

Public Outreach on FASD

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Abstract

Fetal Alcohol Spectrum Disorder (FASD) is a neurodevelopmental disorder more prevalent than autism. Caused by the malformation of an embryo due to the presence of alcohol, the only way to completely prevent FASD is for a mother to abstain from drinking during pregnancy. Our sponsors, the National Organization for FASD are a non-profit working to increase awareness of FASD as well as reduce - or ideally eliminate - the prevalence of this disorder. We worked with the sponsor to support their Prevent FASD campaign. The intent of the project was to develop a blueprint for a media campaign designed to reach 16-25 year-olds in the UK to educate them on the effects of drinking during pregnancy and help prevent the spread of FASD. Our project had three main parts: the deployment of a national poll to understand trends and attitudes towards sexual health and alcohol, focus groups to test potential marketing messages and content, and the development of content and artifacts for the social media platform. Based on our results, we recommend that the National Organization for FASD work on expanding their social footprint on Instagram by incorporating stories and highlights into their daily posts. In addition to the research and content creation, we also created a social media guide to support our sponsor in maintaining their social media content and presence, driven by insights from our research. For future work, we recommend National FASD expand to other platforms such as TikTok, which is rising in popularity with Generation Z. There are many aspects this project could be expanded on including conducting personal interviews and addressing other more political lenses that are a part of the conversation around FASD.

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Sponsor

National Organization for FASD



The Prevalence of FASD

When an embryo can fit inside the zero on a penny, the consumption of alcohol in pregnancy can already cause lifelong effects. Alcohol is a teratogen - a substance which can cause malformations and interfere with the development of an embryo. For this reason, consuming alcohol in pregnancy is more harmful than heroin. While heroin addiction can be treated in a newborn, the damage caused by alcohol has incurable impacts. Of all the pregnancies in the United Kingdom (UK), 41% involve the consumption of alcohol. This means 41% of babies are at risk for developing Fetal Alcohol Spectrum Disorder (FASD). FASD is preventable, but the only way to completely ensure that a baby will not be born with FASD is to abstain from drinking alcohol for the entire pregnancy.

What is FASD?

Fetal Alcohol Spectrum Disorder (FASD) is a broad category encompassing the disorders in children resulting from a mother's consumption of alcohol during pregnancy. It is a neurodevelopmental disorder which can co-occur with over 400 conditions (National FASD, 2020). The use of the verbiage 'spectrum disorders' indicates that there is a range in the severity of the medical conditions resulting from exposure to alcohol in the womb. Fetal Alcohol Syndrome (FAS) is one of the most severe forms of this disorder (Wilhoit et al., 2017). Other forms of FASD are partial fetal alcohol syndrome, alcohol-related neurodevelopmental disorder, and alcohol-related birth defects (Wozniak et al., 2019).

Physical characteristics exhibited in some children with FASD include a flat nasal bridge,

thin upper lip, extra crease in the outer ears, and an upturned nose. Additionally, babies born with FASD may have a smaller head size, low body weight, and be much shorter than average. Medical conditions displayed in some cases of FASD include vision and/or hearing problems and problems with the heart, kidneys, or bones. Learning disabilities, problems following directions, poor memory skills, hyperactive behavior, inattentiveness, poor reasoning skills, and speech and language delays are common

among those with FASD (CDC, 2020). FASD is diagnosed based on the presence of these symptoms along with the magnitude of prenatal alcohol exposure (Wozniak et al., 2019).

FASD is a widespread issue affecting more people than autism (National FASD, 2020). While it can have serious effects on the brain, FASD is a full-body diagnosis which is caused by exposure to alcohol in utero and abstaining from drinking alcohol while pregnant is the only guaranteed way to ensure the fetus will not develop FASD. It is important for people to have information on FASD, because it is a serious neurodevelopmental condition that can cause behavioral, cognitive, and emotional challenges (National FASD). Since FASD is quite common in the UK, and is preventable with the proper education, the main purpose of our project is to increase education of the majority of the local population of London based on statistics and information collected on alcohol in pregnancy, to identify preventative measures one can take, and to direct users to sites or places where they can find more resources on the topics.

Gap in Education

It is important to consider the current standards set for educating the public on the causes and long-term effects of FASD in order to set a foundation for our project to create a more effective awareness and prevention plan. According to a clinical report published by the American Academy of Pediatrics, an increase in research has led to evidence-based FASD education of professionals and the public, broader prevention initiatives, and recommended treatment approaches. These were all based on the premises that alcohol-related birth defects are



Figure 1: Logo for the National Organization for FASD (2020)

completely preventable when women abstain from alcohol use during pregnancy; neurocognitive and behavioral problems resulting from prenatal alcohol exposure are lifelong. Early recognition, diagnosis, and therapy for any condition along the FASD continuum can result in improved outcomes, and no amount of alcohol intake of any kind during the entirety of a woman's pregnancy is considered safe (Williams, et al., 2015).

Our sponsor, National Organization for FASD, has launched a new website, PreventFASD.info, specifically designed to target Generation Z (those born after 1997) and educate this younger generation on the repercussions that would occur from any alcohol use during pregnancy. Since social media plays such a key role in the lives of our sponsor's target market, they have taken advantage of platforms such as Facebook, Instagram, and Twitter in order to spread awareness of the prevalence and severity of FASD.

Social Media Influence

One important factor in our project is looking into the effectiveness of social media campaigns and deciding what route will be best to take when trying to get our message across about FASD. Being able to properly utilize social media is key in getting our message to reach our target audience. In 2019, 16-24-year-olds were the most represented group on social media sites in the UK. Based on usage by this age group, Facebook was the most used application, with Snapchat and Instagram coming in at a tied second (Statista, 2020a). However, the 16-24 age group had the largest proportion of members on Snapchat and Instagram compared to older age

brackets (Statista, 2020a). Additionally, about a quarter of all smartphone users in the UK in our target group of 18-24 are using TikTok, a video application that is rising in popularity (Statista, 2020a).

There are many benefits to using social media to promote a campaign, which include an increase in exposure, traffic, sales, and generated

leads (Statista, 2020b). By 2025, it is predicted that over 50 million people in the UK will be using social media at least once per month. This emphasizes not only its reach, but also suggests that one might anticipate that the numbers will continue to increase (Statista, 2020a). When looking to spread awareness about FASD particularly, it is important to be able to reach the



Figure 2: Image on the Prevent FASD website homepage (2020)

younger generations, such as Generation Z and Millennials (those born between 1981 and 1996) as they are currently the age groups most likely to be conceiving children. In a 2018 study that looked to find a correlation between social media and the vaccines pregnant women should get in the UK, women who were using social media to get their information about vaccines were less likely to receive a pertussis vaccine, even though it is medically encouraged for pregnant woman to receive it (Ford, 2018). This was particularly interesting because the propaganda on social media resulted in fewer women receiving a recommended vaccine. This demonstrates how the information found on these sites can be incredibly persuasive. It is important to keep this

in mind with FASD given that those in opposition may be spreading information that is not medically accurate or may be misleading.

Differing Perspectives on Drinking

The cultural disparities between drinking patterns in the US and drinking patterns in the UK served as principal factors in how we approached our awareness campaign regarding FASD. The US is considered a high binge-drinking society, which has resulted in the enforcement of public policies, such as raising the legal drinking age minimum to 21, in an attempt to control substance abuse on a larger scale (Hogan et al., 2014).

Despite these regulatory actions, alcohol consumption policies still vary from state to state. This has reduced their overall effectiveness by failing to solve the issue of drinking in a college environment. College campuses are places where students easily acquire a fake ID card, which provides evidence that the regulatory actions were potentially counterproductive and invited finding ways around those types of policies (Hogan et al., 2014). Other examples

have gone on to highlight the lack of awareness of the problem surrounding alcohol use in colleges located in the US, and those same examples have also led to further changes made to combat these issues. An example of this was the Phi Delta Theta Fraternity's decision to create an alcohol-free housing policy which was mandated at all times (Whipple & Biggs, 2018). All of these elements came together to reveal that the drinking culture in the US is centered around restrictive policies and organizations that move to discourage massive alcohol consumption.

