### INDIANA PARTNERSHIPS FOR SUCCESS YOUNG ADULT INTERVIEW RESULTS

Indiana University
Richard M. Fairbanks School of Public Health at IUPUI

Department of Health Policy and Management Center for Health Policy (CHP)

### Authors

Samantha Childress, BSPH Rebecca Nannery, MA Marion Greene, PhD Dennis Watson, PhD



## CENTER FOR HEALTH POLICY

INDIANA UNIVERSITY
RICHARD M. FAIRBANKS
SCHOOL OF PUBLIC HEALTH

Principal Investigator: Marion Greene Contact: msgreene@iu.edu

# Acknowledgements

This work is supported by the Substance Abuse and Mental Health Services Administration (SAMHSA) Award# 1U79SP020788. Data collection for this report would not have been possible without the work and assistance of key organizations and individuals. First, we would like to thank the Rutgers University Eagleton Center for Public Interest Polling (ECPIP) for administering the second phase of the Indiana Young Adults Survey (results forthcoming next FY) and subsequently providing the IU Richard M. Fairbanks School of Public Health (FSPH) research team with the recruitment sample for these interviews. Second, we would like to acknowledge individuals from a handful of Partnerships for Success (PFS) organizations who assisted us with recruitment through flver distribution. Finally, we would like to thank our interview participants who provided us with the data that makes this report possible.

Between January and March of 2019, the Eagleton Center for Public Interest Polling (ECPIP) at Rutgers University administered the second phase of the Indiana Young Adults Survey to a sample of the young adult population between the ages of 18-25 in each of the 10 PFS counties. Sampling included email and text message recruitment of those who completed the first phase of data collection and agreed to be contacted again, as well as text recruitment from two approved vendor lists, including both registered and non-registered voters. An oversample was done in Cass, Clark. Lake, Porter, and Vanderburgh counties to ensure the minimum number of respondents was met. A total of 887 individuals completed the survey, exceeding the target. Similar

to the first phase of data collection, survey respondents were asked if they would like to be contacted in the future for a follow-up interview.

# Qualitative Approach

### Recruitment

Institutional Review Board (IRB) approval was received in February 2019 and recruitment was conducted between February 14, 2019 and April 12, 2019. All interviews were completed over the phone and recorded, and participants received a \$25 Amazon gift card for their time.

Of the 887 individuals who completed the quantitative survey, 412 agreed to be contacted for a follow-up interview. Two different recruitment lists were provided to the FSPH research team, by ECPIP. First, FSPH received a list of 159 eligible young adults who completed both phases of quantitative data collection. Nine individuals were excluded from this sample because they participated in the first phase of qualitative data collection, leaving 150 eligible individuals. The research team began contacting these individuals on February 14, while ECPIP was still fielding the survey through the vendor samples. FSPH received the list of 262 respondents who agreed to be contacted from the vendor samples, shortly after on February 21.

In the first phase of qualitative data collection, the research team focused on recruiting four participants from each county, with an even split between college/non-college and male/female participants. Because focusing on college/non-

college recruitment both made recruitment more difficult and did not yield any differences in interview responses between these two groups, the research team decided to eliminate this education-based recruitment goal. However, the research team still attempted to recruit four participants per county with a balance of male/female respondents, though this was not achieved in some counties where recruitment was difficult.

Recruitment was completed through a combination of emails and phone calls. Once the lists were received, respondents were sorted by county and batch emails were sent to randomly selected individuals in each county. These emails contained a link to the same screener survey used during the first phase of data collection through the IU REDCap system, with the purpose of validating age and county. For those who completed the screener and were eligible, research team members attempted to set-up an interview time by a combination of two emails and one phone call. Some counties, such as Marion and Vanderburgh, had a large number of respondents to recruit from, so multiple batches of emails were sent to achieve the target number. For counties with a smaller number of respondents to recruit from or where recruitment was difficult, nearly all individuals

on the provided lists were emailed twice with the screener survey link and called once, to attempt to screen and enroll. These counties included Cass. Knox. Madison. Porter, and Scott counties. Research team members also reached out to PFS coordinators in Cass, Knox, Madison, and Scott counties for their assistance in distributing a recruitment flyer to organizations, business, and colleges/universities in their counties that work with the 18-25 year-old population. This method resulted in three additional completed interviews in Knox (2) and Madison (1) counties. Recruitment by flyer was not overly successful which in part may be due to the IRB ruling that the research team remove language advertising the \$25 Amazon gift card.

At the end of the recruitment period a total of 32 interviews were completed; the same number of interviews also completed in the first phase of data collection. Table 1 details the number and sex of respondents by county, as well as the number of individuals per county that were contacted. The recruitment goal of four interviews in each county was not achieved in Cass (0), Madison (3), and Scott (1) counties because of already low numbers to recruit from and/or general difficulty recruiting participants.

**Table 1. Total Survey Participants by County (N=32)** 

County	N(%)	Female	Male	Total N contact attempted
Cass	0 (0.0%)			4
Clark	4 (12.5%)	2	2	12
Floyd	4 (12.5%)	3	1	11
Knox	4 (12.5%)	2	2	7
Lake	4 (12.5%)	2	2	9
Madison	3 (9.4%)	1	2	20
Marion	4 (12.5%)	2	2	32
Porter	4 (12.5%)	3	1	24
Scott	1 (3.1%)		1	9
Vanderburgh	4 (12.5%)	3	1	27
Total	32 (100%)	18	14	155

## **Interview Guide and Analysis**

The research team used the same interview guide from the first phase of data collection. Interview questions focused on public messaging campaigns; substance use, including prescription drug use, alcohol use, and other drug use; and miscellaneous questions, such as the role of alcohol and drugs in social situations. Minor additions and changes were made to the interview guide. In the first phase of data collection, the team asked about recognition towards specific campaigns in each county. During this round, not having a list of specific campaigns, questions were reworded to

generally ask about campaign recognition and effectiveness. Additionally, three harm-based questions were added, such as, "How harmful do you think prescription drugs are compared to alcohol?" Finally, the research team was interested in further exploring the impact substance use is having on the lives of young adults, captured through the question, "How has substance use affected or impacted your life, if in any way?" This question specifically was added after hearing young adults spontaneously discuss the way substance use has affected them, during the first phase of interviews. The full interview guide can be found in Appendix A. For analysis, interviews were transcribed and

loaded into MAXQDA qualitative data analysis software and initial codes were developed from the interview questions. Further codes were developed by two members of the research team based on common responses, and themes resulting from these groupings were analyzed.

