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**Non-medical use of ADHD prescription drugs among US college students at a public
research university in a small rural town**

An Honors Thesis submitted in partial fulfillment of the requirements for Honors in
Waters College of Health Professions

By

Laura Witteveen

Under the mentorship of Dr. Melissa Garno, EdD, RN

Thesis Mentor: _____

Dr. Melissa Garno

Honors Director: _____

Dr. Steven Engel

November 2021

Waters College of Health Professions

University Honors Program

Georgia Southern University

Abstract

Some previous studies have shown that college students abuse ADHD prescription stimulants, such as Adderall, Ritalin, Vyvanse, or Dexedrine. This research attempts to highlight how often college students use these prescription drugs for nonmedical purposes, how they acquire these prescription drugs, and for what intended purposes they are taking them. This information is gathered through an anonymous Qualtrics survey which was sent out to 200 undergraduate college students enrolled in nursing school at a public research university in a small rural town. A completed survey was received from 45 students. Out of these students, 22.2% are diagnosed with ADHD or ADD and are prescribed medications to help with their symptoms. Out of these students, 100% of them have been asked by someone else for their prescription medications. Additionally, 11.1% of students admit to taking ADHD prescription stimulants without a prescription themselves, and 55.6% of students know other nursing students who take them for non-medical purposes. These students report wanting to focus better on their schoolwork, be more productive studying, and using it to stay awake for longer periods of time as their main reasons for taking these medications without a prescription. This is a significant issue because of the negative health effects these stimulants can have. There needs to be better screening and education to avoid this abuse in college students.

Acknowledgements

I would like to thank my family and friends who have been incredibly supportive of my academics throughout my undergraduate program at Georgia Southern University. Thank you to my parents for always believing in me. Thank you to my sister, Maxine, for working on this project alongside me and guiding me.

I would like to thank Dr. Melissa Garno for being my mentor and playing a crucial part in the completion of my Honors Thesis. Her positive encouragement was very valuable to me.

I would also like to thank Dr. Joshua Kies for being an amazing professor throughout my time in the School of Nursing. I appreciate how he is always willing to help his students, and he was a great help in creating my Qualtrics survey.

I want to send a thank you to all the faculty in the Honors College, especially Dr. Steven Engel, Dr. Francis Desiderio, and Erin Martin, for overseeing this project and being a great support system throughout my time in the Honors College.

Introduction

Approximately 2.5 million Americans are prescribed stimulant medications, such as Adderall, Ritalin, Vyvanse, or Dexedrine, to treat Attention Deficit Hyperactivity Disorder (ADHD). ADHD is a mental health disorder that causes trouble focusing on one specific task and these individuals often exhibit hyperactive behaviors. ADHD symptoms in adults include impulsiveness, disorganization and problems prioritizing, poor time management skills, problems focusing on a task, trouble multitasking, excessive activity or restlessness, poor planning, low frustration tolerance, frequent mood swings, problems following through and completing tasks, hot temper, and trouble coping with stress (Mayo Clinic 2019). Adderall, Ritalin, Vyvanse, or Dexedrine help to reduce these symptoms. However, these drugs are often taken for non-medical purposes and by individuals without a prescription, often acquired by college students who buy them from an individual who does have a prescription. The use of so-called “study drugs” has increased rapidly over the past two decades. Over the past decade alone, the manufacturing of prescription stimulants has increased by nine million percent (Aberg 2021). This could be a sign of over diagnosing and over prescribing. It is therefore important to make sure that individuals are correctly diagnosed, and multiple accurate tests are conducted.

This research attempts to discover how much and why college students at a public research university in a small rural town abuse prescription medication. Different studies have shown that this is an increasingly growing problem among college students. One study of students at Bates College, a small Maine liberal arts college, found that one in every three students had abused Adderall at some point. Another study, of 10,000 college students from

across the United States found that more than half of students with an Adderall or other ADHD drug prescription were asked to sell the medication by one of their friends. There seems to be a lack of education for college students since these clients should be encouraged to handle their medications responsibly. These clients need to be educated on the health and legal consequences of sharing their medications. Additionally, many students seem to be unaware of the negative consequences of taking these medications without a prescription. Clinicians should screen any college student for potential prescription stimulant misuse. This is crucial because prescription drug misuse is associated with higher rates of substance use disorder later on in adulthood. Other negative health consequences include diminished neuropsychological functioning, depressed mood, and sleep problems.