In the UK, the binge drinking culture is not only a great cause of concern in modern times, but has been an ongoing problem throughout centuries of British history. More recently, the public has seen binge drinking as an issue amongst the youth despite evidence pointing to the prevalence of binge drinking in adults that fall in the age range older than their early 20s (Herring et al., 2008). Alcohol consumption in the UK is considered rather 'carnavalesque', meaning that it is more of an excessive lively social activity branching into the overarching social norms of the country's culture as a whole and cannot be simply explained with words and phrases such as, 'binge drinking', 'intoxication', or 'drunkenness' (Haydock, 2016). However, it should be noted that the tolerance of alcohol is still described as widespread in the UK. A testimonial from a Hungarian student studying in the UK highlighted that the act of being drunk is seen as 'cool' in local society (Hogan et al., 2014). The prevalence of this heavy drinking culture served as an indication to us that an effective marketing campaign should focus more on providing education surrounding the topic of FASD rather than criticizing the drinking habits and attitudes of the public. If this strategy were to



Figure 3: Logo for the Prevent FASD website (2020)

be implemented in our campaign’s design, it would be more likely to decrease the number of individuals in our target market who will perceive any relevant information as an attack on their lifestyle choices. Furthermore, this will increase the likelihood that they will make positive changes in their everyday lives to reflect a more educated viewpoint on the issues surrounding FASD.

Why it Matters

Taking on another perspective to add more evidence of this cultural difference, Hollywood has been embedded with themes illustrating that drinking in pregnancy is bad. For example, there are scenes highlighting this cultural difference in movies and TV shows that reveal a woman is pregnant by her refusing a drink when out at a restaurant with a group of friends. This is a common approach to these topics throughout the US film industry and speaks directly to the drinking culture of the country. The reason this approach works so well within the US is that the education system teaches children at an early age that drinking in pregnancy should be avoided at all costs as it is harmful to the fetus. With that being said, here lies the difference between US and UK drinking culture. Since it is very common to see a pregnant woman drinking in a pub in the UK, which is simply unheard of in the US, this led us to take a look at their film industry. We noticed immediately that the central themes surrounding the same topics of drinking in pregnancy were drastically different, and lackluster in terms of educating the public that drinking should be avoided in pregnancy in comparison to the US’ approach. It is not as widely accepted or even

taught that drinking in pregnancy is dangerous and can cause life-long effects in the UK. This discovery found during our research as well as in discussions with our sponsors raised concerns and widened the overall scope of our project.

Project Approach

We originally had 3 goals for our project. The first one was to communicate, connect, and inform public health officials, families, and communities about FASD. Through this project, we hoped to learn about FASD and the effects it has on people who are diagnosed and their families. Our second goal was to evaluate the level of knowledge that people in the UK currently have in regards to FASD and create an engaging and socially-appealing learning experience on the topic. Through this objective, we aimed to gain experience in running social media platforms that are engaging and informative. Finally, we hoped to improve the wellbeing of families that experience the effects of FASD.

We had two quintessential research questions that helped guide our work and gave us necessary insight to accomplish our project goals. These questions were: How is FASD understood in the context of British and American culture? What are the social and political challenges to widespread education and support around FASD?

Our objectives shifted as we conducted our research and continued discussions with our sponsors. Our goal in conducting research was to understand three things: the British drinking culture, current knowledge of binge drinking and alcohol in pregnancy, and social media habits. We conducted this research in order to identify

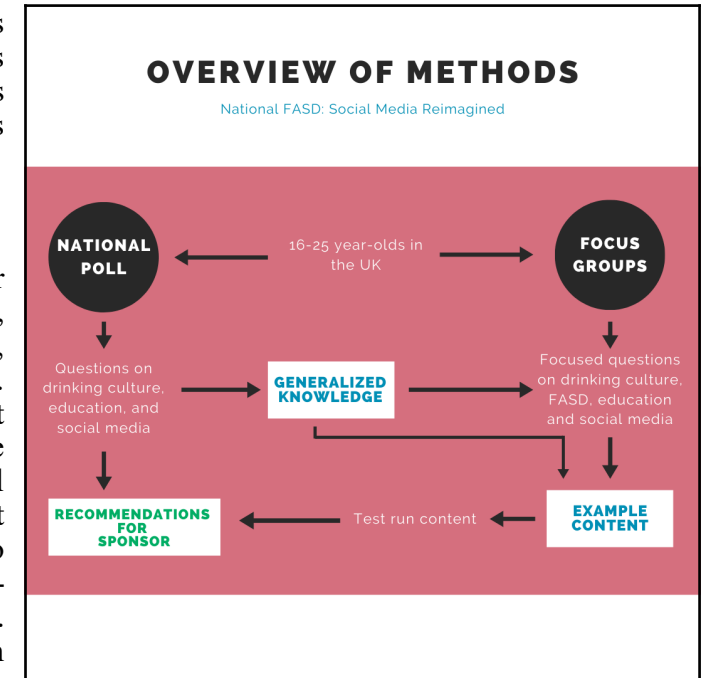


Figure 4: Overview of Methods flow chart

gaps in the knowledge of the target audience regarding alcohol and FASD as well as to identify the ways in which we could effectively educate them using social media. There was a marked change in the original objectives in that we shifted almost entirely to focus on our second objective. While the original first and third objective may be accomplished indirectly by our sponsor’s usage of the information we have gathered, they turned out not to be the direct focus of our project.

Beginning in the next section, we will explore the types of methods we will adopt. This involves surveys, focus groups, and social media content creation and testing. After that, we will explore, analyze and explain the data collected. In the next section, we will summarize the

deliverables of the project. Then, we will discuss potential obstacles followed by a section on the ethical considerations and details on the IRB application. Finally, our appendices will contain the tools we used and the timeline for our project.

Method Logistics

We gathered data to gain further insight into the overall knowledge and awareness of FASD as well as the consumption and culture of alcohol-use based in the UK through three different methods. We focused directly on collecting this data from people between the ages of 16-25 years old. According to Statista, a platform that houses information that can be found through market research, trade publications, scientific journals, and government databases, one of the most used forms of quantitative data collection methods is online surveys. Surveys account for 79% of the methods respondents use. This is followed by mobile surveys, which accounts for 53% of the respondents' usage; CATI, or computer-assisted telephone interviewing surveys, which accounts for 30% of respondents' usage; followed by face-to-face interviews, which accounted for 23% of respondents' usage (Statista, 2020c).

Conducting a National Poll

With the understanding that surveys create the highest response rates from our targeted audience, we assisted our sponsors in conducting a national poll to gather data about the drinking culture and sexual education in the UK amongst 16-25 year olds. We included questions such as: "Which of the following topics do you think you DIDN'T learn enough about at school?" with options being "sex in general", "sex education",

72POINT.

CONTENT.
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SEX AND ALCOHOL TALK – National FASD
8th February 2021

**SURVEY
QUESTIONS**

Figure 5: Image taken from file sent to National FASD from polling company

"contraception", "pregnancy", "drinking alcohol", "drugs", "sexuality", and "alcohol in pregnancy". We also asked questions about 16-25 year old's social media use to get a better understanding of what kind of content is well circulated. This helped inform our sponsors on how to get their message to their target age group. Examples of these questions include: "What social media sites do you use regularly?," "What type of content are you most likely to repost on social media?," and "Based on your previous answer, what method of sharing would you use to repost this information on social media?" A full list of the questions can be found in the supplementary material. We asked these types of questions specifically in our national poll because of their simplicity. Our goal was to make our poll questions as clear and concise as possible. These particular questions provided the means to accomplish this goal given that they were designed to be less personalized and focused more on collecting the data.