In the following Results & Findings section, similarities seen amongst results from the two phases are discussed, as well as differences or new themes from the second phase of interviews. Findings from the new questions included in the interview guide are also highlighted. Finally, throughout the report, toward the end of each section, quotes from young adults are included that may not necessarily be representative of a common theme, but provide the reader with insight into how young adults see and experience the world. These are quotes the research team found to be especially impactful.

# Results & Findings

# Campaign recognition and effectiveness

The first set of questions interviewees were asked began with whether or not they had seen any recent public awareness campaigns related to alcohol or drug use. Nearly three-quarters (72%) reported they had seen a recent campaign. When asked if they remembered what it was about, two-thirds (64%) did, while 21% did not. Those who remembered a recent campaign most commonly mentioned ones advocating against tobacco use (including vaping) and alcohol use (particularly drunk driving), and ones providing treatment

information for substance use disorders. Many different modes of communication were mentioned, including social media, television, radio, billboards, and posters. When asked how effective they felt the promotion of the campaign has been, 29% felt it was effective, 24% felt it was somewhat effective, and 41% felt that it was ineffective.

Relatedly, interviewees were asked whether the messaging for the campaign(s) they remembered spoke to them. More than half (56%) stated it didn't speak to them, although this was largely because they perceived the campaign as being irrelevant to them, mainly because they did not use the substance portrayed. On the other hand, 39% stated the campaign(s) they recalled did speak to them. This was for a variety of reasons, including telling a personal story, effectively conveying information, including statistics, or confirming the interviewee's own beliefs about the topic. When asked if they believed the messaging for the campaign would speak to their peers, 44% believed that it would speak to their peers, 33% believed it would not speak to their peers, and the remainder were unsure.

When the young adults were asked in general, how effective public campaigns for alcohol or drug use are at reaching their peers, 28% stated these are effective, 34% stated they are somewhat effective, and 38% stated the campaigns are ineffective. Of those who believed today's public campaigns are effective, most cite the pervasiveness of these campaigns as making an impact on young people, such as the following interviewee:

No matter where you go, you're going to see it or hear it, whether if you're in the car and it's on the radio or you're scrolling through Facebook, you're going to see something. And it will probably stick with you. (Knox2)

Using modes of communication that are common among young adults and addressing current substance use trends were also mentioned as characteristics of effective warning campaigns. Those interviewees who reported campaigns were somewhat effective also cited the modes of communication used as being important, but noted that partial effectiveness was related to the ability to reach only part of the demographic, as it may be too late to reach some young adults with these campaigns:

I think in certain cases it's pretty effective because if people are going to ignore it, they are going to ignore it no matter what. But if the messages are out there, at least it gives people an opportunity to kind of – hey, this is a bad thing, or maybe I need to tone it down in this particular thing that I do. But I think it's a good thing and I'm glad it's out there. (Madison2)

Among those interviewees who believed campaigns are ineffective, some of the reasons for this included that young adults will do what they want to do regardless of a campaign, many won't pay attention to these, and others already know what to do, but must choose it for themselves. One interviewee described how young adults might ignore messages they see, saying, "Not really effective, just because on social media you just kind of scroll past it" (Porter3).

Young adults were also asked what could make public messaging campaigns more effective. While more than one-third of them could not think of anything (28%) or were unsure (9%), others had suggestions of improvements that could be made. One major theme was that these campaigns need to increase the saturation of their messaging by making it more visible to the target audience. This is important, according to one interviewee: "Just because the more you see something, the more you think about it, like, 'Oh, you know I need to stop drinking,' or 'Maybe I should change my habits'" (Porter1). Another stated, "I feel like the message is out there, but I don't know that it's necessarily out there enough to reach the people that need it, if that makes sense" (Scott1).

Interviewees mentioned methods such as flyers and signs communicating a message, and advertising through the types of media that people of this age commonly use:

But like social media, I don't see a bunch on social media, and I know a lot of people are more prone, my age especially, are prone to looking at social media. So I feel like if there were more ads on social media it would reach more people. (Vanderburgh2)

Another theme brought up by interviewees was the importance of making the message personal, in part, by appealing to the emotions of the audience. One approach to this is educating young adults in a more direct, one-onone, setting: "[...] people are scrolling through things and they may be seeing it, but I don't think that's going to be registering to them at all" (Madison1). Others mentioned that stories about real-life people, particularly people their own age, has an impact that both helps them to

remember the story and causes them to reflect on what the situation would look like in their own lives.

I think it's pretty effective whenever I see ads that have like personal testimonies from people that have been negatively affected by those things and it kind of gives you a shock like seeing the consequences of different actions. (Porter4)

Having more peers that have gone through what you are going through around you, that personally understand the issues you are going through and how it's not just you need to just stop whatever you're doing. I think more peers your age speaking out to you would help a lot more. (Lake3)

Finally, interviewees noted that making advertisements more relatable was important, and when doing so, "don't sugarcoat" the truth about what is being communicated: "I know in my experience for me to really care, I have to see the devastation, the tragedy, to really

cause. I think pulling kind of on the heartstrings a little more would be more beneficial" (Porter4). Interviewees did not suggest that public messaging campaigns should avoid sharing facts; rather, they encouraged the use of additional approaches to capture the attention of the target audience.