This research will also ask each participant their gender, ethnicity, age, GPA, whether they are involved in Greek life, and if they are a student athlete. It is important to know which population is most at risk for abusing prescription medications so targeted treatment and prevention programs can be implemented. It would be interesting to see if there is a certain correlation between prescription abuse and one's demographics, academic performance, and campus involvement.

Literature Review

Arria, A. M., Caldeira, K. M., O'Grady, K. E., Vincent, K. B., Johnson, E. P., & Wish, E.D. (2008).

This study sought to discover whether the nonmedical use of prescription stimulants (NPS) for attention-deficit-hyperactivity disorder (ADHD), including overuse and use of someone else's drug, is associated with an increased risk of other drug use and dependence on alcohol and marijuana. This study was performed at a large public university in which a field staff team of 18 part-time interviewers personally interviewed 1253 first-year college students who were between the ages of 17 and 20 years. The participants were offered \$50 for completing the interview. Out of this sample, 1208 of them were not prescribed any stimulant medications for ADHD, but 218 (18%) admitted to still engaging in the nonmedical use of these drugs. Out of the other 45 students who were professionally diagnosed with ADHD, 12 (26.7%) overused their ADHD drug, and 7 (15.6%) used someone else's prescription at least once in their lifetime. These 225 students who used these stimulants nonmedically said their use was infrequent and mostly associated with focusing and concentrating on schoolwork, however 35 (15.6%) used it to party or get high. The most commonly reported medication was dextroamphetamine, which was the chosen stimulant for 89.3% of participants. For 78.7% of students who were using these stimulants without a prescription, they obtained it from a friend who did have a prescription, usually for free, but if they did pay, the prices ranged from \$1 to \$10 per pill.

There was a significant difference between the use of other illicit drug use for students who used ADHD prescription stimulants non-medically, and students who did not. "For example, 88.7% of NPS+ individuals had used marijuana in the past year, compared with 56.2% of NPS- individuals. After controlling for the effects of race, gender, mother's education, and

medical use of a prescription stimulant for ADHD, overuse of a medically prescribed stimulant for ADHD was independently associated with past-year use of hallucinogens, cocaine, ecstasy, and prescription tranquilizers” (Arria, Caldeira, O’Grady et al., 2008). This research shows that the abuse of ADHD prescription drugs has a strong correlation with the use of other drugs, including marijuana and alcohol.

McCabe, S. E., Teter, C. J., Boyd, C. J., Wilens, T. E., & Schepis, T.S. (2018).

This study was conducted to examine prescription drug misuse (PDM), substance use disorder (SUD), how these drugs were obtained, and how this correlated to educational status among 106,845 US young adults ranging from 18-25 years. “Prescription stimulant misuse is more prevalent among traditional-aged college students than their non-college peers. For instance, more than one in every seven (14.8%) U.S. college males reported nonmedical use of Adderall relative to 7.4% of same-age young adult males not attending college” (McCabe, Teter, Boyd et al., 2018). It is important to know which population is most at risk for abusing prescription medications so targeted treatment and prevention programs can be implemented. Medication management begins to really take shape throughout college, where young adults are usually in charge of their own medicine. “At least one college-based study found that the majority of prescribed users of stimulant medications had been approached to share their medication while another college-based study found that 62% of prescribed users of stimulant medications had shared their medications at least once in their lifetimes” (McCabe, Teter, Boyd et al., 2018). There seems to be a lack of patient education for college students and graduates since these clients should be encouraged to handle their medications responsibly. These clients need to be educated on the health and legal consequences of sharing their medications. Clinicians

should screen any college student for potential prescription stimulant misuse. This is crucial because prescription drug misuse is associated with higher rates of substance use disorder later on in adulthood. Other negative health consequences include diminished neuropsychological functioning, depressed mood, and sleep problems.