The national poll was conducted through the polling company, OnePoll. This poll surveyed 1,200 participants aged 16-25 on a variety of topics including their drinking habits, sex and alcohol education, and social media usage. The poll was released mid February with the results returned on February 23rd. The objective of this poll was to obtain a quantitative baseline for evidence-based data regarding the current knowledge of the target age group (16-25) about sex and alcohol. Additionally, the poll aimed to aid in crafting an effective media plan to reach and influence 18-25 year olds and serve as a baseline to craft questions for the focus groups.

Conducting Focus Groups

Focus groups provided another way to collect qualitative data from participants on attitudes, behaviors, and efficacy of social media messaging. They were helpful because they had a more personalized approach. We focused on both the experiences and opinions of both people who had a personal connection to FASD as well as people without a personal connection to FASD. One of the ways in which we set up these focus groups was by inviting individuals to participate in a closed Facebook group with a small number of members. We were dedicated to creating a safe and collaborative environment that would run in a discussion-based format. Those who became part of the Facebook group had the opportunity to share their experiences with one another in regards to FASD, present insight on the general drinking culture in the UK, and provide feedback on potential content we have created through comments on the posts in the group.

We were able to conduct two other focus groups using our sponsor's connections. The first focus group consisted of contestants from the National Organization for FASD's nationwide competition for young people in Generation Z to develop creative content in which the top 20 contestants had the opportunity to have their idea featured on our sponsor's social media. In order to hold the focus groups with some of the contest winners, we got into contact with the organizer of the competition. We then asked her to connect us with a group of willing participants from the competition to join us for a Zoom call in which we were able to discuss their creative process for coming up with their competition ideas as well as to gain insight into their research and individual thought processes. For the second focus group,

we utilized one of our sponsors, classmates from her masters class to recruit more members to participate in our focus group in which we discussed topics such as drinking culture in the UK, knowledge about FASD, the effectiveness of previous social media campaigns, as well as questions surrounding the topic of social media in general. This allowed us to gain more insight on the perspectives that these groups of young people had on the type of content that we would need to recommend in order to move people to take action on important issues related to FASD.

The Impact of Social Media

We evaluated many different social media applications in order to create optimal conditions for engagement for people aged 18-25. Currently, the National Organization for FASD has accounts through Facebook and Twitter. We knew that the Twitter account faced a decent amount of backlash, resulting in 'Twitter wars' due to conflicting opinions related to FASD, sex, and alcohol. For instance, there are deeply felt debates on whether a woman can drink while she is pregnant. We needed to keep this in mind when creating content and make sure we were messaging in ways that would reach a broad audience while also remaining fact and science-based.

In addition to Facebook and Twitter, we also sought out information on other potential platforms. Based on data collected by Statista, a company that specializes in marketing and consumer data, in 2019 Instagram was the second most used application in the UK, with the most popular being Facebook (Statista, 2020a). This goes to emphasize that in order to best reach this generation, we needed to try and expand FASD's

presence on Instagram. Additionally, focusing on TikTok in the future will be important in reaching this 18-24 age group. Globally, TikTok had 689 million users and as of May 2020, the UK had over 6 million active users monthly on the platform (Statista, 2020a, Statista, 2020b). In the last 3 years, TikTok usage has been linearly growing, with the 18-24 age group in the UK having 26% of smartphone users on the app by 2019 (Statista, 2020b). As a result, being able to properly allocate marketing on social media will be key in creating content that will be engaging to a generation that the National Organization for FASD does not currently reach as successfully.

Since we will be using types of social media that are not as common to the National



Figure 6: Profile picture generated for use in Facebook group

Organization for FASD, the plan is to first be able to analyze how their current social media is working. To do this, we observed their current followers, likes, and retweets on their Twitter page; current followers, likes and shares on Facebook; and their current followers and posts on Instagram. When looking at the websites, we focused on the *PreventFASD.info* website, as this was their new site targeted to the 18-24 age group we were looking to reach. The overall goal with using social media was not only to create and push out accurate information from their accounts, but we needed to ensure the content is engaging in order to reach a greater amount of people.

We worked with mostly qualitative data and collected first-hand accounts and reactions to different types of content through the use of our focus groups. Other quantitative data we looked at came from surveys and polls. The plan for these was to reach people who may not have heard of FASD before and gauge their current knowledge on the topic. Additionally, we wanted to understand the types of content that resonates the best with the target demographic — be it shocking photos or educational infographics. We asked basic questions such as “Have you heard about FASD before?” and “Do you know what FASD stands for?.” Based on information from our sponsors, we were under the impression that

many people may have heard of FASD, but do not even know what it stands for, highlighting the need for a social media campaign. The hope is creating engaging content for the Generation Z age group will not only better spread the National Organization for FASD’s message, but will also help to prevent drinking with pregnancy before it even happens.

Analyzing Our Data

Having defined the types of data that we collected, we will further explain the reasoning behind the need for each data set. The overall questions we asked in our surveys allowed us to gauge where young people’s perspectives currently lie pertaining to alcohol-use in terms of the type of alcohol they are actually consuming. This created a perfect foundation for our project because it highlighted different aspects of drinking culture in the UK that needed to be considered when defining our approach to introducing the topic of FASD.

Taking the quantitative data collected from our surveys into account, we generated a more personalized data set than our focus groups provided that served as very valuable qualitative data. Participants’ answers provided us with specific opinions about what they believe will be an effective method to bring more awareness to the public about FASD and why it is necessary. We chose specifically to employ both methods of collection in order to produce different types of data that call attention to the areas where more education on FASD is needed while simultaneously defining the approach necessary to best reach our target audience.

Overall, the purpose of all of the data we collected is two-fold. First, it helped us better

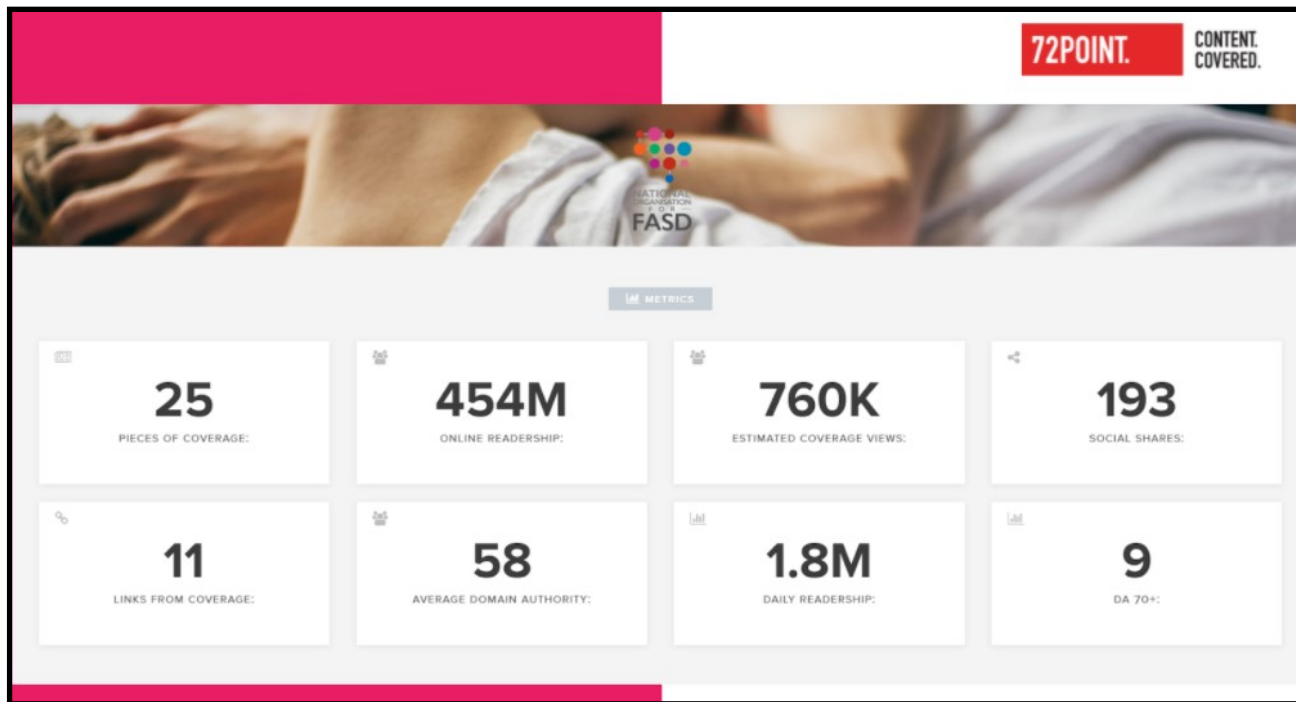


Figure 7: Image produced from 72Point website (2021).

understand the daily lives of people living in the UK as well as those who are affected by FASD, and second, it helped to direct us on what type of content could be created from their stories that would engage and resonate with others.

