BV behaviors including writing on the body, placing objects on the body, wrapping the body in tape or plastic wrap, covering the body with substances, removing clothing or hair, and relocating the body. Participants were asked if they had experienced or had done any of listed behaviors or anything similar. Participants could check as many as applied to them or check “None of the above or anything similar.” Following these questions participants were asked to indicate how many times they had ever been the target of a practical joke when they were incapacitated, perpetrated, or had witnessed a practical joke on an incapacitated individual. Recency of perpetration and victimization was assessed with one item with 5 response options including: “Never,” “In the last year,” “1-2 years ago,” “3-4 years ago,” and “5 or more years ago.” Perpetrators were also asked “who are the people most likely targeted by you and your group of friends” and could check all that applied from four options: Friends, Acquaintances, Strangers, and Disliked People. Finally participants were asked two questions assessing what percent of the time they or their target(s) were incapacitated due to: “Alcohol Consumption,” “Other Substance Use,” “Just Asleep,” or “Some Other Reasons.”

2.3.2 Body Vandalism Event Details—Participants who indicated being a victim of or perpetrating BV *in the last two years* received three additional measures. Two questions asked about the number of alcoholic drinks they consumed during their last occasion of BV (victim and perpetrator). The third measure included 38 possible positive and negative outcomes they experienced in the last six months as a result of being a victim of BV. Participants responded ‘Yes’ or ‘No’ to each item. The questions represented a negative outcomes scale ($\alpha = 0.94$) including items about negative physical, legal, social, and emotional outcomes and a positive outcomes scale including positive social and emotional outcomes ($\alpha = 0.91$). Total counts were created for each of the negative and positive outcomes subscales.

2.4 Analysis Plan

First, a series of tests were conducted to assess the psychometric properties of the new body vandalism outcomes scale: (1) An exploratory factor analysis (EFA) was conducted in SAS version 9.13 to examine underlying dimensions of the items. (2) Cronbach’s alpha was used to document internal consistency of any identified factors and/or total scores. Due to the exploratory nature of this study counts and percentages are reported for rates of experiencing, types, and outcomes of BV. Logistic regression was used to assess associations between demographic characteristics and BV experiences. The relationship between alcohol consumption when perpetrating BV and being a victim of BV was assessed with a t-test.

3. Results

3.1 EFA Results for the Body Vandalism

To identify the underlying factor structure of the body vandalism measure, an exploratory factor analysis (EFA) employing maximum likelihood factor extraction was performed on the 38 items. Principal components and examination of the scree plot suggested either a 2 or 3 factor solution, with Eigenvalues of 11.48, 6.53, and 2.79 accounting for 30%, 17%, and 7% of variance respectively. Subsequent Eigenvalues diminished from 1.49 to 0 with no adjacent differences exceeding .5%. Items loading on factors 1 and 3 were all negative items and items loading on factor 2 were all positive items. We subsequently constrained factor retention to 2 which resulted in all negative items loading on factor 1 and all positive items loading on factor 2. Factor analyses provided results that suggested a two factor solution. Factor 1 (negative outcomes) had an Eigenvalue of 10.73 and Factor 2 (positive outcomes) had an Eigenvalue of 7.28. Factor loadings ranged from .40 to .92.

3.2 Demographics and Rates of Body Vandalism

Of the 981 people in the sample 430 (43.83%) had been a victim, 578 (58.92%) had perpetrated, and 688 (70.2%) had witnessed BV within their lifetime. A large proportion of individuals who reported being victims of BV also identified as perpetrators and witnesses ($n = 365$ of 430, 84.88%). On average individuals reported being a victim 1.11 times ($SD = 2.78$), a perpetrator 2.41 times ($SD = 6.65$), and a witness 4.34 times ($SD = 0.79$) in their lifetimes. A large proportion of individuals experienced BV five or more years ago ($n = 394$, 40.16%), while 118 (12.03%) experienced BV 3-4 years ago, 132 (13.46%) experienced BV 1-2 years ago, and 112 (11.42%) experienced BV in the last year. A negative binomial regression of age on the most recent experience of BV found that age is significantly positively associated with time since last BV experience ($e^b = 1.01$, $p < .001$).

The associations among lifetime victimization, perpetration, and witnessing BV and participant demographics were examined using logistic regression. Individuals were significantly more likely ($p < .001$) to have been a victim if they were also a perpetrator (OR = 5.60) or a witness (OR = 2.57). Furthermore, participants were significantly more likely to be perpetrators if they were also witnesses (OR = 17.91). Neither age, income, education, race, nor relationship status was associated with being a victim, perpetrator or witness of BV.

