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### **ABSTRACT**

Illicit Adderall use has long been acknowledged by the media. Despite its acknowledgement, students are still facing the challenges that come with illicit Adderall. The objective of this study is to allow students to express their own thoughts and opinions regarding illicit Adderall use and to broaden the types of experiences that are being reported. Interviews were conducted with seven college-aged students from a small university in Rhode Island. Three females and four males, 100% identifying as white, were asked a series of semi-structured interview questions. Interviews were conducted anonymously and held via Zoom on a private, password-protected computer. Interviews were recorded, transcribed, and thematically analyzed using Grounded Theory. The qualitative data gathered in this study allowed for a better understanding of the college students' experience with illicit Adderall. Interviews revealed the need for further research regarding illicit Adderall use on Bryant University's campus. Suggestions for improvements in Bryant University's handling of illicit Adderall use will be discussed throughout the research paper.

### INTRODUCTION

ADHD, otherwise known as attention-deficit hyperactivity disorder is a behavioral condition which can impact a person's ability to remain attentive. ADHD can cause trouble staying organized, impulsiveness, and can cause someone to be irrational about their future (2020). The complete cause of ADHD is unknown; however, some believe genetics and environmental factors may contribute to the condition. Known aids for this condition include prescription stimulants, such as Adderall. Adderall is defined as a, "single-entity amphetamine product combining the neutral sulfate salts of dextroamphetamine and amphetamine, with a dextro isomer of amphetamine saccharate and d, I-amphetamine asparate," (Durbin, 2019). Amphetamine and dextroamphetamine are both nervous system stimulants which help control hyperactivity and impulse control by impacting chemicals in the brain (Durbin, 2019). Adderall is used to treat ADHD as well as patients with Narcolepsy since it works to enhance concentration by stimulating the production of dopamine and norepinephrine (Schiffner, 2010). Norepinephrine is a neurotransmitter that plays an important role in assisting the brain with memory, alertness, interest, and mood (Dellwo, 2020). Dopamine is also a neurotransmitter that can help regulate learning, movement, and emotional responses, and it assists the brain by helping to regulate mood, attention, and motivation (Conrad, 2020). The combination ultimately produces a more stable and concentrated mind in patients. Some refer to the drug as "addy" or "pep pills', and when used illicitly, are most often used as a party drug or as a study aid. The average rate of illicit prescription stimulant use among US college students is 15% and for some colleges, up to 40% of students report illicit use (Benson, 2015). These rates are related to the relatively high rate of ADHD diagnoses and prescription stimulants sold in the United States. As of 2011, 11% of all children aged 4–17 in the United States had been diagnosed with ADHD (Visser, 2014).

The high numbers of Adderall users have led to the experience of Adderall being reported in various forms of media. Whether it be in a documentary, article, or school pamphlet, Adderall tends to be reported by the numbers or in a negative light. Mainly, this is because the majority of Adderall reporting relay a warning message about illicit use. In this study, participants will

have free ability to describe their personal experience with Adderall. In doing so, this study aims to broaden the types of Adderall experiences that are being reported and allow the conversation of illicit Adderall use to involve all persons and different types of experiences to create a more complete picture of the Adderall experience on a college campus.

### LITERATURE REVIEW

The use of Adderall in college-aged populations is a well-researched topic. From Netflix documentaries to scholarly research articles, this has been an area of interest for many different audiences. In my search to figure out how the experience of using Adderall manifests itself in a creative outlet, I have yet to find a single study that captures the experience of Adderall through diverse narratives or a study that provides students with an environment to be completely transparent about their experience.

Exactly what causes a student to illicitly use Adderall is unknown, however, a 2019 study sought to explore the effect of social culture on student's views of taking unauthorized stimulants (Cooper et al., 2019). Their research was, "based on analyses of 35 semi-structured interviews conducted in 2014 with undergraduates of a small private liberal arts college in the Northeastern United States," (Cooper et al., 2019). In conducting open-ended interviews, the researchers asked participants, "about their knowledge of stimulant medications, their views of illicit stimulant use on campus, and their personal experiences of stimulant use. Because we wanted to understand student views on the moral acceptability of illicit stimulant use, we specifically asked: "Do you think using ADHD medications without a prescription or not as prescribed is immoral?" and "Do you think using them illicitly to boost one's academic performance is a form of cheating?" (Cooper et al., 2019). In their analysis, they found that students were both for and in opposition of the use of stimulants. Some had argued that "stimulants gave illicit users an unfair advantage on tests and assignments, while others vehemently denied this," (Cooper et al., 2019). Attempting to further understand the polarizing opinions, further investigation was done to explore the reason for this. They stated, "Our analysis suggests that when college academics are perceived a zero-sum game with consequences for one's future prospects, unauthorized academic stimulant use takes on a

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moral valence relevant to that view of reality" (Cooper et al., 2019). Ultimately, their conclusion was that the perspective of the student either viewing college as a competition or as an individual feat-where actions would suffer either reward or ramification in the future-lead students to form their opinions. This study demonstrated that views were formed more from an individual perspective than a cultural perspective. As one of the first in-depth studies using both previous illicit users and non-users to generate information, this study changed the view that students who were taking the drug did not have moral issue with doing so. Their findings pointed out that even students who were taking Adderall had regarded their illicit drug use as unacceptable. This study was limited because it lacked additional questioning to explore individual reasoning for using illicit Adderall more in-depth. Had they been able to track the characteristics of an illicit user more accurately, perhaps they might have been able to paint a fuller picture of its use on college campuses.

