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ALCOHOL USE AND HARM TO CHILDREN BY PARENTS AND OTHER ADULTS

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Abstract

This study used mixed methods to examine parent-reported harm to children (lack of supervision or physical harm) due to alcohol use by themselves or someone else, as well as parent beliefs about alcohol, parenting, and harms to children. We conducted a cross-sectional general population survey of 1,599 parents who were primary caregivers to a child age 10 or younger and follow-up interviews with 23 parents who responded “yes” to one of the questions about alcohol use causing harm their child. Survey data were analyzed using multilevel logistic models. Compared to abstainers, parents who drank at least once a year were less likely to report that someone else’s drinking caused a lack of supervision or physical harm to their child. Higher continued volumes of drinking was related to fewer reports of not watching a child closely enough. Social companionship support (having people to go out with) was related to greater odds that a parent’s drinking would cause physical harm to his or her child(ren). In the qualitative analysis, four relevant themes emerged: perceived effects of alcohol use; tangible support and child supervision; immediate and distal harm; and turning points in drinking behaviors.

INTRODUCTION

Child maltreatment includes a wide range of harms to children including insufficient provision of care and physical abuse, both of which are associated with life-long negative consequences (Afifi et al., 2013; Dube et al., 2001; Norman et al., 2012). Over 3 million children were referred to Child Protective Services (CPS) as potential victims of maltreatment in 2016, with over 670,000 having determinations of child maltreatment (U.S.

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Department of Health and Human Services, 2018). This number underestimates the true prevalence in the United States, however, as not all abused children are referred to or identified by CPS (Sedlak et al., 2010).

Alcohol is a significant contributing factor to child maltreatment. As many as 11% of all cases of maltreatment in the general population are associated with parental alcohol use (Sedlak et al., 2010). Rates of alcohol-involved maltreatment appear to be much higher for children involved with the child welfare system, where it is estimated that 40–80% of parents have problems related to alcohol use (Young et al., 2007). Heavy drinking is also associated with higher levels of maltreatment (Berger, 2005; Famularo et al., 1986; Freisthler & Price Wolf, 2016; Murphy et al., 1991; Kelleher et al., 1994; Kepple, 2017; Sun et al., 2001), including physical abuse (Freisthler et al., 2014; Freisthler & Price Wolf, 2016), involvement in the child welfare system (Hafekost et al., 2017), and recurrent maltreatment (Laslett et al., 2012). In the general population, the risk appears to be concentrated in frequency of drinking rather than amount (Freisthler & Gruenewald, 2013; Freisthler et al., 2015).

Despite these results, whether alcohol directly causes child abuse and neglect remains unknown. In some first attempts to study this, parents and caregivers were asked if they thought their own or someone else's alcohol use had caused harm to their child (Laslett et al., 2011; Esser et al., 2016; Kaplan et al., 2017). These studies described harm as problems due to maladaptive parenting (e.g., yelling, physically harming a child). In Australia, Laslett and colleagues (2011) found that about 12% of children were negatively affected by the drinking of someone other than the respondent. This percentage is similar to sentinel estimates of rates in the United States, but likely undercounts the true incidence of alcohol-related harm, as the caregiver's own behaviors that may have contributed to harm were not assessed. A study of only male caregivers conducted in India found that 43% of respondents reported someone (including the caregiver) had harmed a child due to alcohol use (Esser et al., 2016). However, these numbers were much lower for the two types of harm studied here: physical harm/abuse (15.7%) and supervisory neglect (15.4%) (Esser et al., 2016). In the first U.S.-based study, Kaplan and colleagues (2017) found that 7.4% of caregivers reported that alcohol caused harm to a child in the household. While these initial studies suggest that alcohol use is related to harm for children, all measured drinking behavior differently, limiting comparability. One found that the respondent's weekly drinking was related to alcohol-causing harm to children (Laslett et al., 2011); one found any drinking was related to a child's harm (Esser et al., 2016); one found no relationship between the respondents drinking and harm, but that heavy episodic drinking by another member of the household was related to a child being harmed (Kaplan et al., 2017). Thus, the role of a caregiver's drinking behaviors in alcohol-related harm to children may be mixed and remains mostly unknown.

This is part of an emerging body of work seeking to assess the role of alcohol use in harms to others. One consideration of this work is not just how a parent's drinking may be related to abuse or neglect, but how the drinking of other adults may also affect whether a child is abused or neglected. Further, social relationships or social support may be related to child abuse and neglect. These relationships may include individuals who participate and

encourage participation in risky drinking behaviors that may lead to alcohol-related harm to children. Social companionship support (i.e., doing social activities with friends and family members) may place children at greater risk for physical abuse (Freisthler et al., 2014), and drinking with family and friends may place children at greater risk for different types of supervisory neglect (Freisthler et al., 2015). Parents with higher levels of companionship support (e.g., going out to drink with friends) may leave their child home alone. Indeed a parent's frequency of drinking with friends places his or her child(ren) at risk for being left home alone when an adult should be present (Freisthler et al., 2015). The risks of alcohol use to children are complex, involving not only the parent/guardian and the child, but also drinking behaviors and relationships with other adults.

Several challenges exist in identifying the role of parental or other adult alcohol use on child abuse and neglect. As mentioned, child welfare agencies only see a fraction of abuse and neglect cases that actually occur (Sedlak et al., 2010; Straus et al., 1998). Thus, any estimates using data from the child welfare system will likely undercount the relationship between alcohol use and child maltreatment. Additionally, child welfare agencies do not always document type of substance (e.g., alcohol) when substance use is a contributing factor to child maltreatment, making it difficult to ascertain the role of alcohol vs. other drugs. The cause of harm may or may not be due to the drinking of the respondent. Asking only if the respondent's drinking caused harm is likely to underestimate the effects of alcohol causing harm to children. Determining the causal pathway by which alcohol misuse leads to child maltreatment can be difficult. A parent who chronically misuses alcohol may be hungover during the morning, making her five year old late to school (i.e., educational neglect). Although alcohol use is causing the child harm, the harm is not occurring during intoxication which may cause us to miss the broader picture of negative consequences.