3.3 Types of Body Vandalism

Of the 430 victims and 578 perpetrators, the most common types of BV reported were writing (251, 58.37% and 325, 60.90% respectively), addition of objects (170, 39.53%; 315, 54.50% respectively), and addition of substances (126, 29.30%; 147, 25.43% respectively). The remaining three types of BV reported on were removing clothing or hair (116, 26.98%; 64, 11.07% respectively), wrapping (49, 11.40%; 69, 11.94% respectively), and moving the person (58, 13.49%; 71, 12.28% respectively).

3.4 Contexts of Body Vandalism

Victims indicated the percentage of time they had been incapacitated due to alcohol consumption, sleep, other substance use, and other means. On average victims reported being incapacitated due to alcohol consumption 48.99% of the time, sleep 41.59% of the time, other substances 3.71%, and other means 5.72% of the time. However, examining the distribution of these variables indicates that there may be distinct groups of victims, identifiable by how they became incapacitated. Specifically, 33.73% of victims reported always being incapacitated due to alcohol consumption, 31.82% due to sleep, and 10.29% felt that they had been incapacitated due to alcohol and sleep equally. Conversely, perpetrators felt that on average their victims were incapacitated 61.62% of the time due to alcohol consumption, 30.80% due to sleep, 4.03% due to other substances, and 3.69% due to other means.

The association between alcohol consumption and body vandalism was further explored by examining the number of drinks individuals consumed on their last occasion of victimization and perpetration. Due to the high number of individuals who had been both victims and perpetrators a paired t-test was used to assess the differences in the number of drinks consumed on the last occasion of victimization and last occasion of perpetration. Individuals drank significantly more when they were victims ($M = 5.72$, $SD = 5.89$) than when they were perpetrators ($M = 4.46$, $SD = 4.46$; $t(82) = 2.19$, $p = 0.03$).

Relationships appear to be important in choosing victims. Perpetrators ($n = 578$) report targeting friends much more often than acquaintances and strangers ($n = 510$, 88.24%; $n = 106$, 18.34%; $n = 7$, 1.21% respectively). However, it is important to note that 29 (5.02%) individuals indicated that they targeted people whom they disliked. Additionally, 107 (20.34%) people reported targeting more than one group of people, the majority of which ($n = 77$) indicated that they targeted both friends and acquaintances.

3.5 Outcomes of Body Vandalism

Outcomes of BV victimization were assessed if the individual had experienced BV in the last two years ($n = 154$). The majority of victims reported experiencing both positive social and emotional outcomes as a result of being a victim. Negative outcomes of victimization were endorsed less often than positive outcomes. Emotional consequences were endorsed most often followed by social outcomes. Physical and legal outcomes were reported by less than 10% of victims and perpetrators. The number and proportion of participants who reported each outcome can be found in Supplemental Table 1. An exploratory regression analysis found not significant associations between demographic characteristics and the negative or positive outcomes scales ($p > .05$). In addition, the number of drinks the victim consumed nor the percentage of time they were incapacitated due to alcohol were not significantly associated with negative or positive outcomes experienced ($p > .05$).

4. Discussion and Conclusions

The purpose of this study was to define body vandalism and preliminarily examine the rates of BV victimization and perpetration, possible contexts it is experienced in, and the

consequences associated with victimization. Results suggest that experiences of BV are relatively common for members of this community, as most had experiences with it, and occur among a variety of individuals including people of different races, education levels, genders, and ages. In addition, having witnessed BV increases the likelihood of perpetrating or becoming a victim. The positive relationship between age and time since last BV experience suggests that BV may occur more often during young adulthood. BV appears to be predominantly an in-group behavior with most perpetrators targeting their friends. It is also important to note that there does seem to be a small group of perpetrators that target individuals they dislike, suggesting BV may sometimes be motivated by negative intentions. Alcohol consumption is associated with both victimization and perpetration though results suggest there are some groups of non-alcohol related BV experiences. Drinking and incapacitation due to alcohol was not associated with BV victim outcomes. Furthermore, results of this study indicate that victimization is associated with positive social outcomes as well as negative emotional outcomes.