Benson, K. & Flory, K. (2017).

The misuse of stimulant medications is an issue among college students, this includes taking more than prescribed, or taking medications without a prescription at all. Stimulant misuse is associated with depression disorder, because some individuals believe that taking ADHD medications, like Adderall, Ritalin and Vyvanse, could elevate their mood. On the other hand, some misusers have reported that taking these medications without a prescription can actually make them feel more depressed, sad, irritable, and even suicidal. ADHD symptoms are also often linked to prescription medication misuse. “In one survey that excluded students with a previous diagnosis of ADHD, 71% of students who reported misuse of stimulant medication screened positive for ADHD symptoms” (Benson & Flory, 2017). This could suggest that some students are attempting to treat their attention difficulties on their own.

This study incorporated 890 undergraduate students, ages 18-26, at a public university, and data was gathered through a Qualtrics survey. ADHD is often accompanied by symptoms of depression, therefore this study sought to discover whether these disorders have a direct correlation to prescription misuse. The Current Symptoms Scale was incorporated to determine whether the participant was displaying any of the 18 ADHD symptoms determined by the Diagnostic and Statistical Manual of Mental Disorders. In addition, the Center for Epidemiological Studies Depression Scale Revised was used to determine if any of the 20

symptoms of depression were present. The study's results showed that students who were above the clinical cut-off for depression were 1.64 more likely to misuse stimulant medications. Furthermore, for each additional symptom of ADHD, the odds of misusing stimulant medications increased by 1.12. "The items that were most related to misuse overlapped with symptoms of ADHD: trouble keeping my mind on what I was doing, inability to focus on the important things, and feeling fidgety" (Benson & Flory, 2017). This article helped explain that by diagnosing ADHD appropriately, self-medication and misuse of medications could decrease. This could be done through proper screening and more education to the public as to when to seek health care.

Manos, M. J., Giuliano, K., & Geyer, E. (2017).

Healthcare is an ever-changing field, where the number one goal is to make everything as efficient and cost-effective as possible. Attention-deficit/hyperactivity disorder (ADHD) is the most common behavioral disorder of childhood. Therefore, health care professionals are constantly attempting to find ways to make the treatment of ADHD as productive as possible. "The prevalence of ADHD increased 42% from 2003 to 2011, with increases in nearly all demographic groups in the United States regardless of race, sex, and socioeconomic status. More than 1 in 10 school-age children (11%) in the United States now meet the criteria for the diagnosis of ADHD; among adolescents, 1 in 5 high school boys and 1 in 11 high school girls meet the criteria" (Manos, Giuliano & Geyer, 2017). This increase can be attributed to a heightened awareness and recognition of symptoms. "Even so, guidelines for diagnosing ADHD are still not rigorously applied, contributing to misdiagnosis. For example, in a study of 50 pediatric practices, only half of clinicians said they followed diagnostic guidelines to determine

symptom criteria from at least 2 sources and across 2 settings, yet nearly all (93%) reported immediately prescribing medications for treatment” (Manos, Giuliano & Geyer, 2017). The most common treatment for ADHD is prescribing stimulants since these are cost-effective, control symptoms well, and can be managed independently. Ideally, the client should receive a combination of behavioral therapy, which teaches new life skills, and pharmacotherapy. Additionally, it is also important for the parents of children with ADHD to learn how to effectively manage their child’s behavior. To achieve quality care for individuals with ADHD, clinicals should follow up more frequently throughout drug treatment, achieve optimal dosing, integrate behavioral therapy, and measure outcomes.

Bruffaerts, R., Mortier, P., Kiekens, G., Auerbach, R. P., Cuijpers, P., Demyttenaere, K., Green, J. G., Nock, M. K., & Kessler, R. C. (2018).