Back in 2009, a study was conducted at the University of Rhode Island to investigate the use of prescription and non-prescription stimulants on its campus. This study entitled, "Nonmedical Prescription Stimulant Use Among a Sample of College Students", used a sample of 390 college students (71.6% female, 28.4% male). Participants completed a series of five questionnaires concerning a multitude of topics such as demographics, prescription stimulant use, internal restlessness, sensation seeking, and psychological distress. Their results were as followed, "regarding nonprescribed stimulants, 7.5% reported use within the past 30 days; 60% reported knowing students who misused stimulants; and 50% agreed or strongly agreed that prescription stimulants were "easy to get on this campus," (Weyandt, 2009). Additionally, their findings showed that there was a relationship between psychological distress, internal restlessness, and stimulant use. This study demonstrated that the prevalence of stimulant use was high on college campuses but was unable to find a concise correlation between specific characteristics and illicit use. Another study demonstrated that, "poor mental health, high levels of stress, and characteristics of perfectionism and sensation-seeking" were factors that led college students to use prescription stimulants (Lueck, 2019). The above-mentioned studies bring forth evidence that factors such as psychological distress, social culture, and internal restlessness may play a factor in

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determining illicit use of stimulants. However, none of these studies were able to find an isolated reason as to why students were using Adderall illicitly.

Some explanation for Adderall use may come from Jodi Dworkin of the University of Minnesota who explored "Risk Taking as Developmentally Appropriate Experimentation for College Students". In her study, Dworkin aimed to uncover the reason students take risks (such as using illicit drugs). She used a stratified sample of 12 community college students and 20 university students to interview. In face-to-face interviews, she completed a brief background questionnaire and a checklist to assess how frequently the students participated in a variety of experimentation (risky) behaviors such as sleeping around, drinking alcohol, and using Adderall and other substances. In her conclusion, Dworkin stated that students "described experimentation as an active process of figuring out who they are and what they are capable of through making intentional and deliberate decisions," (Dworkin, 2005). She also stated that students "described a deliberate process of trial and error, taking a chance, or a risk, to see what would happen," (Dworkin, 2005). She found that the level of risk students were willing to take reflected their views of what was acceptable. She uncovered that knowledge and preparation before participation in a behavior influenced their personal opinions. Most interestingly, she concluded that:

Both university and community college students explained that many things contribute to college students' high rates of participation in risk behaviors, such as drinking alcohol, using substances, and sexual activity. Emerging adults said that participation in risk behaviors and the development of a college culture was most influenced by independence and living away from their parents, or at least spending significantly more time away from their parents. Most students reported having few real-world responsibilities (Dworkin, 2005).

This study provided possible reason for increased Adderall consumption on college campuses. In exploring this concept, Dworkin demonstrated that on top of the other characteristics thought to be contributing to Adderall use, perhaps freedom and lack of responsibility could also be influencers. Although this study does not provide a blanket reasoning for Adderall use, it adds to the conversation of Adderall as being a means to unlock a new world and explore one's self- identification.

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Furthermore, additional studies such as "Adderall Usage Among College Students" by Nathaniel Girer, et al. and "Illicit Use of Prescribed Stimulant Medication Among College Students" by Kristina M. Hall, et al., sought to uncover other contributing factors to the college Adderall epidemic. In the first study "Adderall Usage Among College Students", college students were surveyed to uncover motivation for illicit drug use. It stated that students reported other factors they believed to be hindering their academic performance in exception of ADHD or ADD, "The most popular factor was a lack of motivation. Other factors reported were poor knowledge base, inability to process information, negative attitude, and lack of interest," (Girer, et al., 2011). Interestingly, this study unlike the others, asked students directly to think of reasons for poor academic performance and ultimately illicit Adderall use. In doing so, students were able to self-reflect and give insight into why and how they personally justify their usage of Adderall. In the study "Illicit Use of Prescribed Stimulant Medication Among College Students", the authors wanted to explore the extent of the illicit Adderall epidemic at a Midwestern University. Using a questionnaire, they explored the numbers of students who were using stimulant medications. In their findings, they concluded that: 17% of 179 surveyed men and 11% of 202 women reported illicit use of prescribed stimulant medication. 44% percent of surveyed students stated that they knew students who used stimulant medication illicitly for both academic and recreational reasons. Students reported they experienced time pressures associated with college life and that stimulants were said to increase alertness and energy. Regression analysis revealed that the factor that predicted men's use was knowing where to get easily acquired stimulant medication, whereas the main predictor for women was whether another student had offered the prescribed stimulants. (Hall, 2005).

These results are similar to a study titled, "Pulling an all-nighter: current trends of college students' use of Adderall" by Panayiotis Zavos. This study published in 2016 aimed to investigate Adderall's increasing popularity on college campuses. After investigating 141 college students at a Midwest college, they found that "the following students have experimented with Adderall as a study aid: 51% of seniors, 31% of juniors, 16% of sophomores, and 19% of freshman. The investigators also found that males were significantly

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more likely to use Adderall as compared to female students. There were no significant differences between athletes and non-athletes, and "Greek" and "non-Greek" students in terms of Adderall use," (Zavos, 2016). The gender ratio is relatively consistent for all previous or additional studies. Overall, these studies offer a further look at Adderall and its reach and use on college campuses. They exemplify the common theme of large number of users on college campuses. Additionally, they expand the conversation by bringing in additional factors that may contribute to usage such as time pressures and a lack of interest in their academics. The study by Zavos was able to refine these large numbers by breaking them into categories. Interestingly, males seemed to have a heavier usage and likelihood for usage rate in two of the three studies. Although this provides a bit more insight into the demographics of illicit Adderall users, this study still did not provide a platform for students to express how Adderall makes them feel and how they feel about their individual experience.