Discussing the Outcome of National Poll

The data we received from the poll results gave us insight on social media, where young people obtain sex and alcohol information, as well as the public's knowledge on FASD and drinking in pregnancy. These statistics on social media tell us what kinds of social media and content are most popular. More specifically, information on where the participants are getting advice on sex and alcohol can show who they trust the most to give them accurate information. The data on drinking in pregnancy displays how well-known information on FASD currently is in the UK to Generation Z.

Of all forms of social media, participants regularly used Instagram the most. The second most regularly used social media was Facebook, followed by Snapchat, TikTok, and Twitter. In terms of content they would most likely repost on social media, funny content and photos were the most popular options, along with videos and songs. The preferred method of reposting this content was to repost, retweet, or share, followed by posting on their story or highlight for 24 hours, and finally directly messaging the post to another user.

In general, participants appeared to get their sex and alcohol education, resources, and advice from the Internet, their parents, their friends, and their schools. Over 30% of



Figure 8: Collage generated from 72Point poll results website (2021)

participants said they rely on the Internet for most or all of their information on sex in general, but 28% of participants admitted that they find this information to be confusing. While over 50% of participants either somewhat or strongly agree that they can talk to their parents about sex, drugs, and alcohol, 33% admitted that they are not comfortable talking about these topics, and 25% do not want their parents to worry. Most participants seemed more comfortable talking to their friends about these topics, as 66% of participants either somewhat or strongly agreed that they would happily chat to a friend about a good or bad time they've had in bed with

someone, or to chat about a fun binge drinking session or night out. Although we would expect that young people would be taught important information on health regarding sex and alcohol, it appears that there are many topics that participants felt they did not learn enough about in school. Specifically, 40% said they did not learn enough about sex in general, 33% think they did not learn enough about sexual education, 32% believe they did not learn enough about pregnancy, 31% do not think they learned enough about drinking, and 34% said they did not learn enough about alcohol in pregnancy. Although 32% of participants did say that they learned

about how to get pregnant and the act of having sex, only 15% learned about alcohol in pregnancy, 16% learned about binge drinking, and 19% learned about what you should and should not do during pregnancy.

The poll also revealed the amount of knowledge participants have about alcohol in pregnancy and FASD. Seventy percent of participants know that according to UK government medical advice, women should give up drinking alcohol when they are pregnant, and 25% of participants know someone who was pregnant and still drank once in a while. Although only 29% of participants either somewhat or strongly agreed that it was okay to have one or two alcoholic drinks every now and then when

pregnant, 47% thought it would be okay to drink wine occasionally, and 42% said it was okay to drink beer occasionally when pregnant compared to other alcoholic beverages. In relation to information on FASD, only 35% of participants knew that all people diagnosed with FASD have brain damage, and 39% admitted to not knowing the effects at all.

From this data, we can analyze specifically the answers of the 16-17-year-old age group, and compare the participants' comfort level and current knowledge about the relationship between alcohol and pregnancy. We are able to study the reasons why 16-17-year-olds answered in the way that they did. Through graphics such as Figure 1, we can see who people

feel most comfortable talking to about sensitive topics. The analysis of this data tells us how much people really understand drinking in pregnancy.

The age group of this poll was 16-25, and we split those ages up into 3 sections to analyze further: 16-17, 18-21, and 22-25. Of these 3 age groups, the 16-17-year-olds had the highest percent of participants thinking that it was acceptable to have a few drinks occasionally when pregnant. Of participants in the 16-17-year-old category, 37% said it was okay to have a few drinks occasionally, compared to 16% of 18-21-year-old participants and 25% of 21-25-year-old participants. We also found that since the beginning of the pandemic, 18% of 16-17-year-old participants have admitted to having a harder time finding access to contraception, and 10% of 16-17-year-old participants or their partners have gotten pregnant.

These findings could be because of a multitude of factors, the main one being that the pandemic has made access to general healthcare more difficult. If these young people did not already have available access to medical professionals, the pandemic definitely made it more difficult. Although participants of every age did not think that schools taught them enough about many important topics in health, this could also be due to the fact that some 16-17-year-olds have not taken the health classes offered at their schools yet. Also, 16-17-year-olds are more likely to still be living with their parents than people who are 18 and older. As we saw in the results from the poll, a large percent of people do not feel comfortable discussing these sensitive topics with or around their parents. Older people having their own space to learn information could be part of the reason that they are more informed on sex and alcohol topics.

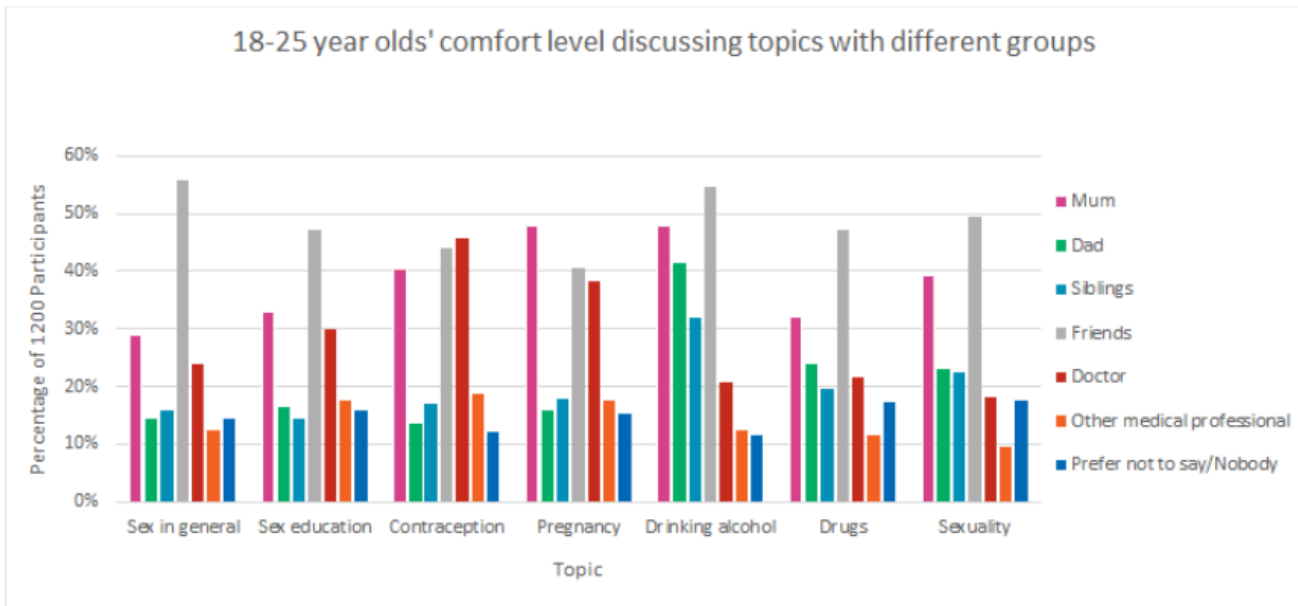


Figure 9: Graphic generated from poll data 18-25 year-olds' comfort level discussing topics with different groups

In the poll, we had a question in which we asked the participants how comfortable they would feel seeking advice about different topics from their mum, dad, siblings, friends, doctor, other medical professional, and prefer not to say or nobody. These topics included: sex in general, sex education, contraception, pregnancy, drinking alcohol, drugs, and sexuality. Figure 1 below illustrates a chart comparing the answers of these topics.