### **Prescription drug use**

The first questions on prescription drug use focused on interviewees' use of prescription drugs, and, if so, which drugs they use, how they get them, and some of their reasons for using. For the purpose of this report, the research team looked at misuse of prescription drugs. In the first phase of data collection. one (3%) interviewee reported either past or present misuse of prescription drugs. During this second phase, seven (22%) interviewees reported past or present misuse of prescription drugs. This misuse included misusing one's own prescriptions, which four individuals reported, to misusing prescriptions they were able to get "off the streets," from "family members," or in other non-reported ways. Four individuals

"I think it's gotten a lot more people talking about it, but I don't think we have gotten a lot of action done. But I think in the more recent years, I've heard more about it than I ever have before. So I think it's gotten a lot of people talking, which is a start." (Lake1)

understand" (Knox1). Another stated, "I feel like ads are trying to be too lighthearted when it's a serious matter, so it's okay to have more serious advertisements about it" (Lake4). An emotional appeal has the effect of making a person more likely to act: "[...] it's like trying to pull more empathy from people rather than just saying this is wrong or this is what it could

reported this type of misuse. There was also variety in responses within the two categories of misusing prescribed and non-prescribed drugs. For example, with misuse of prescribed drugs, one individual reported using their Norco prescription incorrectly but for its intended use, such as not taking the prescribed dose one day and then taking a double dose another day.

Another individual reported past misuse of their Gabapentin prescription, stating, "Like I used it to fall asleep. I used it to just kind of get away" (Vanderburgh2). Another interviewee reported their struggles overcoming addiction after being prescribed Tramadol and Oxycodone by a pain doctor. Those misusing non-prescribed drugs reported using painkillers, amphetamines, and benzodiazepines (e.g., alprazolam/Xanax, clonazepam/Klonopin). Reported misuse also varied within this category, such as one individual who reported just trying Xanax, to another individual who reported past misuse of painkillers, benzos, and amphetamines, "To deal with issues, self-medicate" (Knox3).

Interviewees were asked about their feelings toward use of prescription drugs in an unintended way, their reasons for not using prescriptions in this way, and how they feel about sharing prescriptions with friends and family. No young adults felt positively toward prescription drug misuse and the overwhelming majority felt negatively. Four individuals had circumstantial feelings toward misuse, such as the following individual who felt negatively toward misuse for recreational purposes but felt that for the purpose of treating pain it would be permissible, saying,

I think that if they are abusing them just to get satisfaction from it, to get that high, obviously I wouldn't agree with it. But I think that if you are experiencing pain and those are the only pain meds that you have, I think that would be OK. (Madison1)

When looking at young adults' reasons for not misusing prescription drugs, a couple common themes stood out. One was making a personal choice to not misuse because of lack of interest

in using in this way, or because of the desire to stay in control and remain "in the moment." As one interviewee said.

I just have never felt the urge or the need to get high, to like forget how I'm feeling or just escape the world. It's just been all about living in the moment and experiencing things as they are whether it's good or bad. (Knox1)

A number of interviewees mentioned having observed the negative impact misuse had on the lives of others as a main motivator, as one interviewee said, "And I just don't care for it. I don't understand why they do it and seeing some of the problems they have gone through, I just couldn't take that route" (Marion2). This theme was also prevalent in the first phase of data collection and sparked the research team's interest in further exploring the impact of substance use on the lives of this young adult population. Other, less common responses included the legal ramifications of using drugs not prescribed to you, as well as not wanting to negatively impact important aspects of one's life, like "family," or "school or work."

Following provider advice and taking prescriptions as intended, as well as feeling misuse is unsafe were the two most common themes that bridged reasons for not misusing as well as negative feelings toward sharing prescriptions. Responses reflected straightforward logic around following the rules surrounding prescription use, such as: "It's just if something is prescribed to you, you should be the only one taking it" (Floyd2), while others recognized the potential for unsafe or harmful effects: "I personally think it's a bad idea, just because you never know how it's going to affect somebody else. So it could be dangerous"

(Porter3). Often, these themes blurred, demonstrated by the following interviewee's response:

Just because everybody has a different type of reaction to certain prescriptions. You may or may not be allergic and not know about it. And it's prescribed specifically for you because your doctor knows you, compared to somebody else. So they may have a different reaction than you do. (Knox2)

However, like the first phase of data collection, ten (31%) respondents felt sharing among friends and family is dependent on the circumstances of the situation. Some individuals felt sharing is allowable as long as prescriptions are non-habit-forming and/or if family or friends are prescribed the same medication, referencing sharing prescriptions like antibiotics and allergy medications. Other reasons given for circumstantial sharing of prescriptions were sharing if someone is in pain and sharing with certain individuals, such as an interviewee from Knox County who discussed their sharing behavior, saying,

It just kind of depends what the prescription is for and who I'm giving it to, really. I mean say I have painkillers or something left over from a surgery and my mom hurt her back, I wouldn't think twice about giving it to my family. But I wouldn't give them to my friends. (Knox3)

An additional reason given for sharing circumstantially is the lack of healthcare among friends and family, which a few respondents pointed out. One interviewee discussed how they believe sharing their prescriptions is

assisting their significant other who does not have healthcare, saying,

So I will give him some of my prescription just because if I don't take all of them—like I mean my Klonopin I'm prescribed three a day. I don't always take three a day, so I give him the extra just because I know it helps him personally. Not in a negative way, but in a positive way, and I know he can't get it himself. So that's why I'm not 100% against that because I know it's helpful. (Vanderburgh2)

Finally, respondents were asked how they dispose (or would dispose) of old or unused prescription drugs and if they are aware of any locations in their counties where they could dispose of prescription drugs. When asked what they do with old or unused prescription drugs, respondents reported 32 instances of inappropriate disposal; multiple people reported more than one disposal method, such as storing them indefinitely and then eventually throwing them away. Of these reports of inappropriate disposal, 15 (47%) individuals reported disposing of old or unused prescriptions by throwing them away, 14 (44%) reported storing them indefinitely, and three (9%) reported flushing them down the toilet. Six (19%) of the 32 individuals reported dropping off old or unused prescriptions at the appropriate drug drop locations.