College students are gaining independence while they are transitioning to adulthood. With these newfound responsibilities, many students experience stress, especially when it comes to performing well academically. 12-50% of college students meet the criteria for one or multiple mental health disorders which can have lasting negative impacts years down the road. “Most evidence exists for the finding that depression and suicidal thoughts and behaviours are related to a lower grade point average” (Bruffaerts, Mortier, Kiekens et al., 2018). This study aimed to investigate whether there was a relationship between the prevalence of mental health disorders and academic performance in a sample of 4,921 college freshmen at a university in Belgium. They made a distinction between internalizing mental health problems, like anxiety, depression and social withdrawal, and externalizing mental health problems, like aggression, conduct problems, and attention problems. They found that individuals with both internal and external

mental health problems function significantly lower academically. “Students who have mental health problems in the past year have, on average, a decrease of 2.9–4.7% of their AYP (or 0.2–0.3 decrease in GPA) at the end of the academic year compared to those without these problems” (Bruffaerts, Mortier, Kiekens et al., 2018).

Green, A. L. & Rabiner, D. L. (2012).

Recent research has shown that ADHD usually is not simply outgrown in childhood but instead it can follow individuals to adolescence and through adulthood. College students with ADHD can still have great difficulty fulfilling all the responsibilities that come along with attending college. “Accumulating research suggests that college students with ADHD experience less academic success and greater psychological and emotional difficulties than other students and use alcohol and drugs at higher rates” (Green & Rabiner, 2012). College requires one to be organized and get work done within a timely manner. “Students may deliberately over-report ADHD symptoms to procure academic accommodations or feign ADHD to obtain a prescription for stimulant medication, which many students believe will enhance their academic performance” (Green & Rabiner, 2012). This explains the need of proper diagnostic testing and assuring that the individuals who are prescribed these medications actually need them to function. Especially on self-report tests, individuals can easily exaggerate their symptoms. Further research should be conducted to discover what is the best way to diagnose ADHD among college students.

Individuals with ADHD have less confidence when it comes to performing well academically and succeeding in college. “Other researchers have reported that undergraduates with ADHD are more likely than their peers to say they are worse than other students at planning

for and completing assignments, taking class notes, studying ahead of time for examinations, and avoiding distractions” (Green & Rabiner, 2012). This lack of confidence in their own ability could potentially lead to these students doubling up on their medications or taking more medications than prescribed in an attempt to compensate for their lack of concentration.

Martins, S. S., Sampson, L., Cerdá, M., & Galea, S. (2015).

There has been an increase in global drug overdoses and even though it is a huge problem worldwide, it is still incredibly misunderstood. “The mortality rate from drug overdoses tripled in the United States between 1990 and 2006. In the United States, unintentional overdose deaths among adults aged 25 to 64 years exceeded motor vehicle crash deaths and suicides as a leading cause of injury death from 2008 onward” (Martins, Sampson, Cerdá et al., 2015). This systematic review of the literature found that on average 73.3% of drug users have witnessed an overdose, while 47% personally experienced a nonfatal overdose. There has been a decrease in drug overdoses from illicit drug use and instead, we see an increase in fatal drug overdoses from abusing prescription opioids. This is a public health problem which requires immediate intervention in order to save lives and cut healthcare costs. “Although drug overdose deaths attract much public attention, there are substantial consequences of nonfatal overdose, including cardiac and muscular problems, cognitive impairment, renal failure, hearing loss, and injuries sustained during overdose. Health care costs associated with overdose treatment are also substantial. From 1999 to 2008, hospitalization rates for overdoses in the United States increased by 55%, costing about \$737 million in 2008” (Martins, Sampson, Cerdá et al., 2015). With these stimulant medications, there is always a risk for an overdose, and when these students move on to harder drugs, it can become even more dangerous.

Methods

The method used for this study is a 20 questions Qualtrics Survey (seen in Appendix A) conducted by the principal investigator, Laura Witteveen. This survey was created to highlight the perceptions and statistics on the non-medical use of ADHD stimulants among nursing students at the junior and senior level.