In this regard, our work moves past the descriptive quantifying of harm that occurred, which has been the focus of previous work. Instead, we focus on identifying how parents behave and the reasons behind those actions in a range of social settings where alcohol use and parenting co-occur. We rely on the work of Hedstrom and Swedberg (1996), who define mechanism-based theorizing as seeking to identify under what conditions certain behaviors are more or less likely to result in abusive or neglectful parenting practices. These mechanisms allow us to move the field forward by identifying commonalities across conditions that could be used as a target of prevention or intervention activities.

Here we attempt to address limitations of previous work by: (1) using a general population study; (2) asking questions about only alcohol use; (3) asking about these behaviors for the respondent and others; and (4) asking if the parent felt the alcohol use caused the harm and why. We do this for two distinct types of child maltreatment—physical abuse and supervisory neglect. The current study used mixed methods to examine the factors related to parent-reported harm to children (through lack of supervision or physical harm) due to alcohol use by themselves or someone else.

MATERIALS & METHODS

Study Design

We conducted a cross-sectional multi-mode (telephone and online) general population survey of parents living in 30 cities in California, who were the primary caregiver to a child 10 years old or younger. Respondents were recruited using a listed telephone sample or through targeted Craigslist advertisements in each of the cities. After being deemed eligible, parents were asked to complete the interview via one of two modes: (1) telephone or (2) online. Listed samples of telephone numbers were purchased by our survey vendor. These lists were purchased from credit card companies, magazine subscription lists, utility lists, and other sources (e.g., stores catering to parents). They were purged of non-working numbers, and contained respondents who were likely to have children in the targeted age range. Use of these lists reduced the costs associated with large telephone surveys, since it should take fewer attempts to reach an eligible respondent. These lists were also preferable for a targeted geographic sample, as used in this study, given that telephone exchanges are now portable.

The target cities for this study were a subset of 50 cities used in a previous study (Freisthler & Gruenewald, 2013). That sample of 50 cities was designed to maximize geographic validity of cities with populations of 50,000 to 500,000. We chose a subsample of the original sample because an intervention study was being conducted in 12 of those cities. We then randomized the remaining 38 cities, and included the first 30 in the current study.

The qualitative study consisted of follow-up interviews with parent respondents who responded yes to one of the four questions asking if alcohol use caused them or someone else to harm their child. The qualitative interviews were designed to ascertain possible mechanisms by which alcohol use causes harm to children and uncover parents' ideas and perceptions about alcohol use, parenting, and harms to children. To maintain anonymity and confidentiality, the survey research firm identified respondents who fit the study criteria, recruited them via telephone, and scheduled the interviews. Respondents were asked to give their first initial (or a pseudonym) to be used during the interview.

Survey Sample

The sample size for the survey was 1,599 respondents. Criteria for inclusion included parents who had at least one child 10 years old or younger, the child lived in the home at least 50% of the time, the respondent spoke English or Spanish, and lived in one of the 30 study cities. Where more than one eligible respondent resided in the household (i.e., two parents), a random selection procedure based on most recent birth date was used to choose one to be invited to participate. Individuals who lived in institutional settings, who were not well enough to complete the interview, or did not speak English or Spanish were excluded from the study. Once a respondent had been selected within a household, verbal informed consent was obtained from that person. Sample weights were created that adjusted for gender, race/ethnicity, and household type for the 30 cities. Table 1 presents the descriptive statistics for the total sample and for drinkers.

On average, there were 53 respondents per city (with a range from 14 to 100 respondents), with a 42% response rate, as defined by the American Association for Public Opinion Research (2016). We cannot calculate a response rate for respondents recruited through Craigslist. However, the cooperation rate (ratio of all cases interviewed out of all eligible units ever contacted) was 95% for Craigslist and 98% for the telephone survey. Respondents provided verbal informed consent if completing the telephone survey and written informed consent if responding via the internet. Respondents were given a $35 incentive to participate in the 30-minute survey.

Qualitative Interview Sample

Individuals who answered that their drinking or someone else's drinking had harmed their child in the past year were eligible for a follow-up qualitative interview. The survey research firm contacted eligible respondents and recruited until 23 were enrolled in the study and completed qualitative interviews. At the scheduled interview time, the respondent called in to a toll-free conference call number, gave verbal informed consent, and completed the interview over the phone. Interviews were conducted by research assistants. The interviews lasted approximately 30 minutes and respondents were provided with a $50 incentive. Interviews were audio-recorded and transcribed verbatim.

Survey Measures

The four dependent variables consist of single item questions that assess whether (1) own alcohol use caused the parent to not supervise his or her child; (2) someone else's drinking caused that person not to supervise the respondent's child; (3) own alcohol use caused a parent to physically harm his or her child; and (4) someone else's alcohol use caused that person to physically harm the respondent's child. These questions were adapted from previous work (see Laslett et al., 2011; Kaplan et al., 2017). For all items, respondents were asked to report on past year harms only. Binary response categories were use so that parents would indicate "yes" if harm occurred or "no" if it did not. The items that refer to a parent's own drinking were asked only to parents who reported drinking alcohol in the past year. The remaining two items were asked of all parents. Given the sensitive nature of the questions, parents may not reveal information about harm to their children caused by alcohol use if that information were to be reported to Child Protective Services based on mandatory reporting requirements for child abuse. Thus, questions asking about parenting behaviors that could be considered physically abusive or neglectful were asked using interactive voice response (IVR) technology for telephone respondents, which allowed them to use their telephone key pads to answer questions instead of providing these answers to a live interviewer.