Further investigation into the Adderall epidemic led me to uncover the root of the negative conversation surrounding Adderall. In an article titled, "Pharmaceutical Marketing and the Invention of the Medical Consumer", Kalman Applbaum writes about how a product such as Adderall, can land in the hands of so many illicit users. He writes, "in a consumer society, we see ourselves as individuals and as free agents when we exercise consumer choice, it is not difficult for pharmaceutical companies and other privatized health-care deliverers to convince us that it is empowering to think of ourselves not as patients but as consumers. This conversion from patient to consumer also paves the way for the erosion of the doctor's role as expert," (Applbaum, 2006). He explains that as we become more able to access information on drugs that may serve as a solution, we become set on self- diagnosing and self-prescribing. The debate is on-going about whether the inclusion of the consumer into the distribution channels of drugs is ethical. As we become aware of more solutions to help with more issues, we become eager to satisfy and do so with speed. Whether or not this is healthy in the long run, we do it because we feel a sense of satisfaction. With this, one can view Adderall as a solution to a lack of interest or to a pressured time schedule, or even to restlessness. Whether self-prescribing is healthy or not, we often choose this route because it satisfies our need to be a more perfect version of ourselves even if drugs are not the only viable solution. Ultimately

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this article expresses these arguments and shows that even though we are given choice in the pharmaceutical industry, our health still lies in the hands of corporate marketers who can develop any small, relatable health problem and turn it into astronomical sales. However, when it comes to Adderall, Applbaum limits this argument since Adderall is taking over college campuses without needing heavy marketing campaigns- it's doing so through the word-of-mouth tactics.

The conversation of Adderall use in the media tends to focus on warning stories meant to deter future illicit users. This holds true for the Netflix documentary "Take Your Pills". Seeking to answer why the use of illicit Adderall has spiked, the documentary includes interviews and follows previous users of the drug. Interview after interview, Adderall is acknowledged as a tool to accomplish a higher performance rate. "Take Your Pills", explained to viewers that the spike was caused by a desire to do better as competition became stronger. College senior, Jasper Holtz-Teza and Former NFL Player, Eben Britton, describe their use of Adderall as a reliant relationship and its use as necessary to perform. Dr. Anjan Chatterjee, the chair of neurology at the University of Pennsylvania, described, "When I was in college, people did drugs to check out. Now, people do drugs to check in" (Netflix, 2018). This statement would seem to hold true following the repetitive message of Adderall as an addictive poison. However, limiting to the documentary was diversity of interviewees. Each one was addicted and now recovered from Adderall which carried the narrative into a seemingly cautionary tale to young adults. Ultimately, the documentary provided a platform for Adderall users to express their experience. However, each of the documentary's participants' experiences all followed a very similar narrative and had a common story which tended to paint Adderall strictly in a negative light.

College campuses are arguably a breeding ground for drug-sharing and self-diagnosed-prescription-taking. From first-hand experience, students who start taking the drug illicitly do so because of the advantages they hear of and see with their peers. In an article entitled, "The Adderall Advantage" by Andrew Jacobs, different experiences of Adderall users are described. Libby, a writing major at Columbia who was diagnosed with A.D.H.D. in the first

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grade, is a typical drug dealer who sells her Adderall to strangers or to friends. Libby stated, "the demand during exam week can get intense, I'm constantly being bombarded with requests, people can get desperate," (Jacobs, 2005). She added that "as a kid, I was made to feel different for taking these drugs, now it's almost cool to take them," (Jacobs, 2005). Jacobs points out that numerous mental health counselors have noted that the hundreds of thousands of children who were diagnosed with A.D.H.D in the early 90's, are now attending college. Additionally, Jacobs states that, "Dr. Robert Herman, a staff psychiatrist at the University of Maryland, College Park, says he regularly sees students whose grade point averages rise markedly after taking the prescription," (Jacobs, 2005). Jacobs writes, "Columbia administrators referred to Dr. Laurence Greenhill, a clinical psychiatrist at the university, who said that the idea that Adderall is a performance enhancer is a myth, it won't increase your intelligence, it just increases your diligence," (Jacobs, 2005). Stimulants such as Adderall are far less dangerous than cocaine or methamphetamines. According to the Shire Pharmaceuticals Group, who makes Adderall, "medical research has found it has no potential for addiction. But Adderall, like many other medications, can interact with other drugs and create problems, particularly when taken in other-than prescribed dosages," (Jacobs, 2005). He concludes that for students, Adderall is not so much a health issue as it is a fairness issue. While some students continue to see Adderall as an unfair performance enhancer, others like John, an economics major raised in a conservative Midwestern culture, see their views change as they enter more competitive education systems then in their younger years. John states, "the environment here is incredibly competitive, if you don't take them, you'll be at a disadvantage to everyone else," (Jacobs, 2005). In conclusion, this article provides the most realistic experience of Adderall on college campuses. It explores personal stories as well as professional opinions. Additionally, a 2016 study found that academic dishonesty had some correlation to the abuse of prescription stimulants (Gallucci, 2016). This study found that, "concerning specific academic dishonesty types, misusers reported copying off someone else's homework, having someone copy off their homework, and using the internet to commit acts of dishonesty more frequently than those who do not engage in the misuse of prescription stimulant medications," (Gallucci, 2016). This study highlighted the issue between Adderall abuse and academic dishonesty.