However, an interesting point of comparison is how many individuals reported knowing of locations in their counties that take old or unused prescriptions and how many actually indicated disposing of them in this way. Ten (31%) individuals reported knowing

of locations in their counties that take old or unused prescription drugs. But of this ten, four individuals also reported a method of inappropriate disposal, like the following interviewee: "I usually just bring them to Walgreens and they have a deposit box there or I just throw them away" (Lake3). One respondent in particular knew where to dispose old or unused prescriptions, but reported purposely keeping some types of prescriptions:

I would take them to Walgreens so they could correctly dispose of them. But again, if it was something like Xanax I would probably keep it around. If it was something like painkillers, I'd probably keep it around. But anything outside [of that] I would dispose of it. (Porter2)

Seventeen (53%) interviewees were unaware of locations in their counties that take old or unused prescription drugs, while five (16%) individuals were unsure, saying things like, "I believe there's locations to take them to be disposed of" (Vanderburgh3).

ten do not (31%). This is different from the first phase in which the number of those reporting drinking versus not drinking was inverse, with six (19%) who reported regularly drinking and 26 (81%) who reported not regularly drinking. While the majority of interviewees reported consuming alcohol, when asked how much they consume in a "typical week" most reported infrequent consumption such as having one to two drinks a week or less, exemplified by one interviewee's response: "I don't drink much. I'll drink like once, maybe three times a month. So maybe once a week, if that" (Lake3).

Interviewees who reported drinking were asked about their reasons for doing so. Similar to the first phase of data collection, the majority of respondents stated they drink socially, such as "...having fun with my friends," or drinking on "special occasions, birthdays, things of that sort." Other reasons for drinking were also similar to the first phase of data collection, with six (27%) citing drinking to relax and unwind, and six (27%) drinking because they

"So when I was prescribed the Tramadol, the doctor told me it was because it was a non-addictive alternative to like opioid painkillers. And, so I mean that was what was explained to me when it was prescribed to me and then they gave me that and they gave me longer prescriptions so you know well I'm going to return and get refills on that because they said it was non-addictive and harmless. And to me, like the Tramadol was more addictive than any opioid or standard opioid I've ever taken." (Scott1)

#### Alcohol use

Participants were asked if they drink alcohol, rather than if they "regularly" drink alcohol, as was worded in the first phase of data collection. This change in wording most likely contributed to the differences in reported drinking; 22 (69%) interviewees stated they drink alcohol while

like the taste of the beverage. A few people had overlapping reasons for drinking, such as the following respondent from Lake County:

[My reasons for drinking are] to cut loose or have fun. If I've had a shitty work week. It's my friend's birthday. Sometimes it's stress relief, it's a nice outlet. Sometimes you need that liquid courage to have a conversation so it just really depends on what I'm doing. But most of the time for me it's just a social event or a party. (Lake4)

When asked the role substances play when hanging out with friends, the majority of individuals primarily discussed alcohol as having a social but minimal role in their friend groups. The majority of young adults indicated alcohol is not really around much, or around but "not necessary"; something that is a "party favor". This is consistent with reported alcohol consumption and reasons for drinking; the majority of individuals drink alcohol, but consumption is primarily social and in minimal to moderate amounts.

Those who reported not drinking listed a number of different reasons such as taste, prioritization of health, and wanting to stay in control. Two more prevalent reasons for not drinking were observing the negative impact alcohol use has had on others, as well as not being interested in the use of alcohol or its effects. One interviewee described how the effects seen on others influenced their decision, saying,

As far as alcohol is concerned, I decided very young that I was never going to drink just because a lot of my family is alcoholics and I didn't enjoy being around them or their smell or the way they acted. So I decided I was never going to partake in it. (Marion4)

Finally, interviewees were asked what they consider to be a problematic level of drinking. When analyzing data for the first phase of data collection, it was clear young adults thought of problematic drinking in a myriad

of ways that the research team narrowed into two larger categories: 1) the effect on the life of the person drinking, and 2) the frequency or timing of the drinking. When analyzing this set of data, it was once again evident that young adults thought of problematic levels of drinking in a number of different ways that were often convoluted. This was true even within responses. For example, take the first response the research team looked at when analyzing the question of problematic drinking: "When you can't remember stuff, you black out, you're not in your natural state" (Clark1). Responses were quite varied, but did once again align with the larger categories of frequency or number of drinks an individual consumed and/or the potential effect on the individual.

When pointing out frequency or number of drinks, a couple interviewees did not elaborate beyond this, as one interviewee said, "Multiple drinks a day, like over four drinks I would say a day is way too much." When asked why this level is problematic they could not make the jump to the "why," saying, "Because four is just way too much. I know different people have their limits, but if you're ordering multiple drinks it just probably needs to be at home, away from everyone else or whatever" (Clark2). However, more commonly, when individuals gave a frequency or number of drinks they connected it to the effect on the life of the individual. One of the most prevalent themes related to life effects was addiction or the potential for addiction, including recognition of physical dependencies, whether or not it was connected to frequency of consumption. For example, one participant made the connection between the amount of alcohol they felt was problematic and how it could lead to an addiction:

I would say if you're drinking like every day or if you get drunk like 3 days out of the week, I would consider that worrying...Just because it, it shows that the person is either dependent on alcohol or that they just, they can't stop. And so they are kind of turning to that which is just way too often. (Vanderburgh4)

A number of other potential life effects of problematic alcohol consumption were listed. again, whether or not connected to frequency of drinking. This included short-term effects like the physical or behavioral effects of intoxication or binge drinking, often connected to the potential for loss of control and poor decision-making. One interviewee thought a problematic level of drinking is, "When you can't walk or see straight. Definitely if you black out," because, "You can't control yourself. You can't make proper decisions like potentially getting behind a wheel or maybe taking prescription drugs or illegal drugs, just making terrible decisions" (Knox1). Other common themes of problematic drinking and its potential life effects were health concerns; using alcohol as a form of self-medication or an escape; drinking affecting normal functioning such as doing one's daily activities; and longer-term personality or behavior changes.

## Illicit drug use

In addition to asking about prescription drug and alcohol use, interviewees were also asked

about other, illicit drug use, through the following question: "Do you use any drugs like marijuana, LSD, ecstasy, cocaine, heroin, or methamphetamines?" During the first phase of data collection, six (19%) young adults reported past or present use of illicit drugs. All reported use was marijuana use. During this phase of data collection, nine individuals (28%) reported past or present use of illicit drugs. All nine individuals reported past or present use of marijuana. However, different from last time, other drug use was reported, including three (9%) young adults who reported past cocaine use, two (6%) who reported past heroin use, two (6%) who reported past or present use of LSD, one (3%) who reported past methamphetamine (meth) use, and one (3%) who reported present ecstasy use. Two specific individuals reported the majority of this other drug use. Additionally, two individuals who reported marijuana use also reported having "done some of the others," but the interviewer did not follow-up on which other drugs they had used.