Based on figure 9, we can see that 16-25-year-olds are largely comfortable with friends when seeking advice and information for the topics of sex in general, sex education, contraception, pregnancy, drinking alcohol, drugs, and sexuality. For the topic of contraception, the category of friends was bypassed by doctor, and for the topic of pregnancy the category of friends was bypassed by mum.

Through the data results, we can see that a large percent of young people do not understand the relationship between drinking alcohol and pregnancy. In terms of knowing whether they have to give up drinking alcohol when pregnant, 30% of participants said that they did not have to give up alcohol or that they did not know. Although many people know that women should not drink while pregnant, they do not always know why or what it could cause. Although only 29% of participants either somewhat or strongly agreed that it would be okay to have a drink or two occasionally when pregnant, 47% said it was okay to drink wine occasionally, and 42% said it was okay to drink beer occasionally when pregnant compared to other alcoholic beverages. Even though they knew it was wrong to drink alcohol even occasionally when pregnant, that changed once it came down to specific kinds of alcohol. In reality, all alcohol can be dangerous in

a pregnancy, it does not matter the type of alcohol. In general, 16-25-year-olds do not know basic information on FASD as 65% of participants did not know that FASD causes brain damage in all people diagnosed.

Feedback from Focus Group with Competition Participants

The competition participants were all members of Generation Z which gave us useful information on the social media preferences for our target audience. All five of the focus group participants mentioned using Instagram, TikTok, Facebook, and Twitter as effective ways to share content. Each application has its own benefits, but a key takeaway was to group apps together. This way, the same content can be shared across multiple platforms, reaching a larger community. The participants offered an interesting perspective: they commented that they had an overall lack of trust on the information they find in social media. They noted that a lot of times, content is created just to catch your attention and is not necessarily filled with correct data, which can be misleading to the consumer. Due to the nature of social media, a lot of information gets spread around and it can be hard to decipher between what is true and what is just there to create a reaction, causing a lack of trust amongst readers. One participant even commented that at first, they did not even believe the information that was found on the National FASD or Prevent FASD social media pages. It was not until they looked further into the facts that they were able to go back and understand the information that these pages were presenting. This caused the participants to take extra time to ensure the

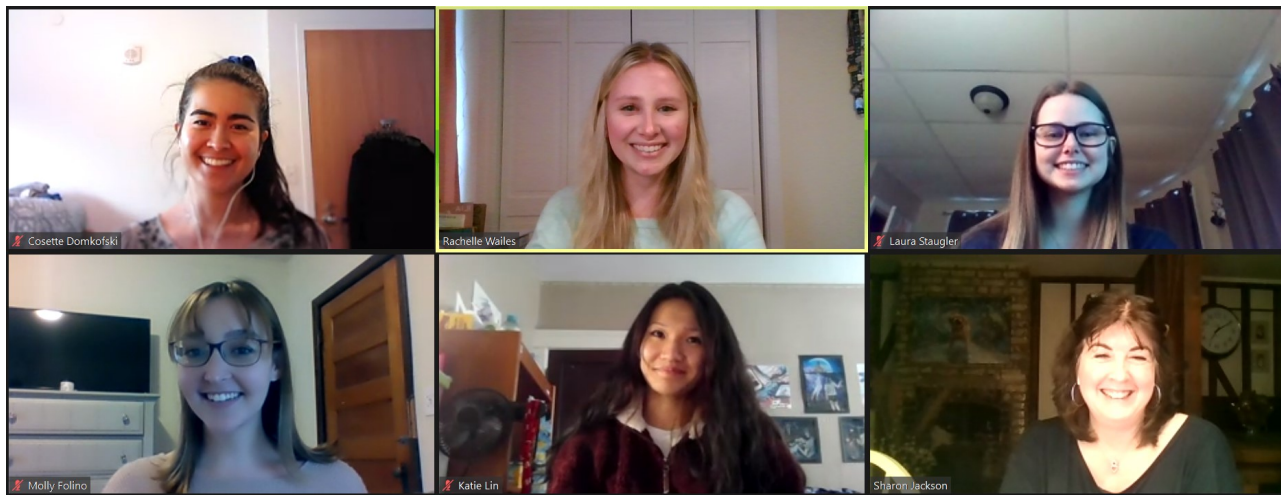


Figure 10: Screenshot from Focus Group with Competition Participants (only the student research team and moderator are pictured in order to maintain participant confidentiality)

content they created was both accurate and eye-catching.

Many of the focus group participants agreed that they did not have sufficient knowledge prior to participating in the competition. A couple of the focus group participants mentioned they were first introduced to the relationship between drinking and pregnancy in their education. However, they also agreed that they were not given enough information. In school, a few of them had learned about drinking in pregnancy in their biology classes. Others learned about it in their Personal, Social, Health, and Economic (PSHE) classes, which are classes about sex, relationships, and health. Although these classes provided some general information on drinking during pregnancy, the participants admitted that they did not feel comfortable reaching out to the instructor of the class for more information since the instructors were usually teachers of other subjects. For this reason, the participants knew that the teachers' knowledge on the subject would be limited. The participants said that the topic of smoking during pregnancy was more heavily discussed than drinking during pregnancy. This is directly related to our preconceived notion that the campaign for smoking is more well-known and promoted than the campaign against drinking during pregnancy, creating the false idea that smoking is more dangerous than drinking in pregnancy.

Due to many of the competition participants not having extensive background knowledge on FASD, they turned to the internet for more information. They found that the information on FASD was easy to find if they knew what they were looking for. Many of them believed the reason that they did not know this information yet was that they did not even know

I'M PREGNANT AND I'VE BEEN DRINKING...NOW WHAT?

Steps to take to strengthen the health of you and your baby during pregnancy

- STOP DRINKING ALCOHOL**
Seek help immediately
It can be confusing to know what the safest options are during pregnancy. The NHS states that the only way to prevent FASD is to abstain from alcohol.
- CONTACT YOUR MIDWIFE**
Speak to a midwife / GP for more information
Learn more about the impacts alcohol has on a fetus during pregnancy.
- ENCOURAGE HEALTHIER CHOICES**
Take steps to make healthier choices
Avoid further smoking or drinking throughout the remainder of the pregnancy.
- HAVE A SAFER PREGNANCY!**
Safer for both yourself and the baby
By not drinking during pregnancy, you are helping prevent FASD

FOR RESOURCES AND MORE INFORMATION, CHECK OUT PREVENTFASD.INFO

NATIONAL ORGANISATION OF FASD
PREVENT FASD .INFO

Figure 11: Infographic created to be shown as example content in the focus groups

to look for it. Once they found the information, the competition participants found it very surprising. In particular, they were shocked to find that just one glass of wine could potentially harm a fetus during a pregnancy or that FASD is more common than autism. They expected that facts as important as those would be common knowledge, because they have a drastic effect on people's lives.

Having completed their initial research, the participants were able to start creating their content. They faced many hurdles in this process including: how to best present the information, the target age group for the content, and the type of reaction they wanted to evoke. When working with such a polarizing topic, it is difficult to present the information in a way that will not offend any readers. As a result, some of the participants struggled with avoiding judgmental language while also just trying to get the main point across of encouraging others to not drink while pregnant. The type of content created also varied with the age groups they were targeting. Posts made on TikTok targeting teenage girls who may have been sexually active tended more on the preventative side, while other content targeted women who were already pregnant to encourage them not to drink for the remainder of their pregnancy. Many of these participants went for an emotional response with their content, creating poems and images they knew would evoke a shocked reaction. This not only helps to spread awareness but also encourages people to think twice about drinking during their pregnancy.