While the moral debate of illicit Adderall use continues, competitiveness and an immediate advantage continue to contribute to the use of Adderall among college students. There is so much to be explored within this topic, but unfortunately the information seems to come in two forms- either in a single-story media presentation, or in an inconclusive study that presents more questions than answers. In this study, I will seek to add to the academic conversation surrounding Adderall by leaving the narrative in the hands of Adderall users themselves. In doing so, and in allowing participants to express their experience through an anonymous interview, perhaps further conclusions will be made about the negative or positive impact Adderall use has on users, and ultimately if the drug use is being accurately portrayed in the media. Although demographics, interviews, and statistics can tell some of the story, expanding the data collection to involve conversations with current college students will bring into play emotion, personal feeling, personal experience, and possibly an explanation for why this "study drug" has become the golden pill for college students.

### **RESEARCH QUESTION**

Previous research has demonstrated the presence of illicit Adderall on a college campus in Rhode Island (Weyandt, 2009). Additionally, research shows that students have described a diverse experience with Adderall and illicit Adderall (Cooper, 2019). After conducting research on the Adderall experience, the following research question is proposed:

RQ: What is the Adderall experience for Bryant University students?

### **METHODOLOGY**

### **Participants**

This study conducted interviews with college-aged students about their experiences with Adderall- both illicit and non-illicit experiences. Interviews of 7 students enrolled in undergraduate programs at Bryant University were conducted from March 8, 2021 to April 12, 2021. All students identified as white and were all in the age category of 18-23. 3 participants were female and 4 were male. 5 participants had been prescribed Adderall at

some point in their life. 1 student had only used Adderall illicitly, and 1 student had been prescribed Adderall and used illicitly.

#### Recruitment

College students from undergraduate courses and word-of-mouth were recruited from Bryant University. An email was sent out by faculty describing the study and asking students in their classes to participate. Students who participated were entered in a drawing for a \$25.00 amazon gift card. After students reached out to the researcher, a 30-minute time block was scheduled for the interview. All procedures received prior approval from the university Institutional Review Board.

### **Interview Procedures**

Interviews were conducted in a private, password-protected Zoom room on a password-protected computer. Additionally, participants were assigned a number to ensure confidentiality and privacy. All interviews were recorded by Zoom and downloaded to the private computer. Prior to the interview, participants filled out a demographic questionnaire on Qualtrics using their assigned number to protect confidentiality (see Appendix A for demographic information). The demographic included their age, gender, level of education, and their race.

The interview comprised of a prepared set of open-ended questions and some closed ended questions to identify their type of Adderall use (see Appendix B for an outline of the interview questions). The first section of interview questions asked participants whether they had been prescribed Adderall or not. If they had been, they were then asked a series of questions regarding their experience with Adderall both personally and on Bryant's campus. If they had not been prescribed Adderall but had used Adderall illicitly, they were asked a series of questions regarding their decision to use, how it made them feel, and how they perceive others who use Adderall illicitly.

### **Analytic Procedures**

**Data preparation.** Following all the interviews, the recording was saved to a password protected computer. The in-depth interviews were transcribed initially by Sonix, a

transcription software protected by a username and password and then checked by the researcher to ensure that the interviews had been transcribed verbatim. Numbers were used as participant identifiers to ensure confidentiality. No personally identifying information was included. During the transcribing process, the interviewer repeatedly reviewed the recordings (about three times), while transcribing each interview and read the written transcripts multiple times to prepare the interview for analysis.

Coding and constant comparison. A thematic analysis was followed to analyze the transcripts. With the thematic analysis, the researcher was able to identify and analyze data with various aspects of the research objective in mind. Thematic analysis allowed the qualitative data to be analyzed while preserving the detailed data that may have become lost during a different analytical procedure. The researcher conducted the data analysis beginning with an identification of four meaningful themes that emerged from the 7 interviews. The coding process followed Glaser and Strauss' Grounded Theory (1967), which allowed for objective and analytic data coding (Klose, et al., 2017).

The coding process began with open coding. During this process, the researcher analyzed the transcripts to assign codes/labels to parts of the data. While looking at the assigned codes, the researcher continuously referenced the transcripts to ensure accuracy and frequency. Once the data was initially analyzed, the researcher identified four main themes that were consistent amongst all interviews. These themes included personal experience with Adderall, perceptions of the media's portrayal of Adderall, thoughts about and knowledge of illicit Adderall use, and what student's wanted Bryant to know about illicit Adderall/ suggestions for Bryant to improve its handling of illicit use. After these themes emerged from the data, the transcripts were analyzed four times (once for each theme), and data was coded into subcategories of a theme. The themes were created inductively and were strongly tied to the data since they had been derived from the data. The interview transcripts were revisited constantly to ensure accuracy of the emerging themes and categories. This process was done four separate times with each theme in mind. The following is an example of the open coding process:

"I definitely think they should take it more seriously because I have definitely witnessed like kids abuse Adderall at college to study for an exam and everything along those lines. So, I think that it should be brought up in schools. It is a pretty serious drug, and it definitely should be mentioned, and the students should be told how to not abuse the drug."

In this example, the researcher has identified and labeled data relevant to the research question and to one of the four main themes that had been identified after initial analysis of the interviews (suggestions for Bryant to improve its handling of illicit use). This quote will then be identified into the subcategory of Bryant is responsible for illicit Adderall and why, under the main theme of suggestions for Bryant to improve its handling of illicit use since it is talking about how Bryant needs to take the issue more seriously.