When asked how they get these drugs, individuals reported a mix of buying from dealers, getting them from friends, or a combination of these; some individuals reported friends being their dealers, like the following individual: "Yeh, friends. Usually friends. Some of my friends are my drug dealer so it kind of depends. But mainly my friends, people I trust" (Lake4). One individual reported obtaining

"I got one ticket once...so that affected me because I had to pay \$3,000 to get it taken off my record. I definitely learned my lesson. Besides that, like I told you before, I have a lot of family that are alcoholics and I grew up with an alcoholic mother and I live with an alcoholic, so that's why I'm kind of against drinking 3 to 4 days a week and thinking it's the coolest thing ever because I personally experienced how it completely damages people and lives." (Lake1)

cannabis legally, using only when they travel to states where it's legal.

Reasons for using marijuana fell into a few clear categories. Nearly all young adults reported using for reasons the research team coded as "management." This included management of chronic pain, headaches, sleep, anxiety, and general stress. For example, one individual discussed how marijuana helps them relax, saying, "[I use it] more as a relaxation device. I don't know how to put that into words. Just something that will make me relax and take some stress off" (Madison1). A few individuals reported using marijuana in social situations and one individual explicitly mentioned using for the feeling of being high. Reasons for using other drugs included a number of interesting

normally wouldn't if you were sober. I know they are bad, but they do help. Heroin, that was—my parents used to be addicts and I always said I would try anything and put it down and I would never touch it again just to prove I wouldn't be an addict, because I was told all my life I would grow up and be an addict. I know it's stupid, you know, you're told you're going to be an addict and you go and do the drugs just to prove a point. It doesn't sound very smart. (Lake3)

Within this section, interviewees who reported no substance use throughout the interview were asked their reasons for not using alcohol or drugs. Interviewees reported a number of similar themes seen in other questions asking about reasons for not using substances.

Well, I always wanted to use drugs because I looked at it - I was just really curious on what they did I always kind of wanted to go into psychiatrics and I still have a really huge interest in psychiatrics now, so when I was younger, I actually thought that if I used all these drugs at least I would have a better idea of how they work and what they do and how people get addicted to them and how people, you know, feel after they use those drugs. And I felt like it would be an educational thing. I look back on that and I still kind of agree with it." (Porter2)

reasons outside of the high or feeling using produces, including curiosity or an "educational thing," and to "prove a point." The following interviewee explained their reasons for using each drug, saying:

LSD, it's fun to get away from reality for a while if you're in a bad state. It helps you get through mental problems. Ecstasy being the same type of thing. It puts you out of the normal feeling so you can actually feel more empathetic and happier, in certain situations you can be closer with people and really open up and actually share things that you

including prioritization of health, employment, and family; substance use being unsafe; and use of certain substances being illegal. However, more common reasons given, also seen frequently throughout other interview questions, included not being interested in use or the effects of use; not wanting to be put in a situation where they are out of control; and

observing the negative impact substance use has had on others.

# Perceived harm of different substances

The young adults interviewed were asked how harmful some substances are relative to others. Their responses varied by the substances compared. The majority of those asked to compare the harmfulness of prescription drugs to that of alcohol stated that these two types of substances were either equally harmful (34%) or more harmful (44%) than alcohol. Those interviewees who viewed them as equally harmful tended to emphasize that this was dependent upon how these substances were used, noting, especially in the case of alcohol, that alcohol can lead to negative consequences if misused.

Interviewees who viewed prescription drugs as more harmful than alcohol noted in particular that this is because prescription drugs are potentially more addictive than alcohol, have a less predictable impact on the body than alcohol, and their use is easier to hide.

It's tougher to use prescription drugs in moderation. I don't think you can just casually take [...] any kind of painkiller, really. Those are all pretty addictive. Whereas alcohol, also addictive, don't get me wrong. You could have two drinks a week or three or whatever, or a glass of wine with dinner, and it's not as intense, I feel like. (Floyd4)

I think that prescription drug use is more harmful than alcohol use. In my experience, alcohol use is more out in the open, like it's easier to spot a person who is drunk, like the way they act, the way they smell, that sort of thing. But for substance abuse, prescription drug abuse, most of the time people are really secretive about it and so their friends and family may not know. (Knox1)

On the other hand, a few interviewees indicated that alcohol is potentially more harmful than prescription drugs, particularly because alcohol is more readily accessible: "If I had to pick one that's probably more harmful, maybe alcohol [...] you can easily gain access to it than you can prescription drugs" (Clark 4). Alcohol is also more normalized in social circles, which obscures its potential harm:

I feel like alcohol gets a pass because everybody drinks, it's okay. It's okay to have a couple glasses of wine when you get off work, but it's not okay to pop a couple Percocet every day. It's society's expectation of it. They are both pretty bad, but just the way society leverages one above the other kind of skews it. (Lake4)

Alcohol use is perceived as more harmful than prescription drug use because it can also have broader, negative effects on others, such as accidents caused by drunk driving, and domestic violence:

I think more people that aren't utilizing [alcohol] get affected. And what I mean by that is [...] with alcohol and alcohol abuse, you see things like driving while intoxicated and you do that and you could kill four or five other people that never made a decision to abuse alcohol. (Scott1)

I think alcohol is definitely a lot worse [...] because I get a lot more – me and my

husband get a lot more violent on alcohol than we do on prescription. Prescription drugs we're a lot more calm, but alcohol we're a lot more negative. It affects you differently. (Vanderburgh2)

When asked to compare the degree of harm of using prescription drugs versus using illegal non-prescription drugs, many (41%) of the young adults interviewed believed that prescription drugs are equally as harmful as illegal drugs. Reasons for this perception included that prescription drugs can also be used recreationally, and both legally prescribed and illegal, non-prescription drugs can have addictive properties: "[...] because it's prescribed by your doctor, it's probably going to be more publicly approved, but it can be equally as addictive" (Lake4). One interviewee noted that it is the dosage that matters with respect to the relative harm between these two groups: "Seeing how a while ago different things in medicine were made with things that were found in drugs, there really isn't a difference. It's based on the dosage of what you are taking" (Lake2).