Since human participants were involved in this study, the research method, including the survey, was approved by the Institutional Review Board. The Qualtrics survey ensured that the participant's identity was concealed, and the participants remained anonymous. The research survey was opened April 5th, 2021, and closed October 5th, 2021. Over the span of 6 months, data was collected from 45 students. These students were informed of the survey by their student emails. Additionally, a link to the survey was posted to the news page of the school of nursing. The Qualtrics Survey was completed online, and therefore the COVID-19 precautions and regulations set by the IRB were maintained throughout the project.

The first page of the survey included the informed consent (seen in Appendix C). It was stated that the survey is anonymous and voluntarily, and that there is no penalty for deciding not to participate in the study. The students were informed that the survey should take no longer than five minutes. By keeping the survey relatively brief, the goal was to encourage participation since it would not take up too much time. The principal investigator and the mentor's email addresses were included in case the participants had any questions. The risks involved in this study are comparable to risks experienced on a daily basis. On the last page of the survey, the locations and phone numbers of the counseling center in both Statesboro and Savannah were included just in case the nature of the questions caused the participants any distress. By

proceeding to the next page after the informed consent, the consent of the participants was ensured.

The questions were all multiple-choice questions, with exception to, 'how old are you?', since this question was a fill in the blank. The last three questions were included to obtain the perceptions of the students and the knowledge they already had about the subject. They were asked whether they believe the statement in the question was true or false. The students were encouraged to answer each question truthfully with no fear of repercussions.

Results

The survey was completed by 45 nursing students. The survey started out by asking the demographics of the nursing students, this was included to display the sampled population. Additionally, the goal was to see if there is a certain correlation between a student's demographic and whether they abuse prescription medications.

Sample demographics:

<u>Gender</u>	Female: 95.6%	Male: 4.4%	Other: 0%		
<u>Age</u>			Range: 18-64 years		
<u>Ethnicity</u>	White: 86.7%	Black: 6.7%	Hispanic: 2.2%	Asian: 0%	Other: 4.4%
<u>Semester</u>	J1: 18.2%	J2: 13.6%	S1: 29.6%	S2: 38.6%	
<u>GPA</u>	<2.5: 0%	2.5-3.0: 6.8%	3.0-3.5: 29.6%	>3.5: 63.6%	
<u>Greek Life</u>		Yes: 20%		No: 80%	
<u>Student Athlete</u>		Yes: 2.2%		No: 97.8%	

Most of the students, 80%, were not diagnosed with attention deficit hyperactive disorder (ADHD) or attention deficit disorder (ADD). However, 20% of students in this sample have an official diagnosis and are prescribed medications to help with their symptoms. The majority of these students are prescribed amphetamine-dextroamphetamine (Adderall), and one of them is prescribed lisdexamfetamine (Vyvanse). Every one of the students with a stimulant prescription, 100% of them, have at some point been asked to share their prescription with another student. Out of the students with an official ADHD or ADD diagnosis, 55.6% of them have been asked for their medication but refused to share it. However, 22.2% of them sold their medication to another student, and the remaining 22.2% gave it to another student for free.

Additionally, when asked whether they have ever taken Adderall, Ritalin, Vyvanse, or Dexedrine, without a prescription, 11.1% of students admitted to doing this, and 55.6% of students are aware of other students doing this for non-medical purposes. Out of the students who admitted to acquiring these stimulants without a prescription, 60% got it from one of their peers for free, and the other 40% bought it from somebody. The answers ranged from taking it once or twice without a prescription to taking it around ten times without a prescription. These students report wanting to focus better on their schoolwork, be more productive studying, and using it to stay awake for longer periods of time as their main reasons for taking these medications without a prescription.

The students were given two statements that they were asked to answer with true or false. The following two statements are true statements that can be supported by evidence.

ADHD/ADD prescription drugs are schedule II drugs, meaning they are labelled as highly addictive	True: 97.2%	False: 2.8%
Taking ADHD/ADD prescription drugs, without a prescription, can have negative outcomes on your health	True: 100%	False: 0%

Finally, they were also asked whether they believed that taking ADHD/ADD prescription drugs, without a prescription, is a problem on this campus. To this statement, 92.6% students said it was true, and 7.4% of students said it was false.