Take it more seriously

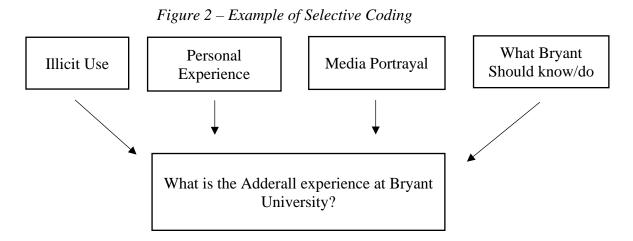
I have witnessed kids abuse Adderall

Bryant is responsible for illicit Adderall use on its campus and should do something about it

What Bryant should know/do about illicit Adderall

*Figure 1 – Example of Coding* 

In the last phase of the coding process, selective coding was used to focus on the most important categories. This process was conducted for each theme. This stage of the coding process allowed the researchers to ensure the codes and themes were relevant to answer the research question. By continually assessing the data, codes, and themes, the researchers reached theoretical saturation.



The analytical procedure ultimately allowed the researcher to identify important and rich text that was crucial in answering the research question.

### **RIGOR**

Throughout the coding process, the researcher used several techniques to ensure rigor. Rigor criterion includes: (1) confirmability/auditability, (2) credibility, (3) fittingness/transferability, (4) utility, (5) verisimilitude. Confirmability or auditability includes documentation of the researcher's thinking and decisions. This was done through several pre-data preparation documents. Next, credibility was achieved by interviewing various groups to answer the research question. For this research study, in-depth interviews were conducted with college students to compare their perspectives and insights regarding Adderall and illicit Adderall at Bryant University. Next, fittingness or transferability refers to the possibility that the study's findings would be applicable to another research study. For this research study, the data could be used in outside contexts because of its accurate and rich descriptions of research findings. Further, this research study achieved utility through thick descriptions because the findings produced knowledge that will allow Bryant to address illicit Adderall issues on its campus. Finally, verisimilitude refers to writing that seems "real" and "alive" through transporting the reader directly into the world of the study. Verisimilitude was achieved through a detailed description of the study as well as detailed examples to transport the reader into the study.

### **RESULTS**

The collection of qualitative data from this study broadened the reporting of student's experiences with Adderall on a college campus. Through the research, this study was able to accomplish objectives including 1) explore how students experience Adderall at college 2) explore how students felt about illicit Adderall use 3) ask students to identify solutions to illicit Adderall use and 4) help Bryant University better understand its students and how Bryant University can help them better excel in academics. The results for this study will be broken down by the four themes that were derived from the initial analysis.

### Theme 1: Personal Experience with Adderall

To start, we will look at the first category, personal experience with Adderall. After analyzing the data, four categories emerged under this theme. The first was the negative side effects associated with Adderall. Students discussed a lack of appetite (participants 5,7), irritability (participants 5), tiredness (participants 5,7), and hyperawareness (participant 3) that they experienced while taking Adderall. This category ultimately covered any data that was coded by mentioning of side effects or negative experiences with taking Adderall. Participants mentioned negative side effects of taking Adderall such as, "I definitely became kind of more irritable". One participant also mentioned the fact that the wished they did not have to take Adderall due to the side effects, stating, "I wish I didn't have to take it." Participants also mentioned not being able to express their authentic self while taking Adderall and having poor sleep.

The second category that emerged was increased focus or productivity. Data for this category was derived from participants' mentioning of being able to better focus while using Adderall or noticing an increase in productivity while on Adderall (participants 1,2,3,4). Quotes from this category included participants saying that when taking Adderall, "I could focus, and I actually kind of cared and wanted to learn more than I did previously." Additionally, this category derived from a participant commenting, "I sat down and was like wow, I love this feeling. The next time I have a bunch of homework to do, I definitely think I could not do it without this". Ultimately, this category demonstrated that students who were using Adderall, both illicitly and as prescribed, noticed an increase in focus.

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The third category under personal experience with Adderall was students who reported that they were taking Adderall for the sake of getting through school as mentioned by participants 1,2,5 and 6. This category is important to mention because it highlights a potential reasoning as to why students take Adderall illicitly and highlights the stresses that school, particularly college, can put on students. In this category, statements such as, "I kind of hate it, but I take it just to get through school" and "These meds are helping me get through college" were reported.

The last category under personal experience with Adderall is students who reported no side effects from taking Adderall. Only mentioned by one participant, participant number 6 reported that they did not have many side effects occur when taking Adderall. In this category, were also quotes where students mentioned that Adderall simply did its job (participants 1, 2, 3) and nothing more.

### Theme 2: Thoughts on Illicit Adderall Use at Bryant University

This theme covered five categories. The first was the overwhelming knowledge of illicit Adderall use at Bryant University. Every participant except for one (number 7) had awareness and acknowledgement of illicit Adderall use happening on Bryant's campus. One student stated, "In college, I have met a lot of people who take Adderall like 3 a day and definitely overuse it instead of working on themselves and other ways to make themselves more productive." This is important to highlight since there has never been any data reporting the number of students using illicit Adderall on Bryant's campus and the fact that 6/7 students reported knowledge of illicit use lends some perspective on the sheer size of the illicit Adderall issue.

The second category covered students who had first-hand experiences with illicit Adderall use. One student acknowledged that they had been asked by other students for their Adderall. Additionally, two participants (participants 2 and 6), had acknowledged their own use of illicit Adderall. An important quote from this subcategory is, "I almost felt like it would be the same as borrowing an aspirin or ibuprofen". This student felt a though their use of illicit Adderall posed no risk or danger to their health.