One of the participants is someone who was diagnosed with FASD, which provided us with a very unique perspective. This participant explained that they found information about FASD, and the symptoms resonated with them

and their family. They had to bring this diagnosis to the doctor, who actually did not even know what FASD was. This participant said that their diagnosis took six years, with many misdiagnoses in that time period. This showed us that the lack of information available on FASD is a detriment to people who are in need of a diagnosis.

Feedback from Focus Group with Cohort B

Cohort B revealed that while people would be willing to trust the internet, they are less likely to believe what they found on social media. However, an exception appeared to lie in official accounts or people holding similar ideas to the user's own personal perspectives. Facebook and

Twitter were identified as good platforms to post FASD content on. Cohort B shared a dissenting opinion to that expressed in the last focus group, believing Instagram would be less effective due to the nature of the posts. While Facebook and Twitter are each conducive to text posts and the spread of information, Cohort B believed it would be harder for posts to trend on Instagram and thus for awareness of the general population to increase.

Cohort B was surveyed for their reactions to the smoking campaign material. They found that Image B had the most shock value given that it seemed extremely realistic and jarring with the image of a pregnant woman smoking. A detriment to Image A (depicted in figure 12) was the fact that it seemed unrealistic in its imagery.

Image C was identified as the most eye catching given its bright coloring. It was also established as the post most likely to be re-shared due to its palatable coloring and easily digestible text. It seemed easier to read than the text in Image B (depicted in figure 12) as it was less dense and more easily understandable. It is worth noting, however, that while Image C (depicted in figure 12) was identified as the best to share on social media, Image B was something that Cohort B could easily picture on a bus stop. Additionally, Image B was deemed the most trustworthy due to the fact that it was from the NHS and labelled as such in the graphic. Due to this, Image B was the picture that would likely inspire the most action. Lastly, Image A was marked as the most memorable due to its graphic nature.

Because of their previous knowledge of FASD, Cohort B had similar reactions to smoking and drinking during pregnancy. When asked, however, why they believe there is a difference in the response by the general public, they noted that there is less knowledge about the effects of alcohol during pregnancy than there is regarding smoking. Because smoking during pregnancy has more coverage in the media and, more importantly, is discussed by the NHS, there is more of an adverse reaction to smoking during pregnancy than in the consumption of alcohol. If, however, there was more education and awareness as well as confirmation from the NHS, Cohort B believes that there would be a change in the opinion of the general public.

When shown example content that we created to be included in our blueprint for our sponsors, Cohort B reacted in a similar way to the competition participants in terms of direct feedback on the visuals. Both groups agreed that our series-style content would perform well on a

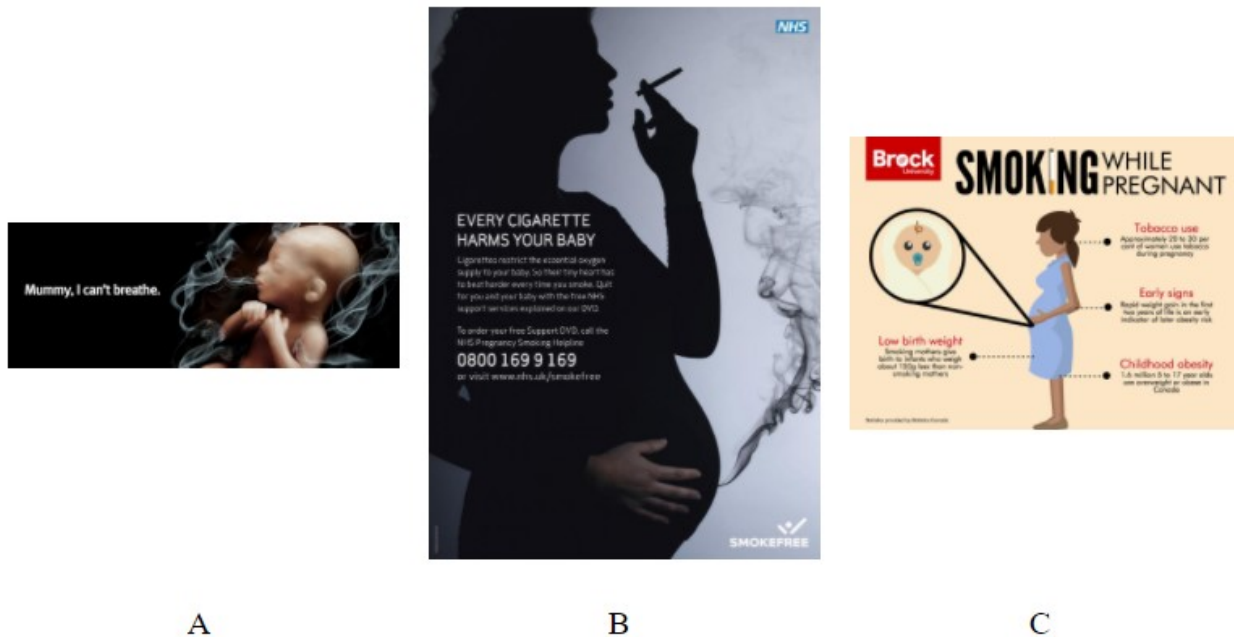


Figure 12: Images from UK smoking campaigns used in Cohort B focus group

platform such as Instagram. They also mentioned that including more visuals would help grab the audience's attention reeling them into reading through the entire post. The two groups differed slightly on whether they preferred the shock value post which took a primarily fact based approach over the scenario designed to pull at the heart strings followed by next steps to take. While the competition participants saw only the positive benefits of each approach, Cohort B highlighted the potential negative setbacks that the later approach presented at face value.

When presenting information in the form of social media content on topics that may be sensitive for some audiences and communities, we need to define where the line is that determines, in this specific case, what is considered placing blame on the women who may be drinking during their pregnancy and fostering an environment where the same woman may be able to relate to and feel comfortable seeking advice on next steps. Cohort B goes on to mention the apparent blame culture that they have witnessed in the UK and makes us wary of the harm in not using scientific terminology, especially in regards to a fetus, could cause. Overall, both focus groups allowed us to gather the necessary data to make proper changes to our example content. This will help increase awareness of the topics surrounding FASD as well as what approach will promote a nurturing environment where the target audience feels comfortable taking action and expressing their own opinions and experiences in a positive way.

Recommendations

After analyzing the results of the national poll and focus groups, we were able to come up