Alcohol use.—Parents were asked a series of questions regarding their own alcohol use based on whether they disclosed drinking during the past month or past year on a screening questions. Parents were then asked the frequency (i.e., number of times) the parent had 1, 2, 3, 6, or 9 drinks over the past 28 or 365 days (based on the screening questions). Parents were also asked to report the greatest number of drinks they had during the 28 or 365 time period. For the full sample, we assessed the effects of another person's drinking by creating measures for parents who (1) abstain; (2) drink weekly; (3) drink monthly; or (4) drink yearly. We choose frequency of drinking as opposed to quantity or

a frequency-quantity measure as that appears to be a main driver of physical abuse and supervisory neglect in dose-response models (Freisthler & Gruenewald, 2013; Freisthler et al., 2014). Drinking patterns were measured using a graduated frequency approach derived from the above questions that provides model-based estimates of dimensions of drinking patterns using a mathematical model described in Gruenewald et al. (1996; 2003a,b). We created dose-response measures to assess (1) the frequency of drinking (i.e., having at least one drink) and (2) the continued volume of additional drinks over all the drinking events. Continued volume is the sum of the number of drinks > 1 during the past year across all drinking locations. Essentially these measures allow us to separate how often a person drinks (i.e. frequency of at least one drink) from the total amount they drank over the year time frame (e.g., continued volume). Stated another way, drinking risks are a linear function of frequencies of drinking, F (obtained by number of days a person reports drinking), and total volume, V (created through a mathematical model that considers amount of alcohol consumed from survey questions detailed above), minus frequency, V - F.

Social support.—We used the Interpersonal Support Evaluation List (ISEL) short form (Cohen et al., 1985) to measure three types of social support: social companionship, tangible, and emotional. Social companionship support (also called belongingness) is the availability of individuals to go and do social activities with, and includes going to lunch or the movies. Tangible support includes items related to receiving help from others, such as whether or not the respondent had someone to call if he or she were stranded 10 miles from home. Emotional support measures whether or not the person had someone they could talk to about problems, including listening to them about problems or giving advice. Each type of support was measured via four items with four point Likert response categories of "Definitely True," "Probably True," "Probably False," and "Definitely False." Responses were reverse coded where necessary and summed so that higher values refer to higher levels of the specific type of social support. Internal consistency was moderate for all three subscales where $\alpha = .633$ for social companionship, $\alpha = .620$ for emotional support and $\alpha = .613$ for tangible support.

Control variables.—The study included controls for parenting stress, impulsivity, and sociodemographic characteristics. Parenting stress was measured with two items from the Dimensions of Discipline Inventory (Straus & Fauchier, 2011). These items included "In the past year, how often have you felt stressed out when your child misbehaved?" and "In the past year, how often did you get very angry when your child misbehaved?" Items were summed with higher values indicating higher levels of parenting stress. Reliability, as measured by Cronbach's alpha, was .682. Impulsivity was measured using items from previous alcohol studies (Caetano et al., 2000). The three statements used to measure impulsivity included: (1) I would often act on the spur-of-the-moment without stopping to think; (2) You might say I act impulsively; and (3) Many of my actions seem to be hasty. The sum of the true responses (i.e., did not include "don't know" or "refused") indicated a higher level of impulsivity. Parenting stress and impulsivity used the same four response categories, including "Quite a lot," "Some," "A little," and "Not at all." Cronbach's alpha was .763 for the impulsivity measure.

Parent and child gender and age and number of children were included as controls. Parent race was recoded as Hispanic (of any race), non-Hispanic Blacks, non-Hispanic Asian, and non-Hispanic white. Family income was measured as a categorical variable: "≤ $20,000," "$20,001 to $60,000," "$60,001 to $100,000," "$100,001 to $140,000". Marital status was recoded to include those who were married or living in a marriage-like relationship compared to those who were single, divorced, widowed, or separated.

Qualitative Interview Measures

The qualitative interviews were designed to assess respondents' experiences with alcohol and parenting. As we believed that respondents' own childhood experiences with parental alcohol use might inform their own choices, we began by assessing how respondents' parents or guardians used alcohol when they were growing up (e.g., How did their alcohol use impact how they treated you?). We then examined respondents' own drinking behaviors, including where and when they drink and where their children are during those drinking events (e.g., How does your drinking differ by where you are (e.g. are there some places where you are more likely to drink?). We concluded interviews by asking how a person's (and their own) alcohol use might positively or negatively impact their children (e.g., Does alcohol use seem to change your temper or patience with your kids?), and any specific examples related to how an adult's alcohol use harmed their child(ren) (e.g.,You indicated that your drinking or someone else's drinking caused harm to your child or led to him or her not being watched closely enough. Can you give an example of when that happened?). Due to the open-ended nature of the questions, responses may reflect events that occurred earlier than in the past year, which was the timeframe used by the quantitative questions.

Data Analysis

Survey data.—Survey data were analyzed using non-linear multilevel (logistic) models with individuals nested within cities. Multilevel models adjust for characteristics that individuals living in the same cities may share (intraclass correlations; ICC). In our models, Level 1 variables were the individual and family-level variables representing characteristics of the respondent. We did not include Level 2 or city-level variables, but use multilevel models to account for any effects of the clustering within cities.