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The third category encompasses negative comments about illicit use and participants who had negative feeling about those who use illicitly. This category was created from mentions of feeling angered or feeling like student who used illicitly were being given an advantage, "I can see how it would be a little bit angering for people, especially when they feel like even if they're taking all of those steps, they're still not at the level that everyone else is."

Participants mentioned that they did not like that students were using illicitly, some reported that students had asked them for some of their own prescription (participants 3, 4, 5), and some were concerned about the health of those students who used illicitly due to the side effects and issues that can arise from taking a medication that is not prescribed to you (participants 1, 4, 7).

The fourth category was derived from participants 5 and 6 who reported that they were unbothered by the illicit use they witnessed. Participant 7 was the only participant who did not have knowledge of illicit Adderall use on Bryant's campus.

The fifth category under illicit Adderall use includes reasons participants felt that others used Adderall illicitly. Participants felt that procrastination was a big factor when it came to using Adderall. Some reported that cramming leading up to an exam led students to use illicitly, "Many people take it as an excuse, like "I haven't studied, I have procrastinated the whole semester, so I might as well pop another one eight hours before the exam to see what happens". Others reported that using Adderall illicitly was trendy and because of that, led students to use illicitly.

### Theme 3: Thoughts on Media Portrayal of Adderall

The third theme covered is how students felt about the current media's portrayal of Adderall. The first category under this theme was that participants felt as though the media should talk about the potential dangers of using Adderall illicitly and that it should issue warnings against illicit use (participants 1, 3, 4, 7). One student stated, "I do think that some concern is good because I've seen a lot of people misuse or overuse it."

The second category encompassed remarks about how participants felt as though the media exaggerates the negative side of using Adderall. One student said, "It's highly addictive and

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it's dangerous, but at the same time, I do feel that it is less dangerous and not as bad as they (media) stress it to be." Additionally, one student felt as though the negative light that Adderall can be put in may be harmful to those who do need it since it may make them feel negatively about something they need, "I think the stigma around Adderall can be harmful because it can actually help people in a lot of ways". One student also commented, "There's this negative connotation regarding Adderall, which I don't like".

The last category consists of students who reported that they had no feelings towards illicit use (participants 5,6). They stated that they had no opinion on how the media portrays Adderall.

### Theme 4: What Students Want Bryant to Know and Do About Illicit Adderall

The last theme that arose from the analysis was what participants had to say anonymously to Bryant about what the school should know about their own illicit Adderall issue or what they should do to fix it. The first category under this theme was awareness and students who felt as though there was not enough knowledge about illicit Adderall use provided to students. Participants 1, 4, and 5 mentioned that Bryant should bring awareness to the issue and that it would be the first step in helping with the issue.

The second category was stress and included the reasons that Bryant should help students cope with stress in hopes that it would help students avoid illicit use. When discussing stress, participants talked about exams, "Having big exams, I'm not a fan of that. I hate having exams that are like four or five chapters because I'm like, "How the heck am I supposed to remember every little thing in those five chapters." This student then commented that exams bring about stress and cramming which could lead to illicit use. Another participant commented, "I feel like I am always cramming, even if I feel well prepared". Additionally, one participant who was prescribed Adderall to help with seizures mentioned, "I was so nervous, so stressed, that I had a seizure", when talking about a Bryant exam.

The third category stemmed from participants who felt as though Bryant was responsible in taking control of the illicit Adderall use on its campus. Participants 4, 5 and 7 stated that Bryant is responsible for the issue. Participant 5 mentioned that Bryant needs to take the issue

more seriously. Participants 2 and 5 both felt as though Bryant should help students learn alternative coping methods so they did not have to use illicitly and commented that Bryant should help students learn how to focus better, "I think they have to be a little less worried about where people are getting stuff from and more concerned about how to prevent students from seeking it out".

The last category included participants who felt as though Bryant University was not responsible for taking care of illicit Adderall on its campus. Participant 6 mentioned that there is not much Bryant can do since Adderall is hard to detect saying, "How would they catch me?" and "it's so hard to detect, it can really get out of control very fast".

### **DISCUSSION**

The purpose of this study was to provide Bryant University students with a platform to discuss Adderall. The discussions held during this research point to improvements that need to be made by Bryant University. These conversations revealed that illicit Adderall is a rather large issue at Bryant and that students have diverse feelings towards the issue. Those who felt as though illicit Adderall was an issue that needed to be addressed, provided some solutions that will be examined throughout this discussion. They include:

#### Awareness

The first solution to helping students refrain from illicit Adderall use is bringing awareness to the topic and helping students to understand all the health risks that it poses. This can be done through flyers, class discussions, speaker series, and many other ways. The main point is to explain why illicit Adderall is harmful and why you should be wary of taking it since many students are ignorant to the effects of taking a prescription that is not prescribed.

#### Grading

Students proposed that Bryant look at its grading policies. They said that with so much emphasis on exams, students become stressed and when students procrastinate, it leads to cramming which leads to illicit Adderall use. Students felt that more emphasis should be

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placed on participation and smaller assignments to hopefully alleviate the pressure that comes with exams.

#### **Punishments**

Students proposed punishments for students who used Adderall illicitly to help deter students from taking it in the first place. Punishment ideas included write-ups and treating the situation as academic dishonesty.

### Programs to Help Foster Focus

During the interviews, students asked Bryant for help with learning how to foster the same focus they get when they use illicit Adderall. They thought that if they learned how to study better, that it might alleviate stress and reduce their inclination to use Adderall.

### **Better Study Environments**

Students discussed the potential for Bryant to provide less distracting and more isolating study environments to help students focus on their work and prevent them from procrastinating.