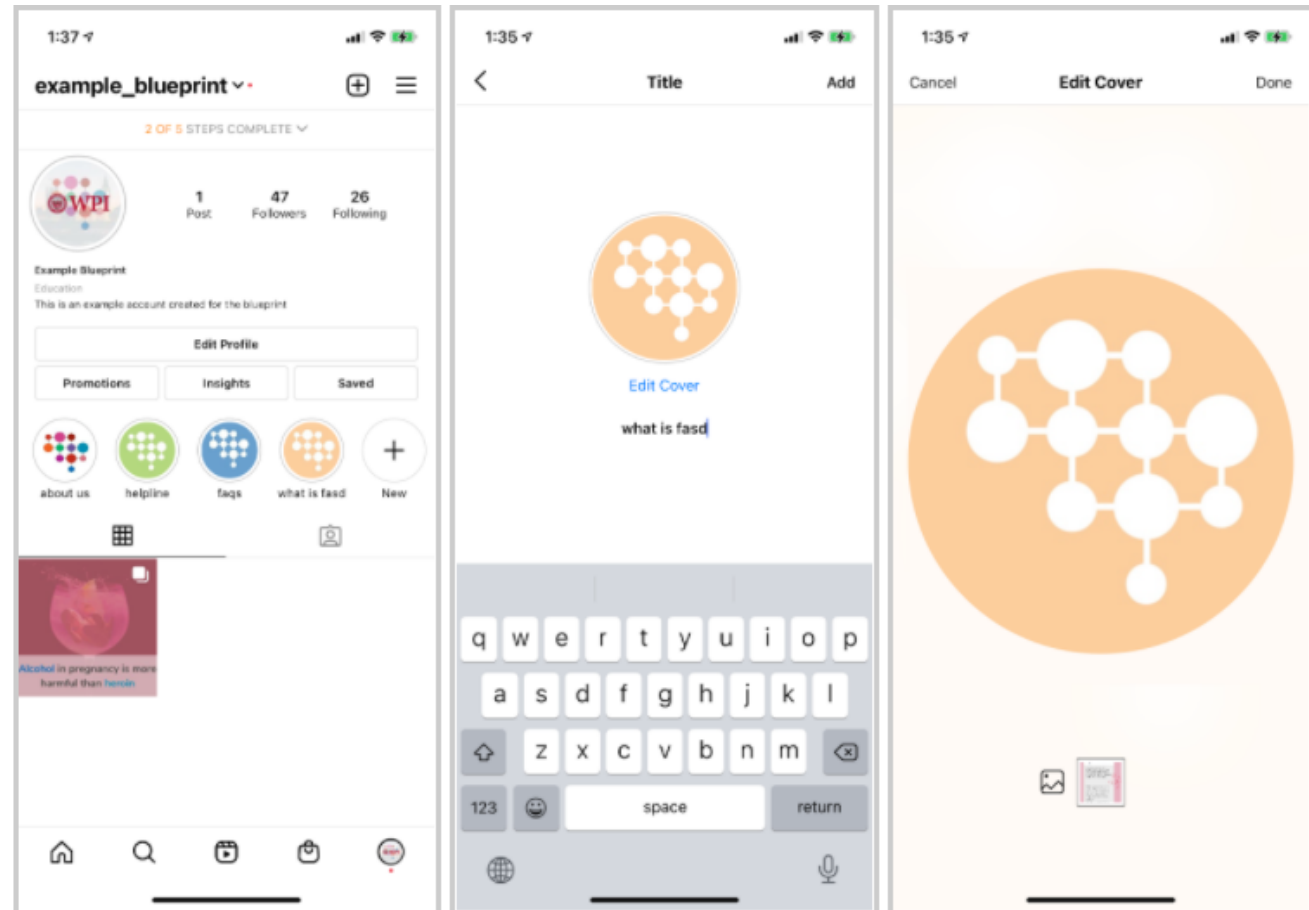


Figure 13: Screenshots of example Instagram page made to be included in blueprint

with a few recommendations that we feel would help both educate 18-25-year-olds in the UK on FASD while also providing a visually appealing and engaging learning experience. Based on the questions given in the National Poll, our results determined that Instagram is the most popular social media site among the given demographic. As a result, we feel it would be beneficial if our sponsors began utilizing this application more effectively with the hopes of reaching a larger audience and educating more people on FASD. This could be done using reposting and adding highlights. Reposts were the top choice for spreading information in the poll, followed by using stories and highlights. One way they could accomplish this is by making sure they repost their permanent posts onto the stories. When people click through the stories, they will be

notified a new post was made. We also feel that the National Organization for FASD would benefit by using highlights more regularly. On their Prevent FASD website, which is geared towards our target audience, they have a lot of helpful tabs such as the impact of alcohol, resources, and relevant news articles. By using highlights, they could mirror each tab on their Instagram page, allowing people to learn about FASD without having to go through the extra

step of going to the website. These could also encourage people to go to the website if they want more information.

Our next recommendation would be to expand their social media presence onto TikTok. They already have a following on Facebook and Twitter, but TikTok is rising in popularity and would give them access to the younger generations. One of the competition participants already has a large following of over 50,000

followers on TikTok, meaning they could be a great ally to the National Organization for FASD by posting content with the correct information on FASD to a larger audience. This would create an opportunity for others to learn about FASD while also giving those who have FASD the platform to share their stories and experiences about having FASD. A lot of Generation Z are getting the bulk of their information from TikTok now, whether it be about politics, pop culture, news, etc., so being able to expand on that site would not only help to educate the 18-25-year-old generation but would also be an entertaining way to learn the information on FASD.

Based on the data collected from the focus groups, we are also able to make recommendations on the type of content to create on social media. From the feedback we received, we found that we want our content to be both eye-catching while ensuring it is also factually correct. With there being a lack of trust in some of the content found online, we want to make sure that we are also providing clear references so people can do their own research as well. Also, including branding on the post will authenticate the information delivered. Based on the focus group done with the competition participants, we were able to learn how, in their minds, we could improve the page. The first step would be ensuring that there are helpful links in the biography of the page. By using LinkTree, a tool used for optimizing traffic on Instagram, our sponsors would be able to not only link their website for more information, but also auxiliary sites such as references and helplines. This will help to show people where they can go if they find themselves in the situation of having consumed alcohol during their pregnancy.

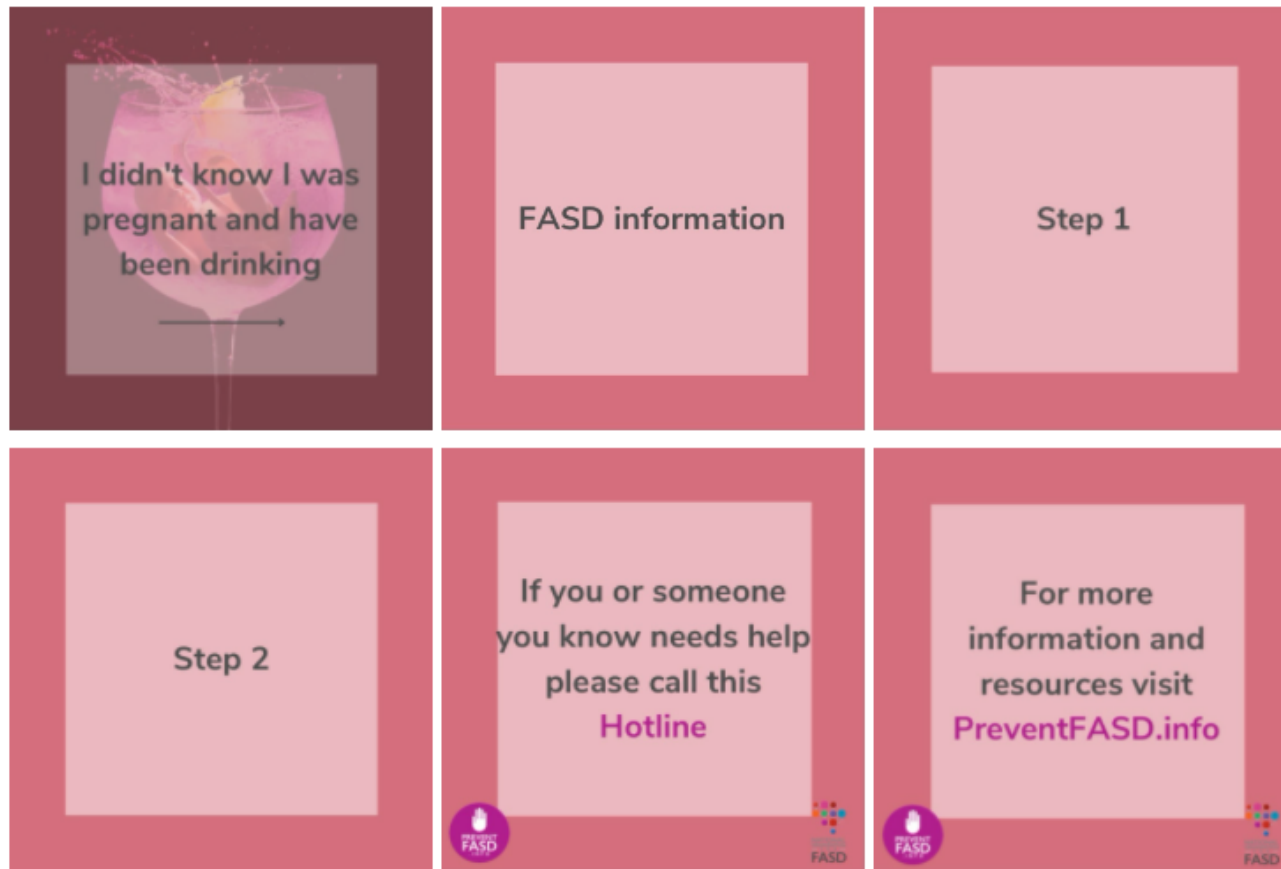


Figure 14: Images created to be shown as example content in the focus groups



Figure 15: infographics created in response to the feedback received in the focus groups

Observations

There were other points that we noted during the data analysis process that we feel could be done in order to increase awareness of FASD among the younger generations, however these

are not recommendations since they are more difficult to implement. One thing that could be done is increasing the sex-education in the schools. FASD is not currently part of the PSHE curriculum, so adding it would teach a lot of young people what the impacts of drinking during

pregnancy could be. This would help to inform these generations at an impressionable age so when they go to have children of their own, they have the correct information on how to have a safe and healthy pregnancy. Lastly, we would recommend to the National Organization of FASD that they hire a Generation Z intern to help run their social media pages. Popular content is constantly changing on social media, so while we are making recommendations based on current trends, they may not be applicable in six months. Having someone in the PreventFASD age group there to provide constant feedback on posts will ensure that the content being put out is engaging to that generation while also factual.