Qualitative interview data.—Data from the 23 semi-structured interview transcripts were used to develop a codebook using an open codebook approach. Two independent coders were randomly assigned five transcripts each to read and code. The codes generated from this process were discussed and merged with others when appropriate. The remaining transcripts were again randomly assigned to the coders (six transcripts each) for a second iteration of open coding. Any new codes that emerged were added to the list of current codes. A finalized list of 17 codes was then used to analyze the data, with both coders coding all interviews in the dataset. Initial agreement in assigned codes was 53.66%, calculated using Cohen's Kappa coefficient as an indicator of inter-rater reliability. To improve inter-rater reliability, the coders went back through each transcript to discuss codes they mismatched in application. Discussions were a chance for each coder to present their rationale for applying a code and to clarify the meaning of the excerpt in the context of the

entire interview. Following discussions and subsequent re-coding, agreement was calculated a second time, averaging 74.78% per code.

RESULTS

Survey Results

As shown in Table 1, about one in four parents reported that their own drinking caused them to not supervise their child closely enough, whereas one in eight reported that their own drinking caused them to physically harm their child. About one in five parents reported that someone else's drinking caused a lack of supervision of their children, and one in seven reported that someone else's drinking caused physical harm.

Table 2 presents the results of the models assessing whether someone else's drinking caused harm to their child(ren). Results indicate that parents of younger children and those who reported higher levels of support were less likely to report that another person's drinking caused harm. Parents who drank at least once a week, once a month, or once a year (compared to abstainers) were less likely to report that another person's drinking caused their child to not be supervised closely. Younger, male, and Hispanic children were less likely to be physically harmed by someone else's drinking. Compared to those with incomes greater than $140,000, parent's reporting income of less than $20,000 were less likely to report that someone else's drinking caused their child physical harm. Parents who report higher levels of tangible support and parenting stress were less likely to report that physical harm to their child was caused by another person's drinking. Compared to abstainers, parents who drank at least once a month or once a year were less likely to report that someone else's drinking caused physical harm to their child. Finally, having higher levels of companionship support was related to higher odds of a parent reporting that his or her child had been physically harmed by someone else's drinking.

The results examining whether a parent's own drinking resulted in harm to their child(ren) is found in Table 3. Male and African American children had lower odds of being harmed physically or through lack of supervision. Married respondents were less likely to report that their drinking caused lack of supervision. Parents reporting higher levels of tangible support had lower odds of saying their drinking caused their child physical harm. Parents who report higher continued volumes of drinking were less likely to say that their drinking caused them to not supervise their child closely enough.

Qualitative Interview Results

Four relevant themes emerged: (1) perceived effects of alcohol use; (2) tangible support and child supervision; (3) immediate and distal harm; and (4) turning points in drinking behaviors.

(1) Perceived effects of alcohol use.—The interviews highlighted the perceived negative effects of alcohol use (especially heavy drinking) among participants, either by their own or someone else in their social networks (e.g., ex-husbands, relatives). Also, participants stressed the importance of setting limits and maintaining self-control to mitigate negative influences of alcohol use on their capacity to care for their children. All participants

demonstrated some awareness about the effects that alcohol can have on themselves, their children, or the parent-child relationship in general:

> Q: [H]ow does your drinking at all affect your interactions with your children??
>
> FEMALE: Um, well if you ask me that question I would say it doesn't but if... I mean a person from the outside looking in might say that um, it really hinders a lot of things... like a lot of daily activity. (Transcript 107)

Occasionally, they mentioned that drinking by someone else in their social networks could impact their children:

> FEMALE: Um, my husband drinks socially as well, uh, with me. My, um, my father, who is their grandfather, uh, he lives with us. Um, he drinks pretty much every day. . . Um, and that, you know, could've had... you know, he has interactions with the children daily. . . Their uncle, you know, he's usually here when we're having, you know, our family get-togethers, and he also has interactions with them. . . While drinking, so. . . (Transcript 45)

For participants who admittedly drank, they mentioned setting a limit on how much they consumed in order to maintain what they felt was a safe environment for their children:

> FEMALE: It [alcohol] helps me to start my day. And I don't feel like it's become um, really like a big problem at this point. . . And I honestly feel like once it does which I you know pray that it doesn't then I'll seek help you know because I do have a child. I mean I-I just know growing up as a child and being around my grandfather who was you know just out of his mind drunk I-I honestly would not want my child to go through that all ever. (Transcript 107)
>
> Q: Um, how does your drinking affect your interactions with your children?
>
> FEMALE: Um. It doesn't affect it unless I drink a lot . . . (Transcript 112)

Similarly, when respondents shared their thoughts on alcohol use and parenting in general, the threshold for safe drinking behaviors seemed to be related to levels of self-control:

> MALE: Um, well I guess my only feedback would be there are, you know some people um, 'cause I know like teachers and things that would have like a glass of wine or two. You know getting off work, and it didn't seem like it impacted their fa-the family dynamics at all. So I think some people are able to handle it, and are great parents, and there are some people that you know, tend to push the alcoholism a little further than they should. . . . Like have more drinks than they should, or you know, anything like that. So I figure, um, figure if it impacts your family life, then definitely it's not a good situation. But if you're able to contain the alcohol, and still be functionable, you know. (Transcript 124)

(2) Tangible support and child supervision.—Participants consistently stressed the importance of tangible support in caring for children while they were using alcohol at home or while they were out drinking. For the parents who reported that their alcohol use substantially impacted their ability to care for their children, tangible support from their kinship system played an important role. These parents reported that their children were

cared for by relatives (e.g., spouse, grandmother, aunt) when they were unable to care for them due to their drinking:

> Q: [D]oes it-[drinking], change your interactions with your children at all?
>
> FEMALE: Oh, no, 'cause either they're asleep or um, they're at home with my grandma if I go out. (Transcript 46)
>
> FEMALE: I always make sure that dad is around if I want to take a drink so that I can have, you know, somebody to take over with them so they won't feel neglected you know, [or can't sleep] you know. (Transcript 112)

Some participants also stepped in as caregivers for someone else's child when that adult was unavailable due to alcohol or drug use:

> FEMALE: And I-I actually raised, um, my sister's children, three boys for about six years. She had her children taken from the CPS, but, I was, you know, I applied for the county to try to get them. And me and my father got custody of them for a while. But then she did all her classes and everything and got them back. (Transcript 20)

Furthermore, at social events where alcohol was present, many parents reported that there were one or more adults watching the children. One respondent described hiring a babysitter; another reported that someone would check on the children from time-to-time:

> FEMALE: Um, the adults typically hang out in the back yard. Um, and most of us are drinking. Uh, the children are usually in the living room playing video games or watching TV. Um… And, um, I would say, you know, I-I come in every 30 minutes to an hour to check on the kids, and just... joke with them. (Transcript 45)

Still, others did not formally describe a system for making sure that children were supervised, but assumed that everyone was responsible for their own child:

> FEMALE: I wasn't watching other-well, it was my house so I didn't want anybody to get hurt or, you know, in trouble. But, um, I wasn't really like, specifically babysitting the kids or no-nobody else was specifically babysitting. Everybody was, you know, left to be responsible for their own children. (Transcript 20)

(3) Immediate and distal harm.—Participants noted the immediate and distal harms to their children as a result of their own or someone else's abuse of alcohol and/or other substances. Children were vulnerable to immediate harms when they were in situations involving a threat to their physical or emotional safety. In the case of one respondent, immediate harm to her child was a car accident caused by drunk driving:

> FEMALE: I wasn't drinking but I had-I had a roommate and I asked him to go pick my son up at daycare because I was stuck at work. . . And um, I didn't realize it but he had been drinking and when he got ho . . . got back home with my-my son in the car he crashed the car into a pole. . . So yea um, nobody was hurt. (Transcript 103)

While no other participants discussed physical harms to their children, there were disclosures of verbal abuse:

> FEMALE: She was crying and I was telling her to, you know, to-to man up and to not be such sissy and I was telling her to shut up and, yeah. (Transcript 42)

Often, immediate harms were more abstract; participants recounted scenarios of absent parents in their own social networks and how their alcohol abuse negatively impacted the children:

> FEMALE: Um, my brother is actually an alcoholic. . . Um, ah, and this doesn't have to do with drinking, but my sister is, um, a meth addict. . . They didn't-it didn't-their children's feelings didn't matter . . . like they-they found the substance more powerful than the love of their children. I think they just-they just blew it off, they just blew off their kids. They didn't care for them, feed them, tuck them in at night, anything. They left actually, you know, their behavior wasn't welcomed here. I live with my dad and their behavior wasn't welcomed here and they said, "Okay, fine, we'll leave." And they chose drugs and alcohol over their family. (Transcript 20)

Sometimes, an adult's drinking or drug use led to broken relationships. One participant discussed her brother in law and brother:

> FEMALE: They've lost contact with their children based on their alcohol usage. They have, you know, been away in jail or prison . . . And have lost touch with their own children. And, um, have not... you know, been divorced from their spouses because of alcohol or drug usage, and so have not taken care or participated in their children's growth . . . Or financial responsibility for their children. So now as a result, their children are not close to them and don't want to be around them, and, you know, have lost any kind of emotional attachment, I guess, with them. (Transcript 42)

Many of the narratives went beyond describing the immediate harms that arose from parental drinking. Participants began their interviews reflecting on their childhood and describing *their* parents' drinking behaviors, highlighting the intergenerational harms that parental alcohol abuse can cause. Although these particular parent-child relationships were not of primary interest, this part of the interview still shed light on how parental alcohol use and its immediate harms may have lasting or exert delayed emotional effects:

> FEMALE: My mother, uh, drank heavily and my step father also did.
>
> Q: Okay. [W]hen they were drinking, how did that impact how they treated you?
>
> FEMALE: It depended. Sometimes they were very nice to me, sometimes my stepfather would molest me, and sometimes my mother would hit me. She would tell me things that were very inappropriate…. Things like she suspected I wanted, you know, a sexual relationship with my stepfather. I was only eight and, you know, that really messed me up in the head. (Transcript 17)

Participants whose parents drank excessively shared mixed feelings about their own desire to consume alcohol; they either loved it or they hated it. For those who loved it, they inherited their own destructive behaviors as a result of drinking:

> FEMALE: . . . I-I-grow-growing up, um, with an alcoholic mother, I should've hated alcohol. And I should've not wanted to drink, but-and even though now I don't often, I like alcohol. I mean, I take great pleasure in it, but I don't like the after effects. I don't like the destruction. I don't like, you know, losing control so much over. And I-yeah, and I don't trust myself to-to continue to keep drinking. So that's why I really minimize any usage. (Transcript 17)

In the case of the woman in the transcript above, the past harmful behaviors of both of her parents took on new life as concerns she had to manage while drinking and caring for her own child. When asked how her alcohol use affected how closely she could watch her daughter, she said this in reference to the harm caused by her step-father:

> FEMALE: I-I watch her like a hawk, because even when I was drunk, because I was-I told you I was molested. So I have this-this mother instinct that, you know, even when I was intoxicated I knew where my child was. And I knew what she was doing, because I didn't want the same thing to happen to her by anybody. (Transcript 17)

When asked how her drinking affected her interactions with her children, she shared this, remembering her mother's actions:

> FEMALE: I would say that, um, I would say that it kind of took on the pattern of that of my mother. It would make me mean or kind of very blunt, very uncaring. And so, that's why I have decided to stop. (Transcript 17)

Implicitly, it was clear that participants who frequently drank perceived drinking to some extent as a negative behavior, because many tried to hide their drinking or shield their children from seeing it:

> FEMALE: Um, well he [her husband] usually never usually drink around them because he don't want them to even know he drinks. And they don't ever even know. (Transcript 112).