Prescription drugs were considered less harmful by three interviewees because they are regulated, and because "illegal" is equated with "harmful." "[...] at least the prescription drugs are regulated to an extent, and at least like you can get information on these prescription drugs that you're taking, but most people just don't" (Porter2). Conversely, three other interviewees believed prescription drugs are more harmful than illegal drugs, because the former are more easily obtained: "There's not really rigorous processes that help avoid people getting them that don't need them, and then the people that actually need them can't get them because of the people that were [mis]using them" (Lake3).

Also, because the use of prescription drugs is less taboo, it's harder to identify their misuse.

[...] prescription drugs are more harmful in the way that they're less taboo and it's easier for normal performing people in society to get their hands on prescription drugs. [...] someone could use prescription drugs every single day, and you don't necessarily notice it until something happens, like they overdose or someone gets hurt. (Scott1)

When asked to compare how harmful alcohol is when compared to other intoxicating substances, 13 (41%) interviewees believed that alcohol is equally as harmful as other substances, while nine (28%) stated that alcohol is less harmful than other substances. A prevalent attitude related to these being equally harmful is related to whether or not alcohol is consumed in moderation: "I think it can be just as harmful if you don't drink responsibly" (Clark1), or, "I guess it's not bad if you're at home, but if you're out then you're just endangering everyone else. So, I would say if you are out and you're drinking, it's just as bad as anything else" (Clark2). One interviewee noted, "I just think they are all harmful in different ways. Some are more of the mental and social stuff and then others are physical and a lot are both" (Madison2). Another person stated:

I would say it can be just as bad as anything else. Just because if someone is an alcoholic, it's basically the same as a drug addict. You're just going to sit around and do it all day and have that same negative effect on people around you. (Floyd2)

Those who believed that alcohol is less harmful than other substances noted that this is the

case when alcohol is consumed in moderation. Familiarity with the effects of alcohol on one's own body and a lack of predisposition to alcohol use disorder were equated with a lower degree of harm. One interviewee noted alcohol as being less harmful than other substances since its availability for purchase is regulated, saying,

Usually less harmful. Again, just because it's something you can buy at the store, it's something that's regulated, it's something that takes effect sooner than prescription drugs, so you do have an idea of how much you need to consume, and a lot of people do know their level. Alcoholics are kind of a different story. (Porter2)

Despite varying perspectives on the use of different kinds of substances, nuance is important: "It kind of just depends on what substances you're talking about. It kind of depends on the person too, because it affects everybody differently" (Knox3).

One new and prevalent theme that emerged in this round of data collection was relaxed attitudes or opinions toward marijuana use. This theme emerged mainly in the harmperception question, "How harmful do you think prescription drugs are compared to illegal drugs such as cannabis, heroin, methamphetamine, or cocaine?" Thirteen (41%) individuals mentioned cannabis being not as harmful as other substances or not harmful in general. Holding this opinion was not exclusively linked to reported use, though nine of the 13 (69%) individuals who voiced these opinions have used or currently use cannabis. Some interviewees simply stated that marijuana is not as harmful, while others elaborated. A number of different sub-themes emerged related to the feeling

that marijuana is not as harmful as other substances.

Several individuals referenced "what we know," or what's "been proven," such as the following interviewee: "I don't think there is any relation because cannabis doesn't have any proven facts, any negative consequences as what we know of right now" (Madison1). Along with this, interviewees also discussed the lack of addictive potential as compared to other substances. For example, one interviewee discussed how some substance use can lead to harder substance use, voicing that marijuana use doesn't follow this pattern, saying,

I think that when you are moving on from prescription drugs you move up into, specifically opioids, you move up into a stronger opioid and a stronger one. With cannabis you just, I don't know, you smoke cannabis to get high I guess. (Knox4)

A few individuals mentioned how cannabis is not as serious or not the same thing as other substances because they have seen the effects of harder drug use on people they know, like meth use or prescription drug misuse. One interviewee mentioned how they feel about marijuana use compared to the effects of other substance use on those close to them, saying,

Because I've seen people affected by meth and I've seen that outcome and I've seen the—even the alcohol, alcohol abuse. And to abuse marijuana is hard to do, you know? Just to see it as often as I have and I feel like it's just night and day. (Floyd3)

A number of interviewees specifically pointed to alcohol as being more harmful than marijuana,

such as the following individual: "But if it's something like marijuana, I would say that alcohol is worse than marijuana" (Porter4). Finally, a couple people discussed how they feel legalization of cannabis would eliminate the need for prescription drugs or other substances, whether abused or used as indicated. People referenced this generally and in relation to their personal use. Referencing use of others, one interviewee described the impact they believe legalization would have, saying,

I feel that more people—if cannabis was legalized, let's say countrywide, I feel like there would be a decline in prescription drug abuse. And honestly, there may be a decrease in alcohol abuse as well because I feel that a lot of people have to hide the fact that they smoke marijuana. (Porter4)

was included in this round of data collection: "How has substance use affected or impacted your life, if in any way?" Interviewees reported substance use impacting the lives of those close to them as well as their lives being affected by their own substance use.

Twenty-four (75%) individuals reported substance use affecting or having affected someone they know, with a number of these individuals indicating a significant impact this has had in their own lives, such as the loss of someone, fracturing of relationships, and major changes in their lives because of others substance use. A number of interviewees spoke to the "loss of relationships," from choosing to remove people from their lives: "Substance use has affected my life pretty substantially. My father has had issues my whole life so he is currently not in

[Marijuana] doesn't damage your liver or any of your like organs the same way that alcohol would. It doesn't leave you in the same state that cocaine or meth or heroin would, but we treat it as if it's the same because of a weird stigma placed on it early in this country's history. And it feels kind of inconsistent, you know?" (Floyd4)

# Substance use impact

As previously stated, during the first phase of data collection young adults often discussed observing the negative impact substance use had on the lives of those close to them and how that affected them and informed their decisions surrounding substance use. Even throughout this report, observing the negative impact use has had on others and how that relates to their choices, was frequently mentioned by young adults. Wanting to gauge the extensiveness of the impact substance use is having on our young adult population, the following question

my life due to that issue" (Floyd2), to what one interviewee called the "emotional stress" and "grief," of relationships that have been changed by substance use:

I mean it's taken—it's hit me personally, just not in the sense of me doing the drugs but just losing loved ones as well as—I mean alcohol and drugs they change people and so being around people that may have been your best friend for a long time but then alcohol or drugs hits them and you lose friendships, you lose lives of people, you don't trust people because they're stealing from you to be able

to buy their drugs or alcohol. (Porter4)

A handful of interviewees mentioned substance use affecting their childhood or formative years. One interviewee discussed growing up in an abusive family home where their father was an alcoholic making him "violent towards my mom and my older brothers" (Vanderburgh2). Another interviewee talked about the significant impact of parental use on their childhood, saying,

From about the age of 6, I grew up in a house that was filled with trash and meth and everything like that, paraphernalia. Then my parents just decided to stop cold turkey and we moved away, moved all the way across the country to get away from everything and they stopped and tried to give us a better life. (Lake3)

responsibility they now have to take care of their sister's children, saying,

My dad is an alcoholic. I have three sisters. All of them are regular substance abusers. We received two children from my youngest sister, what was it three years ago? Three years ago next month, because she was abusing methamphetamine and could no longer care for them. So we've got kids now. My parents regularly abused substances when I was a child, so it's pretty interwoven I feel like with my early, early childhood, early adult life. (Floyd4)

Some interviewees indicated seeing how other's substance use, while maybe not directly affecting their lives, has shown them what they do not want for themselves, such as one interviewee who said,

"One of my best friends from high school - we grew up together - got into drugs pretty hard core. We had a pretty close group of guys. There were eight of us and he - we all got really close once everybody went to college, we'd always get together. You know, when everybody was off, we'd always get together and hang out, and about the past, probably the last year and a half this other friend got into another group, stopped hanging out with our group and we soon figured out that he was - we suspected that he was doing drugs. Well we figured out that, that was true because he actually just recently overdosed and he died from that..." (Madison3)

Some young adults discussed how substance use has affected the routines of their daily lives or situations they have to respond to because of those in their lives who use. One interviewee described getting a call from the police that week about a family member who had been picked up, saying, "...we had to go deal with her and figure out what's going on and figure out where we could take her" (Madison2). In addition to mentioning the impact substance use had on their own childhood, one young adult discussed the

I would say the only impact it's had on me is me seeing people around me using it and coming to the decision that from what it's done to them and what I can see them go through or how they act, make me decide I didn't want to have any part of it. So I guess seeing it firsthand was the best deterrent for me. (Marion4).

Additionally, seven (22%) interviewees reported how their own substance use has impacted their

lives. A few interviewees discussed their struggles with addiction, how it was "horrible" and "took control of things," and affected "relationships with my friends and family." One discussed financial repercussions of their substance use, while another talked about the "fake friends" they surrounded themselves with when they used. Not surprisingly, when asked if they knew where they could get assistance for friends or family members with substance use issues, the majority of interviewees indicated they were aware of resources.

# Discussion

Comparing the two phases of qualitative data collection, a number of similarities were seen between the two groups of young adults. Interviewees had several opinions related to campaign recognition and effectiveness, but consistently felt campaigns that tell personal stories or show realistic situations stemming from substance use are most effective and, therefore, can be used to make campaigns more successful. Personal stories about the impact of substance use was an underlying theme throughout every section, in both phases of data collection. When asked why they did not use certain substances, young adults frequently cited seeing the effects of substance use on others as a primary motivator for not using. Reasons for choosing not to use substances were often complex and multi-layered, but frequently centered around this observation of negative impact, as well as not being interested in using, not liking the effects use has on them, and not wanting to be out of control. Ultimately, there was not much variance among young adults' reasons for participating or not participating in certain behaviors, or holding certain opinions. For example,

young adults consistently reported engaging in minimal to moderate levels of drinking, primarily for social or recreational purposes. Also, they largely reported not sharing prescriptions or taking prescriptions in an unintended way because it is "unsafe" and/or they should be used for prescribed purposes, with a small portion of young adults believing these situations are circumstantial.

Despite many similarities, differences and new themes emerged between the two groups, often connected to modifications to the interview guide. One point to note is that reported prescription drug misuse and illegal drug use were higher in this population of young adults compared to the group in the first phase, while alcohol use remained consistent. Connected to a new, harm-perception question, a little less than half of young adults expressed permissive feelings toward marijuana use. Interviewees felt marijuana was not harmful in general, or not as harmful when compared to other substances. It is likely these opinions are related to changing attitudes around the country as well as movement in our own State, including the legalization of CBD that occurred since the first phase of data collection. Once again, personal experiences and observations of negative impact related to substance use was a prevalent theme among both young adult groups. While not necessarily a new theme, further exploring the impact substance use has had on this young adult population revealed its emotional, relational, life-changing pervasiveness. A considerable majority of voung adults reported that substance use has had an often substantial impact on their lives.

It is important to note that findings from the interviews may not be representative of the entire young-adult population in Indiana and that

participants could have been self-selected, i.e., highly motivated to participate in an interview like this so they could share their experiences. However, it's also important to continue exploring these issues, as they can greatly impact the lives of the general population.

During the first phase of data collection, quantitative and qualitative interview results were included in the same report. Quantitative results from this second phase of data collection will be released during the coming fiscal year, and all four parts of data collection across the two phases will be considered when composing the final report for the end of the PFS grant.

# **Appendices**

Appendix A. Interview Guide

### **PFS Interview Protocol**

- Have pen, paper for notes
- Set up recording system
- Begin Recording

### **PFS Young Adult Phone Interview Script**

- Bold text is to be read out loud by the interviewer.
- Blue text indicates instructions for the interviewer
- Red text indicates probes for questions.

Hello, my name is [name of interviewer]. I am calling you about the study being conducted by Drs. Dennis Watson and Marion Greene from the Indiana University Richard M. Fairbanks School of Public Health. Are you still available to talk with me for a few minutes?