### **Better Resources**

One student specifically requested that ACE provide better resources for students with ADHD and help them navigate procrastination. Additionally, they mentioned that they hope Bryant will provide resources to those with ADHD to better navigate assignments and help them outline what they need to get done to complete their work more efficiently.

While previous research indicated the existence of illicit Adderall use on college campuses, no research has been conducted by Bryant University to have statistics that report the number of illicit Adderall users on its campus. As supported by the data found in this study as well as in alignment with previous data, it is known that college students have a newfound independence and sense of exploration during their college years. These explorative and independent traits lead students to not only become aware of certain risky behaviors, but to become involved in them as well. Such would be the case for illicit Adderall when used as a party drug or to be 'trendy'. Perhaps the reason for a risky behavior like the use of illicit Adderall is due to not only stress and heavy course work, but also from a lack of parental structure and guidance. While Bryant cannot necessarily parent its students, Bryant should be

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able to provide some guidance when it comes to avoiding risky behaviors. If students are concerned for their peers' health and involvement with illicit drug use, Bryant should be as well. When it comes to structuring punishments or rules against illicit use, it might be tempting for Bryant to implement a responsive solution rather than a proactive one. Schools tend to punish students for using drugs, drinking alcohol, etc., rather than guiding and teaching them about why they should not do those things in the first place. Schools rarely intercept the issue where it matters most- at the beginning. Throughout the interviews in this study, multiple students were quick to talk about the stress they felt while trying to get good grades or even pass a class. The stress, as described by one student, led to illicit Adderall use. Since it is easy to see that risky behaviors, such as illicit Adderall use are usually the result of some other event, Bryant should be concerned with the event that causes these behaviors. One solution, as provided by a participant, was to restructure the grading system.

Schooling has remained standardized when it comes to learning and teaching methods since they first opened, only just now are we starting to understand the repercussions of how students are taught. The point that should be underscored here, is that if students are resorting to the use of illegal substances to get them through school, then perhaps the event causing them to use illegal drugs (school) needs to be looked at more closely. Learning should be natural and exciting, not stressful and overwhelming. As schools become more competitive, students are going to start relying on unnatural things to help them produce unnaturally high GPAs and test scores. Neither of these things will be beneficial to the student or to the world as it receives a stressed out, exhausted, fact-spitting citizen. Instead of the focus remining so heavily on numbers and exam scores, perhaps schools should take a more natural approach. A natural approach might involve more class discussions, more focus on participation grades and effort. This approach might be unorthodox and make it hard to distinguish between students who can memorize equations and those who cannot. But memorization and having to stuff five chapters in your brain and spit it back out in only 50 minutes is utterly useless in the real world. Furthermore, as many participants mentioned, stress is a big factor in triggering risky behaviors. This natural approach may relieve a great deal of it while also lessening

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feelings of having to cram and ultimately, stop students from using illegal drugs to get through school.

There are many ways that a school can help to lessen the stress it puts on students, but some participants have argued that Bryant should not be involved in the issue. This might mean that even if schools were to be less stressful, give the resources to cope with schoolwork better, or even give guidance on why students should stay away from illegal drugs, students might still use them. Students might still want to explore their limits and be entirely independent. This, however, is irrelevant to the issue that was brought about during this study. Although some students may choose to continue their risky behavior, those who use it because of school or those who need the extra guidance, will have a greater chance at staying away from illicit Adderall if Bryant intervenes. Additionally, if Bryant can bring awareness to illicit Adderall and the potential harms it can bring, students will possess even more knowledge as to why they should avoid taking illicit drugs. Instead of thinking about the Adderall as another aspirin or ibuprofen, they might think twice before they take it. For any school, I can imagine that lessening the number of illegal drugs consumed by its students by any portion, matters.

The conversations held in this study have demonstrated that students' feelings towards illicit Adderall are very much personal and do not stem from the mass culture. Since some participants felt negatively about illicit Adderall use, it is an important topic to discuss. One participant mentioned that it may feel like students who do need Adderall will never have the same advantage as those who do not and take it anyway. This is an issue that directly affects students and has the potential to interfere with learning and how students feel about themselves when compared to their classmates. In a place of learning, illicit Adderall might give a potential unfair advantage and should be taken very seriously. If a student is given an advantage over another, they will never be equal. If one student is using drugs to help them get better grades or do better in school, they will always have an advantage over a regular student and especially over a student who needs to take Adderall to be able to match their peers at a regular level. Adderall can be very hard to detect since it has little to no visible side effects. However, the fact that students are not more aware of the fact that their illicit use

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directly affects other students, is concerning. Not only should Bryant be concerned, but Bryant should also be responsible for ensuring a fair learning environment to its students. Most students attend university to then enter a job field that requires a degree. If certain students are cheating their way to a better GPA or better grades and Bryant is doing nothing to prevent it, students will never have equality when it comes to the job search. As mentioned previously, Adderall can be hard to detect. However, that does not mean that Bryant should shy away from enforcing rules or bringing awareness to the issue. Even if awareness or punishments deters a singular student from using illicit drugs, it is one student less that puts themselves at risk.

Although initially, media representation was the focus of this study, the structure of the interview allowed students to address issues they felt were important and allowed the researcher to see that illicit Adderall is a very under-studied topic. This research is the first step for Bryant in beginning to understand and help students with the issue of illicit Adderall. Overall, this research added to the knowledge of illicit Adderall use on college campuses and further provided reasons for universities to more closely examine the issues their students are really facing.