Parents also voiced concerns about normalizing drinking behaviors and wanting to limit their children's exposure to drinking as a preventive measure in the spread of intergenerational drinking:

> MALE: You know, uh, my dad would uh, we'd go to the . . . the airport, and uh, we'd get a six pack of tall cans, and uh, some cheeseburgers and, he'd let me drink, you know. . . And um, this is when I was like nine or ten. And he'd let me sit there and, and have a-have a beer with him while we'd watch airplanes and stuff. I would never, ever in a million years. I don't even wanna do that with my kid when she's 21. . . I'm not-I'm not here to be your friend, you know, I'm here to be your parent and… And uh, I don't want you looking as if this is a normal thing to do . . . I don't want you to feel comfortable with your dad uh, drinkin' around you . . . (Transcript 217)
>
> Q: Okay. Um, and how do you think that uh, might impact the kids?

> MALE: Um… Well they might see it as a norm. Um, you know, that oh well it's okay. That kind of thing, where they, you know. Uh, they get a um, desensitized to the fact that you know, drinking's not always a great thing. (Transcript 101)

(4) Turning points in drinking behaviors.—There were many critical points when participants decided to change their drinking behaviors. Sometimes participants discussed a return to drinking as the result of a stressful situation; more frequently, participants described putting an end to their drinking. These critical points tended to be the result of an expectant child (e.g., participant was pregnant), a pre-condition to something (e.g., in order be involved in the life of their new grandchild), or the negative or positive influence of their social networks:

> MALE: You know, uh-uh, I'm a child of God, you know? I'm around Christian people. I'm around a positive group of people now. (Transcript 11)

Turning points in drinking behaviors also occurred when they took charge of their own personal agency to alter their circumstances:

> FEMALE: . . . Um, uh, I used to do a lot of other drugs. Uh, drinking wasn't as bad but I-I did a lot-a lot of other things. And so I was living a-a you know not a very good life. Uh, my… I had people around me that were-were pretty bad. . . . you know I was living in this house with a lot of… there were several of us living there and I was the only one who still have... had their-their children. I only have one... the one child in every other person that I was living with and have their children taken away. Um, one lady got her kids back on the weekends but she-she drank a lot... Um, I would see how she would have no patience for child, she would sleep until noon. Her-her five-year-old little boy would be you know awake at seven o'clock in the morning and hungry and you know go want out and he-he had no discipline, he had no structure, he had no… you know he had nobody taking care of him. And it was pretty awful to-to watch and... And then you know I kind of realized that everybody in this house has lost their kids; what am I doing here with him. (Transcript 103)

Such experiences served as positive interventions in parents' lives to change the course of their drinking or drug use.

DISCUSSION

Our study found much higher rates of alcohol causing both physical harm and supervisory neglect than previous studies assessing alcohol's harm to children. These higher rates could be explained in a couple of ways. One study only assessed harm by others (not the parent), eliminating the most likely source of harm due to alcohol use (Laslett et al., 2011). The U.S.-based study included caregivers with children of all ages, including teenagers (Kaplan et al., 2017). Child maltreatment is much more likely to occur with children under 5 (U.S. DHHS, 2018). Thus, studies using a larger age range of children may find lower percentages of alcohol resulting in harm to children. To address both of these issues, our study assessed the role of alcohol-causing harm to children who are 10 or younger for both the respondent

and others. Our results suggest that many children in the United States may be experiencing harms related to alcohol use.

We examined how a parent's own drinking behavior is related to harm to children, by them or another adult. Specifically, we used drinking frequency to assess someone else causing harm, and frequency with continued volume measures to assess whether parents' drinking caused harm. Previous studies conducted outside of the United States found that parents generally report that their drinking was related to alcohol-causing harm to their child(ren) (Esser et al., 2016; Laslett et al., 2011). However, similar to Kaplan et al. (2017), we found that parent drinking behaviors were not related to greater risk of harm to children by any adult, as we had expected. Indeed, our findings suggest that drinking behavior is negatively related to reporting harm. These findings suggest that abstainers are more likely to report alcohol-related harm to children by someone else. Parents may stop drinking after an event where someone else's drinking may have harmed their child. Alternatively, drinkers may be less likely to perceive drinking behaviors as the cause of physical harm or lack of supervision compared to abstainers, who could be influenced by moral beliefs about alcohol. Indeed, appraisals of what constitutes harm and how that harm relates to alcohol may vary by individuals and drinking status (Room, Laslett, & Jiang, 2016). In addition, parent drinkers may be subject to self-report biases that abstainers are not, such as impression management bias, whereby individuals are less likely to disclose the severity or instance of stigmatized behaviors. Impression management bias has been associated with less reporting of alcohol use and related harms (Davis, Thake, & Vilhena, 2010).

In examining how a parent's own drinking was associated with them causing alcohol-related harm to children, we found that parents who drank greater quantities of alcohol (i.e., higher continued volume) were less likely to report that drinking caused them to harm their children through inadequate supervision. It could be that drinkers who consume greater amounts on average may be less likely to leave their children alone while drinking, or be more likely to drink when children are present. As our qualitative findings noted that parents adapted strategies to minimize children being exposed to alcohol use, it could be that parents who drink lesser quantities avoid drinking around children and potentially expose them to lack of supervision.

We found no relationship between parents' drinking behaviors and saying their drinking caused physical harm to their child. There are several possible reasons for these results. The United States' restrictive culture around drinking norms may mean that parents are less willing to admit that drinking can cause harm to children. In addition, parents who have had negative experiences with drinking and parenting may be ex-drinkers, not lifetime abstainers, which may affect results. Our qualitative results suggest that when we conduct semi-structured interviews with individuals endorsing one of our four dependent variables, they are often reluctant to admit that their drinking ever caused their child harm, despite the fact that at least one in four drinkers noted this. When asked about these events, parents may focus on those times when others were watching their children. In addition, those who reported that their drinking caused their child harm may have already modified their drinking to prevent this from reoccurring.