[If YES, proceed]

[If they don't have time, offer to call back]

Are you currently driving a vehicle? [If YES, ask to schedule a time for a call back]

[If they say they don't want to participate, thank them for their time and hang up]

This study is part of a project funded by the U.S. Substance Abuse and Mental Health Services Administration and the Indiana Division of Mental Health and Addiction. Findings will help direct substance use prevention efforts in Indiana. This interview should take approximately 20 minutes, and it includes sensitive questions such as those related to alcohol and illegal drug use.

However, your participation is voluntary, you may end the interview at any time, and you may skip questions you do not want to answer. We will be audio recording this interview, but to assure your confidentiality and privacy, we will not be connecting any of your identifying information to your answers in this interview. Would you still be interested in participating in our interview?

### **Begin Recording**

Before we begin, I just need to confirm some information to make sure you are eligible for participation:

### Section 1: Background and Demographics

1. First, could you please tell me your age?

[If they are 27 or older, discontinue interview]

[If they are under 18, discontinue interview]

[If 26 years old, ask when their birthday is, discontinue if they turned 26 before 1/6/19, continue if they turned 26 on or after 1/6/19]

2. Next, please tell me what county you live in.

[If not from one of these counties, then discontinue interview]

- Cass County
- Clark County
- Floyd County
- Knox County
- Lake County
- Madison County
- Marion County
- Porter County
- Scott County
- Vanderburgh County
- 3. What is your gender identity? [If individual does not understand, clarify with asking

their sex—most likely to understand as identity]

- 4. What do you consider your sexual orientation to be?
- 5. What is your race?
- 6. Do you consider yourself to be of Latino or Hispanic origin?
- 7. What was the last grade in school you completed? [If they did not indicate going to college, ask if they have any experience taking college courses, and, if they do, find out how many and for how long.]

### **Section 2: Campaigning**

First, we are going to go through a few questions regarding public messaging campaigns on substance use that you may have seen recently.

- 8. Have you seen any messaging or public campaigns regarding alcohol or drug use within the past few months (i.e. social media ads, TV ads, billboards, etc.)? [If YES proceed to question 8a; If NO skip to question 9.]
  - 8a. Do you remember what the campaign was about? How effective did you feel promotion of this campaign has been? (Probe: likes and dislikes about it)
  - 8b. How well do you think the messaging for this campaign spoke to you?
    - 8bi. How well do you think it spoke to others who are about your age?
- 9. In general, how effective do you think pub-

lic messaging or warning campaigns for alcohol or drug use are at reaching people around your age?

9a. Why do you say this?

10. Is there anything you think would make public messaging about the dangers of alcohol and drug use more effective?

### Section 3: Substance use

- 11. Do you use prescriptions drugs like pain killers, Ritalin, muscle relaxers or any other prescriptions drugs? [If YES go to question 11a. If NO skip to question 11b.]
  - 11a. Which prescription drugs do you use? (Probe for legitimate use)
    - 11aii. How do you get these prescription drugs? (Probe: doctor, friends, family, dealer)
    - 11aiii. Can you please tell me about some of your reasons for using these prescription drugs? (Probes: when and why started using; how started using; who do they use with; in what settings do they use)
  - 11b. In general, how do you feel about people not using prescription drugs as they are intended?
  - 11c. Is this why you have chosen not to use drugs? (Probe: other reasons)
  - 11d. In general, how do you feel about sharing prescription drugs with friends and family? (Probe: reasons for sharing)

- 11di. Why do you feel that way?
- 11f. How harmful do you think prescription drugs are compared to alcohol?
- 11g. How harmful do you think prescription drugs are compared to illegal drugs such as cannabis, heroin, methamphetamine, or cocaine?
- 11h. What do you do with old or unused prescription drugs when you have them?
  - 11hi. Are you aware of locations within your county where you can safely dispose old or unused prescription drugs?
    [Let them know we will send them locations with their gift card email]
- 12. Do you drink alcohol? [If YES, move to question 12a; If NO, move to question 12b.]
  - 12a. In a typical week, approximately how many alcoholic drinks do you consume?
    - 12ai. [If respondent is under 21]
      How do you get your alcohol?
      (Probes: from a friend or family member, using a fake ID)
  - 12b. What are some of your reasons for drinking? (Probes: when and why started drinking; who do they drink with; in what settings do they drink, what they consider to be binge drinking)
  - 12c. What do you consider to be a problematic level of drinking? (Probe: in a day, in a week)

- 12ci. Why do you consider this amount to be problematic?
- 12d. How harmful do you view alcohol as compared to other intoxicating substances?
- 13.Do you use any drugs, like marijuana, LSD, Ecstasy, Cocaine, Heroin, or Methamphetamines? [SKIP to question 14 if they indicated they do not use ANY SUBSTANCES. If they use substances, SKIP to question 15]
  - 13a. How do you get these drugs?
  - 13b. What are your reasons for using [Ask about all substances they indicated using]? (Probe: when and why started using, how started using, in what settings do they use, personal preference, friends or family do the same, safety, ease of access, stress) [Move to question 15]
- 14. [ASK ONLY IF they indicated they do not use any prescription drugs, alcohol, or illegal drugs] What are your reasons for not using alcohol or drugs? (Probe: personal preference, friends or family, safety, prescription vs. illegal)
- 15. Describe the role alcohol and drugs play when you hang out with friends.
- 16. How has substance use affected or impacted your life, if in any way?
- 17. Is there anything else you'd like to share with us about the topic of drugs and alcohol as it relates to people around your age?
- 18.Do you know where to get assistance or where to send a friend or family member

with substance use issues? [If NO, provide resource] 1-800-662-HELP (4357)

### STOP RECORDING

Okay, that concludes our interview. I'll just need an email address where we can send the Amazon gift card code. [Confirm email address and thank the interviewee for their time].

- Send Amazon code and drug drop locations after concluding the interview (located in 'Qualitative Data Collection' folder)
  - Mark that gift card has been distributed in the Excel file 'Amazon Codes'.
- In [Box Health] folder, upload interview recording to Box (i.e. 001\_Cass\_Female\_02.21.2019).
- Record that the participant has completed the interview in the Excel file 'Completed.'
  - Record County, College/Non-College/, Male/Female, REDCap ID.