Original Focus Group Plan

We created a Facebook page titled, “Focus Group On British Drinking Culture.” In order to recruit potential members, we constructed a post that served as an advertisement to promote our Facebook group. This advertisement ran for a total of ten days. Once the individuals saw the advertisement and clicked on the link to join the Facebook group, they were required to answer a few screening questions to determine their eligibility. The questions that were included were, “Are you between the ages of 18-25?,” “Did you complete your education in the UK?,” and “Are you a current citizen of the UK?” If the potential members’ answers were determined to be consistent with our target demographics, they were admitted into the group.

In addition to the sponsored advertisement, some of the other ways of recruiting individuals to participate in these focus groups were by taking advantage of snowball sampling and using our own personal connections to gain access to people who live in the UK that



Figure 16: Screenshot of the closed Facebook group's homepage (2021)

fit our target audience criteria. The goal of the sponsored post was to attract around 10 people who would be interested in joining our Facebook group and participating in our focus groups. We encouraged those who joined to then invite their friends who may also be interested as a means of snowball sampling. Snowball sampling is defined as a research recruitment technique in which the current participants in a study group provide the names of potential candidates to be included in the study as well (Oregon State University, 2017). For example, one of our sponsors is enrolled in a master's course that includes 21-24 year olds who

are currently living in the UK, and she was able to not only ask her peers to participate in our study but also request that they ask other individuals in our target demographic to participate as well. By taking advantage of our personal networks we could easily get in contact with more candidates in our target audience if needed. In doing so we hope to increase the overall number of responses therefore increasing the accuracy of our data in representing the average population of the UK.

The data that we planned to collect while conducting our focus groups came in the form of two sets per cohort, one for each session. Prior to

each session, an initial survey was sent out via the closed Facebook group that focused on collecting necessary demographic data as well as basic level information about each participant's existing drinking habits without divulging the overall purpose of the study in any way. We hoped to hold the main sessions of the focus groups on Zoom, which were each intended to last about an hour. We wanted to ask each cohort discussion-based questions that led to open-ended answers. This would have required our team to record the audio of the call to be later transcribed and used as data sets. These recordings would have then been deleted in order to protect the confidentiality of each participant and would only serve their singular purpose of allowing us to accurately reflect the discussions that took place throughout each session. We would have recorded the personal opinions and reflections of each focus group participant in order to understand how our target market best receives information in the form of social media content. Any direct quotes that would have been included in our final focus group data sets would have been de-identified to the participant's comfort level. These quotes would only have been kept if we had full consent from the participant. The data that we hoped to collect from each cohort's first session would have directly impacted the social media content created for the second session. Overall, we hoped the data sets collected from the focus groups specifically, would allow us to create the best project deliverables. We had hoped to create a finalized blueprint from these data sets that would serve the main purpose of increasing the public's awareness of FASD by further understanding the impact different content has on our target audience and in turn our sponsor's target population.



Social Media Blueprint

Updated: 03.18.2021

2021 IQP Student Research Team
Worcester Polytechnic Institute

Figure 17a: Social Media Blueprint front page

Introduction

In this social media blueprint, we will be discussing the multiple ways to reach a younger audience, specifically Generation Z, on various social media platforms as well as including tips on how to create and post content. This blueprint will serve as a manual to guide you through the process of posting and creating content with the findings of our research in mind. This manual can serve as a starting point for creating content and can also be passed on to another project team to update and expand upon further.

General Recommendations

Here are some of the general recommendations we have based on our research. We will discuss how we think it would be best to actually implement these recommendations in later sections of this manual.

1. **Use Instagram.** Results from the National Poll (February 2021) and the focus groups show that Instagram is highly popular amongst 16-25 year olds. Focusing social media content on Instagram will aid in effectively reaching this age group.
 - a. **Mirror PreventFASD website using Instagram Highlights.** Mirroring the tabs seen on the PreventFASD website would help highlight important information about FASD and will be easily accessible in this format.
2. **Expand presence on TikTok.** Due to TikTok's rising popularity in the target age group, we believe this would be a great way to reach the younger generation and spread messaging about FASD.
3. **Use branding on posts.** Using official branding on social media will help in increasing the trust young people have on the content that the organization puts out.
4. **Include hotlines and resources.** Include hotlines and resources both in posts and in places where people can actually press the links (ie. the Instagram bio).
5. **Utilize LinkTree.** LinkTree will enable you to provide access to links via one single link. This allows you to use one link in a bio to provide access to multiple websites and resources.
6. **Integrate onto multiple platforms.** Using the same content across multiple platforms is a good way to spread messaging and reach a broader amount of people. For example, TikTok content can easily be added to Instagram as Instagram Reels.

Figure 17b: Social Media Blueprint page 4

Due to the lack of participation and reluctance to join our Zoom call for the Facebook group, the discussions instead took the form of text posts. Participants were asked to react to smoking and pregnancy messaging as well as their opinions regarding alcohol and pregnancy by responding to the respective posts. However, because the responses were low in volume and did not introduce anything novel to the findings we had received from other focus groups, we decided to omit the data from the study. It is our belief however, that should another group pick up where we left off, focus groups with individuals not connected to the FASD community would be beneficial.

Future Directions

Another avenue that we originally thought would serve us well in gaining a more personal perspective into the lives of both those directly affected by FASD and their caretakers are interviews. Individual interviews would have allowed us to record responses in more detail solely due to the nature of interviewees being given the chance to elaborate on their current personal experiences as well as possible preconceived notions about their understanding of this life changing disorder. We would have conducted these interviews in a semi-structured manner in order to acquire specific information that would have allowed our team to analyze and compare experiences across the board. This method would have also enabled us to maintain a level of openness that would allow for the interviewees to talk about specific topics that they personally wished to address and disclose. We anticipated that we would collect data on the accommodations that the caretakers must undertake in order to alleviate some of the daily

hardships and challenges that come with FASD. These interviews were planned to take place over Zoom in order to follow all COVID-19 guidelines. Due to time constraints of the project dates we did not get the chance to collect data through this method. The data that we did collect through the national poll and focus groups provided the information and answers needed to complete our project. However, if we had more time we would have liked to explore this avenue of employing interviews with those directly affected by FASD and their caretakers. We recommend that with the continuation of our sponsor's research they take advantage of this data collection method in order to have a more personal perspective on the topics discussed in the focus groups we conducted.

Summary/Conclusion

While FASD is preventable with the abstinence of alcohol during pregnancy, there still remains a significant proportion of the UK's overall population that is directly affected by it every day. Through the use of focus groups and a national poll we were able to assess the current knowledge of FASD and brainstorm ideas for effective messaging. Our goal was to educate individuals between the ages of 16-25 years old on FASD in order to prevent its spread. Using the data we collected we were able to develop a social media blueprint for our sponsor to spread their message easily and effectively to their target audience.

Acknowledgments

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