Social companionship support (having people to go out with) was related to greater odds of a parent's drinking causing physical harm to his or her child(ren). Our qualitative results suggest that parents may or may not be monitoring their children when drinking with others. Similarly, these parents may also assume others are watching their children while they are having fun or view this as normative, depending on whether their own parents drank. The interviewees did not disclose specific events where drinking with others was related to physical harm to their child. How social companionship support may lead to greater physical harm due to drinking remains unclear.

Our qualitative findings revealed that parents who reported alcohol-related harm to their children by themselves or someone else provided few concrete examples of this harm in follow-up interviews. It could be that parents conceptualize harm to children as so broad that even things like letting them watch television too long so they can drink is viewed as harmful, potentially overcounting the types of harm that would come to the attention of the child welfare system. Indeed, those parents that were interviewed viewed alcohol exposure as potentially harmful to children and adopted strategies to minimize this. Another theme present in the data was related to turning points in drinking behaviors, with parents noting self-reflection about their drinking and often reducing their drinking in response to previous events. Parents with former drinking issues or who were exposed to drinking as children might have heightened sensitivity to the ways that alcohol can harm children. These findings suggest that measures that depend upon appraisals of harm versus specific maltreatment behaviors (e.g., punching a child) may have unquantifiable measurement error related to differing conceptions of harm. This potential measurement error could undercount some cases of alcohol-related harm, as some parents may not attribute harms as related to alcohol.

Our study has several limitations. The fair to moderate response rate for our telephone sample may make it difficult to generalize our findings to the larger population. While we did try to conduct multi-modal recruitment (telephone and online), those individuals who respond may look different from those who did not. Despite the use of post-stratification weights, we may still be missing information from hidden or unknown populations. Our semi-structured interviews occurred several months after the original data collection. Thus, our attempts to identify how and why a parent endorsed the items saying alcohol use caused harm to their child are limited in that parents may not remember why they responded in that way or they did not want to admit those behaviors. Interviewees were able to provide any examples of instances where their own or someone else's drinking harmed their own children. The responses in the qualitative interview may not correspond to the same past year period as in the survey. In order to maintain privacy and confidentiality of our respondents, the research team did not have access to which of the four dependent variables were endorsed, limiting our ability to ask probing questions about the type of harm caused by their own or someone else's drinking. While we asked questions about alcohol 'causing' harm, our study is cross-sectional making it difficult to identify true cause and effect. Another reason that parents did not share specific examples of harm could be the sensitivity of the issue and the live interview format. This suggests that data collection methods such as IVR (which was used in the initial survey) might be better at reducing stigma associated with self-reporting these behaviors. Finally, we may not be accounting for all the factors that

might be related to why a parent would feel that someone's drinking has caused their child harm.

Our study suggests that asking parents about their perception of whether their drinking caused harm to their child(ren) may not be the best way to assess harm due to child abuse or neglect. Some assessments used by the child welfare system (e.g., UNCOPE; Hoffmann, Hunt, Rhodes, & Riley, 2003) often ask parents questions that may reflect perception, such as "Have you found yourself preoccupied with wanting to use alcohol or drugs?" This question requires the parent to assess what preoccupation means for him or her. Thus, parents who have cognitive impairments due to alcohol misuse may not report this as a risk behavior (Kepple, 2017). However, questions that require parents to discuss specific past month or past year drinking and actual parenting behaviors may be a better way to assess levels of problematic drinking that may be an underlying cause of child abuse and neglect. Questions and thresholds for likely harm due to alcohol use may differ if the underlying concern is physical abuse or neglect (Kepple, 2017).

Our results reveal puzzling relationships between drinking behaviors and assessments of harm to children. For example, a parent's perception of whether or not his or her drinking caused harm did not necessarily correlate in the expected direction with actual drinking behaviors. Some parents may be more concerned about the negative effects of alcohol use on their parenting and pay more attention to their drinking behaviors as a result. Conversely, heavier drinkers may have little idea of how their drinking affects their parenting or maintain that it does not affect their parenting so they do not have to change their drinking behaviors. However, research examining this relationship of alcohol-causing harm to children is not consistent. This may be due to measurement, populations under study, or countries in which the studies are being conducted. More work is needed to determine how alcohol use of a parent or other adult may result in physical harm to children or harm through lack of supervision. When using surveys to ask about alcohol-causing harm to children, we may want to immediately ask the respondent to tell us about a specific incident in order to prevent lack of recall later and to assist us in elucidating the types of alcohol-related behaviors parents see as resulting in harm.

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Table 1:

Descriptive Statistics by Full Sample and Drinkers Only

	Full Sample		Drinkers Only	
Constant	**weighted %/mean(sd)**	**Sample n**	**weighted %/mean(sd)**	**Sample n**
% Drinking caused lack of supervision (Others)	19.4	1447	--	--
% Drinking caused physical harm (Others)	14.1	1455	--	--
% Drinking caused lack of supervision (Parent)	--	--	27.2	1030
% Drinking caused physical harm (Parent)	--	--	13.6	1035
Biological sex, child				
Female	46.5	791	45.9	510
Male	53.5	800	54.1	545
Age, child	6.7 (.8)	1596	6.7 (2.7)	1059
Biological sex, parent				
Female	49.2	1163	46.0	752
Male	50.8	436	54.0	309
Age, parent	40.5 (9.9)	1599	40.1 (9.4)	1061
Number of Children < 10	1.7 (.8)	1599	1.6 (.8)	1061
Race				
White	41.3	707	44.5	518
Hispanic	36.6	516	33.3	307
Black	5.9	154	6.3	99
Asian	12.4	114	12.4	67
Multi or other race	3.7	58	3.6	38
Marital Status				
Widowed/separated/divorced	26.0	329	26.1	217
Married or living in a marriage-like relationship	74.0	1262	73.9	838
Income				
< $20,000	15.8	226	12.5	125
$20,001 - $60,000	34.9	526	33.4	322
$60,001 - $100,000	23.2	345	24.3	236
$100,001 - $140,000	15.1	233	17.9	176
> $140,000	11.0	159	11.9	118
Type of Social Support				
Companionship Support	13.5 (2.3)	1581	13.5 (2.3)	1050
Emotional Support	14.2 (2.3)	1584	14.2 (2.2)	1051
Tangible Support	13.7 (2.4)	1580	13.7 (2.4)	1049
Parenting Stress	3.7 (1.2)	1591	3.8 (1.1)	1058
Impulsivity	4.5 (1.9)	1577	4.5 (1.9)	1047
Drinking Frequency				
Abstainer	31.6	535	--	--
At least once a year	22.3	378	--	--
At least once a month	19.5	301	--	--

	Full Sample		Drinkers Only	
Constant	**weighted %/mean(sd)**	**Sample n**	**weighted %/mean(sd)**	**Sample n**
At least once a week	26.6	382	--	--
Continued Drinking Measures				
Frequency of drinking	--	--	4.5 (6.4)	1055
Continued volume (after first drink at each event)	--	--	6.1 (19.9)	1055

Table 2:

Relationship of Parent and Child Characteristics on Role of Someone Else's Drinking in Causing Harm to Children

	Lack of Supervision (n =1261)				Physical Harm (n = 1267)			
	OR	**95% CI**		**p**	**OR**	**95% CI**		**p**
Constant	4.661				6.346			
Male, child	0.726	0.524	1.007		0.571	0.367	0.888	0.013
Age, child	0.907	0.847	0.971	0.005	0.939	0.883	1.000	0.049
Male, parent	0.799	0.582	1.098		0.731	0.467	1.143	
Age, parent	1.003	0.981	1.027		1.004	0.981	1.028	
Number of children < 10	1.108	0.884	1.390		1.069	0.863	1.325	
Race (ref. White, Other, Multi-Race)								
Hispanic	0.861	0.553	1.343		0.580	0.337	0.999	0.050
Black	0.621	0.319	1.206		0.579	0.270	1.242	
Asian	1.399	0.859	2.280		0.978	0.470	2.037	
Married	0.816	0.447	1.488		0.645	0.376	1.104	
Income (ref. > $140,000)								
< $20,000	0.670	0.316	1.423		0.347	0.161	0.749	0.007
$20,001 - $60,000	1.204	0.806	1.798		0.933	0.592	1.470	
$60,001 - $100,000	0.993	0.570	1.728		0.938	0.468	1.882	
$100,001 - $140,000	0.843	0.442	1.609		0.474	0.221	1.014	
Type of social support								
Companionship support	1.076	0.971	1.192		1.108	1.001	1.226	0.048
Emotional support	0.988	0.906	1.077		0.925	0.819	1.044	
Tangible support	0.873	0.801	0.950	0.002	0.886	0.799	0.982	0.021
Parenting stress	0.807	0.657	0.991		0.786	0.640	0.966	0.022
Impulsivity	1.042	0.946	1.146		1.055	0.958	1.163	
Drinking frequency (ref. Abstain)								
Weekly	0.515	0.350	0.757	0.001	0.758	0.479	1.199	
Monthly	0.381	0.221	0.656	0.001	0.488	0.264	0.900	0.022
Yearly	0.404	0.259	0.631	< .001	0.572	0.329	0.994	0.048

Table 3:

Relationship of Parent and Child Characteristics on Role of Parent's Drinking Harm to Children (Drinkers only)

	Lack of Supervision (n = 839)				Physical Harm (n = 841)			
	OR	**95% CI**		**p**	**OR**	**95% CI**		**p**
Constant	1.97				3.60			
Male, child	0.60	0.41	0.87	0.007	0.51	0.30	0.84	0.009
Age, child	0.95	0.88	1.02		0.99	0.91	1.08	
Male, parent	1.35	0.85	2.15		0.72	0.42	1.23	
Age, parent	0.99	0.96	1.01		1.02	0.99	1.04	
Number of children < 10	1.21	0.95	1.54		1.25	0.95	1.63	
Race (ref. White, Other, Multi-Race)								
Hispanic	0.92	0.56	1.50		0.63	0.30	1.30	
Black	0.47	0.23	1.00	0.050	0.34	0.15	0.80	0.013
Asian	2.47	1.12	5.45	0.025	0.92	0.40	2.15	
Married	0.49	0.26	0.92	0.025	0.65	0.31	1.35	
Income (ref. > $140,000)								
< $20,000	1.21	0.46	3.20		0.55	0.20	1.55	
$20,001 - $60,000	1.89	0.93	3.86		1.17	0.64	2.15	
$60,001 - $100,000	1.32	0.62	2.79		0.89	0.41	1.90	
$100,001 - $140,000	0.65	0.27	1.56		0.53	0.23	1.27	
Type of social support								
Companionship support	1.08	0.97	1.21		1.03	0.90	1.18	
Emotional support	0.97	0.88	1.06		0.93	0.80	1.08	
Tangible support	0.92	0.84	1.00		0.86	0.77	0.96	0.007
Parenting stress	0.82	0.67	1.02		0.88	0.69	1.11	
Impulsivity	1.12	0.98	1.27		1.03	0.89	1.18	
Drinking behaviors								
Frequency of drinking (# of days)	1.03	0.99	1.06		1.01	0.96	1.07	
Continued volume (after 1st drink)	0.99	0.98	1.00	0.014	1.00	0.98	1.01	