A connection was observed between students who abuse ADHD prescription drugs and lower GPAs. Additionally, the overwhelming majority of students admitting to taking ADHD prescription drugs are Caucasian females. However, it is important to keep in mind that the population sampled is mostly Caucasian females.

Discussion

This study attempted to highlight individual’s motivations to take medications for non-medical purposes. “Students turn to the medicines, so they can stay awake longer and increase their ability to focus. Many students wrongly believe stimulants will improve their ability to learn and result in better grades. ADHD medicines are also being used to curb appetites for weight loss. Some also use them to get high. But although these medicines are considered safe when taken as prescribed, they can cause health problems and addiction when not taken as they

were intended” (University of Rochester Medical Center). In this survey, the students were asked why they decided to take Adderall, Ritalin, Vyvanse, or Dexedrine, without a prescription. This exposed some reasons as to why students are participating in this dangerous behavior.

Since many of the students stated that performing better academically was their main purpose for taking these medications without a prescription. This should be a warning sign for many universities since many students feel incredibly overwhelmed with the high demands of schoolwork that they turn to drug abuse. Instead, there needs to be a focus on stress reducing strategies and teaching students how to plan out their assignments, so they do not feel the need to stay up all night studying.

When they are not taken as they were intended, these individuals can become addicted and potentially overdose. There has been an increase in global drug overdoses and even though it is a huge problem worldwide, it is still incredibly misunderstood. “The mortality rate from drug overdoses tripled in the United States between 1990 and 2006. In the United States, unintentional overdose deaths among adults aged 25 to 64 years exceeded motor vehicle crash deaths and suicides as a leading cause of injury death from 2008 onward” (Martins, Sampson, Cerdá et al., 2015). When individuals have access to prescriptions that they are not prescribed, there is always the risk of an unintentional overdose which is an avoidable death. There should be additional research conducted about how individuals who overdose acquired these prescription medications. It is important to raise awareness about how common overdoses are, how to prevent them in the first place, and how to reverse them before it is too late.

There was a trend between students with lower GPAs and prescription medication abuse. This is crucial information since students who perform lower academically have a higher chance of eventually dropping out of school. It is important to extend resources to college students who

are experiencing stress and/or mental health problems so they can thrive in college and use healthy coping strategies. Otherwise, if these students feel like they cannot keep up with their classes, they might turn to stimulant use to try to compensate, which is something that we want to avoid.

Limitations

There were certain limitations with this research survey that could be altered in future research. The sample size was relatively small. There was no reward for completing the survey. If there was some type of an incentive, like professors offering extra credit in a course or a monetary compensation, this could have helped with survey participation. This research study also took place during the COVID-19 pandemic, and this might have hindered people from filling out the survey. Many nursing students were already burnt out with all the online assignments that this survey might have just felt like an extra thing for them to do and therefore chose to ignore it. However, because of the pandemic, there also might have been less access to other students with these prescription medications because most students were at home, away from the campus. Therefore, the numbers might have not been as high as previous years.

Conclusion

Prolonged abuse of ADHD drugs may lead to sleep difficulties, inability to concentrate, lack of motivation, depression, irritability, lethargy, fatigue, aggression, thoughts of suicide, mood swings, paranoia, hallucinations, anxiety, panic attacks, heart disease, weight loss, headaches, tremors, and constipation (Lautieri 2020). Once this medication leaves the body, withdrawal symptoms may occur and indicate a physical and emotional dependence on the drug. These withdrawal symptoms include extreme tiredness, depression, and sleep problems. Many students taking these prescription drugs without a prescription don't think that what they are

doing has a significant effect on their health. In the survey, the overwhelming majority agreed with the statements that ADHD/ADD medications are highly addictive and that they can have negative consequences on one's health when taken without a prescription. These statements gave us some insight into how college students perceive the consequences of taking these medications. This shows that there is not necessarily a lack of knowledge among this population. However, additional education on the legal consequences and negative health outcomes of taking medications that you are not prescribed might lead to a decrease of abuse.