#### Limitations

This study was limited by the lack of diversity amongst participants. Because all students identified their race as white, there was little representation of other races that exist on Bryant's campus. Additionally, while there was relatively equal representation for males and females, the lack of diversity also stemmed from the number of students who used Adderall illicitly. Only two students used Adderall illicitly while the rest were prescribed Adderall. An increase in representation of illicit users may have brought about contrasting results. Other limitations stemmed from the nature of the study. Since the interviews were semi-structured, participants would wander off topic differently than the other participants, leading to nongeneralizable data and inconsistent results. Lastly, the small sample size of this study limited findings. Although there was saturation in responses, a bigger pool of students may lead to greater findings.

### Future Research

This study ultimately revealed the need for future research. There are numerous areas for future study that will need to be done to eliminate the issue of illicit Adderall use. This research might include an investigation into the actual numbers of students who use Adderall illicitly on Bryant's campus, studies to uncover attitudes of Bryant's students regarding illicit use with a larger population sample and studies to understand how illicit Adderall use affects learning and whether it gives certain students who use illicitly an unfair advantage. Lastly, once Bryant can put together awareness campaigns, clearly outline punishments, or offer more resources, studies should be done to explore the implementation of such prevention programs and their effectiveness in lessening illicit use.

### Reflection

The process of choosing a topic, interviewing, and analyzing has taught me many valuable lessons. First, I learned how much I loved being excited about research. I learned that there are so many ways to conduct research and that there are so many areas left to be explored by research. I also took great pleasure in interviewing my participants. It was a pleasure to give students the opportunity to voice their opinion on a topic that is rarely discussed. This also opened by eyes to the fact that listening to others can provide some very valuable insight. Overall, I have grown so much as a researcher and I am very thankful to have had the opportunity to push myself during this experience.

### **CONCLUSION**

In conclusion, this study has demonstrated the prevalence of illicit Adderall use on Bryant University's campus and showcased the desire that students have to push awareness for this issue. Lastly, this study demonstrates the need for students to voice their opinions on this issue so that a university can understand their students and better assist them in their academic endeavors.

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### **APPENDICES**

### <u>Appendix A – (Demographic Information for Participants (Bryant University Students)</u>

Gender Identity	
Female	3
Male	4
Race	
White	7
Black or African American	0
American Indian or Alaska Native	0
Asian Indian	0
Chinese	0
Filipino	0
Other Asian	0
Japanese	0
Korean	0
Vietnamese	0
Native Hawaiian	0
Guamanian or Chamorro	0
Samoan	0
Other Pacific Islander	0
Other	0

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<u>Appendix B – (Sample Interview Questions)</u>

### Prescribed/ Not Prescribed

Have you ever been prescribed Adderall as a medical treatment for a diagnosis?

#### Prescribed

- 1. At what age would you say you/ your parents recognize that you may need to consider Adderall or other similar medications to help you in your life?
- 2. What was your initial response to this observation from you/your parents? Please describe your feelings and thoughts from this moment in time.
- 3. Did you have reservations about taking Adderall as medication? If yes, what were they and why? If no, why not?
- 4. Can you describe the process of getting your prescription? How did your doctor talk to you about it? How did your diagnosis make you feel knowing Adderall was the treatment?
- 5. Do you feel that Adderall has been effective in your life? If so, how? If not, why?
- 6. Are there any negative side effects of taking Adderall?
- 7. Can you describe your experience while you are on Adderall?
- 8. How does Adderall affect your daily life?
- 9. Do you feel as though Adderall has had an overall positive or negative impact on your health?
- 10. How do you feel the media represents Adderall?
- 11. How do you feel about the media's representation of Adderall?
- 12. What has your experience with Adderall been like at Bryant? Please describe.
- 13. Have you felt any pressure to sell Adderall or give it to other students during your time at Bryant?
- 14. What do you think Bryant should do to deter students from taking Adderall illicitly?
- 15. Is there anything else you can tell me about your experience at college and Adderall?
- 16. Is there anything you would like to share with Bryant about Adderall?

#### Illicit Adderall Use

Have you ever used Adderall that was not prescribed to you?

If Yes

Let's talk a little bit about your decision to take illicit Adderall.

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- 1. Was your decision to take Adderall illicitly a singular event or were there multiple occasions that you decided to use Adderall that was not prescribed to you?
- 2. Can you describe the situation that made you feel inclined to take illicit Adderall?
- 3. How was the experience of taking illicit Adderall?
- 4. How did you feel after taking this Adderall?
- 5. Did you feel like you were doing something illegal at the time or did you not feel as though you were doing anything wrong?
  - (a) If yes, why?
  - (b) If no, why did you not feel as though taking illicit Adderall was a big deal?
- 6. Do you feel as though taking illicit Adderall is a common or rare choice among college students at Bryant?
  - (a) If yes, why do you feel as though that it is such a popular drug on Bryant's campus?
- 7. Have you witnessed others participating in illicit Adderall use? If so, how did it make you feel?
- 8. What are your feelings towards Adderall/ other similar medications?
- 9. Is there anything else you can tell me about your experience at college with Adderall?
  - 10. Is there anything you would like to share with Bryant about Adderall?

If No:

Let's talk a little bit about your decision to not take illicit Adderall.

- 11. Can you tell me a bit about why you have never used illicit Adderall?
- 12. Do you feel there were times where you wanted to use illicit Adderall?
- 13. If yes, can you tell me about these times?
- 14. Have you witnessed others participating in illicit Adderall use? If so, how did it make you feel?
- 11. What are your feelings towards Adderall/ other similar medications?
- 12. Is there anything else you can tell me about your experience at college and Adderall?
- 13. Is there anything you would like to share with Bryant about Adderall?

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