The targeting of friends and the reported positive social outcomes associated with victimization indicates that BV may serve as a positive group initiation or reinforcement behavior. This is consistent with media reports of the BV being done to friends. Additionally, the association between BV and alcohol consumption is intuitive given the positive relationships between alcohol consumption, impaired decision making, and incapacitation (Mallett, Lee, Neighbors, Larimer, & Turrisi, 2006; Perkins, 2002; Steele & Josephs, 1990). Moreover, situations that decrease the application of inhibitory self-control in potential perpetrators (e.g. when consuming alcohol; Fillmore & Vogel-Sprott, 1999; Mulvihill, Skilling, & Vogel-Sprott, 1997) are likely to increase rates of BV. In sum, environments that encourage alcohol consumption, are likely to increase the risk of BV occurring and individuals who drink more heavily may be at higher risk for becoming victims of BV. While alcohol consumption and incapacitation due to alcohol was not associated with victim positive or negative outcomes, it may be a factor in outcomes experienced by perpetrators. More work is needed to understand the antecedents (e.g. attitudes, motives, and expectations) and consequences for both victimization and perpetration and to identify individuals at high risk for experiencing negative outcomes.

In conclusion, this study represents the first empirical examination of BV and advances our understanding of what it is, who does it, and who is likely to experience it. As such, it serves largely as an initial point of entry into the study of a category of alcohol-related consequences which has received no previous empirical study. There are a number of limitations to this preliminary study and related and potentially fruitful directions for additional inquiry. First, participants from MTurk are a self-selected sample that may not be representative of the larger U.S. population (Berinsky, Huber, Lenz, 2012). Although research has found samples to be comparable to college samples and often more diverse than student samples (Buhrmester, Kwang, & Gosling, 2011; Casler, Bickel, Hackett, 2013) and more attentive (Hauser & Schwarz, 2016). Assessing BV in other samples is needed to identify whether experiences of BV are unique to specific samples or subsamples. For example, we might expect alcohol-related BV to be highest among emerging adults, and particularly prominent in heavy drinking subcultures (e.g., Fraternity, Sorority, and/or athletes). Additionally, BV related to falling asleep might be more prevalent among

adolescents (e.g., slumber parties). Additional research in targeted samples will help provide a clearer picture.

Second, behaviors were framed as “practical jokes” which may suggest more positive intentions on the part of the perpetrators. This could account for the extent to which victims endorsed positive outcomes, which was unexpected. Future research describing behaviors without labeling them would be useful. A related issue is the measure used to assess positive and negative consequences. Items were derived by the investigators with input from a team of undergraduate research assistants. An alternative approach could begin by having perpetrators and victims describe their feelings and results that followed the incident using open-ended questions and then coding for themes.

The frequent endorsement of positive consequences by victims, especially if replicated, would suggest additional questions such as: are positive outcomes linked to feeling closer to the group?; Are victims attributions affected by impression management (e.g., face saving)?; what happens when incidents are posted online and how might that affect victims perceptions of outcomes? In short, this paper represents an important first step in what is expected to become a fruitful line of inquiry. A long term goal of this work is to identify factors leading to BV that is experienced as very negative and further developing strategies to reduce risks of these kinds of occurrences.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Highlights

Common types of body vandalism were the addition of writing, objects, or substances.

Most victims of body vandalism are also perpetrators.

Body Vandalism is associated with alcohol use for both perpetrators and victims.

Body Vandalism victimization results in both positive and negative consequences.

Table 1**Demographics of Study Participants**

Gender	Count	%
Female	470	48.00%
Race & Ethnicity		
Hispanic	63	6.46%
Caucasian	797	81.46%
Native American	7	0.72%
African American/Black	66	6.75%
Asian	67	6.85%
Pacific Islander	3	0.31%
Muti-ethnic	29	2.97%
Other	9	0.92%
Highest Level of Education		
Some High School	8	0.82%
High School Diploma/GED	92	9.40%
Some College	359	36.67%
Bachelors/Associates Degree	431	44.02%
Graduate Degree	89	9.09%
Current Yearly Income		
< \$10,000	211	21.57%
\$10,000 - \$29,999	304	31.08%
\$30,000 - \$49,999	233	23.82%
\$50,000 - \$69,999	120	12.27%
\$70,000 - \$89,999	64	6.54%
\$90,000+	46	4.70%
Relationship Status		
Single or Dating	444	45.31%
Engaged or Long-term Committed	153	15.61%
Married or with Life Partner	322	32.86%
Divorced or Separated	53	5.41%
Widowed	8	0.82%
Occupational Status		
Student Only	120	12.33%
Working Only	609	62.59%
Student & Working	65	6.68%
Retired	158	16.24%
Other	19	2.40%

Note: Student and Working Only includes part and full time workers that did not mark being in another category.