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Appendix A - Qualtrics Survey

1. What is your gender?
 - Male
 - Female
 - Prefer not to respond

2. How old are you? (*if you are younger than 18, please do not fill out this survey*)

3. What is your ethnicity? (Select all that apply)
 - White/Caucasian
 - Black/African American
 - Hispanic/Latino
 - Asian
 - Pacific Islander
 - Native American
 - Prefer not to respond
 - Other

4. What year in school are you?
 - Freshman
 - Sophomore
 - Junior
 - Senior

5. Are you involved in a Georgia Southern fraternity or sorority?
 - Yes
 - No

6. Are you a Georgia Southern athlete?
 - Yes
 - No

7. Does your major fall under the healthcare field?
 - Yes
 - No

8. What is your GPA?
 - <1.5
 - 1.5-2.0
 - 2.0-3.0
 - 3.0-3.5
 - >3.5

9. Have you ever been diagnosed with attention deficit hyperactive disorder (ADHD)?

- Yes
- No

10. If you have been diagnosed with ADHD, which medication are you prescribed to help you with your symptoms?

- I have never been diagnosed with ADHD
- amphetamine-dextroamphetamine* (Adderall)
- methylphenidate* (Ritalin)
- lisdexamfetamine* (Vyvanse)
- dextroamphetamine* (Dexedrine)

11. If you have been diagnosed with ADHD, have you ever been asked by someone if they could buy/have some of your medication?

- I have never been diagnosed with ADHD
- No, I have never been asked by anybody for my medication
- Yes, however I did not give it or sell it to them
- Yes, I gave it to them for free
- Yes, I sold it to them

12. Have you ever taken Adderall, Ritalin, Vyvanse, or Dexedrine, without a prescription?

- Yes
- No, but I know people who have
- No, and I don't know anyone who has

13. If you have taken Adderall, Ritalin, Vyvanse, or Dexedrine, without a prescription, how did you get it?

- I took it from a friend, roommate or family member without their knowledge
- I got it for free from a friend
- I bought it from a friend

14. How often have you taken Adderall, Ritalin, Vyvanse, or Dexedrine, without a prescription?

- I have never taken it
- Once or twice in my life
- More than once or twice, but less than 10 times
- Around 10-30 times
- More than 30 times

15. Why did you take Adderall, Ritalin, Vyvanse, or Dexedrine, without a prescription? (Select all that apply)

- I have never taken it without a prescription

- I want to focus better on my school work / be more productive studying
- I want to lose weight
- I want to perform better athletically
- I want to stay awake for longer periods of time
- I used it for recreation purposes (to get high)

16. I have taken Adderall, Ritalin, Vyvanse, or Dexedrine, without a prescription, and would do it again.

- I have never taken it without a prescription
- True
- False

17. ADHD prescription drugs are schedule II drugs, meaning they are labelled as highly addictive.

- True
- False
- I don't know

18. Taking ADHD prescription drugs without a prescription can have negative outcomes on your health.

- True
- False
- I don't know

19. Taking ADHD prescription drugs without a prescription is a problem on Georgia Southern's campus.

- True
- False
- I don't know

Considering the nature of the questions above; the Georgia Southern Counseling Center:

Statesboro Location

PO Box 8011
 Forest Drive, Building 435
 Statesboro, GA 30460
 Phone: 912-478-5541
 Fax: 912-478-0834

Armstrong Location

7000 Compass Point
 11935 Abercorn Street
 Savannah, GA 31419-1997
 Phone: 912-344-2529
 Fax: 912-344-3437

Appendix B – Recruitment Email

Hello,

My name is Laura Witteveen, and I am a S1 BSN student at Georgia Southern University. As a part of my Honors Program Thesis requirement, I am asking you to participate in my online research study survey utilizing the Qualtrics Survey Tool, concerning the non-medical use of ADHD prescription medications. The survey should take 5 minutes to complete and I would appreciate it a lot. Participation is completely anonymous and voluntary, and the survey can be stopped at any minute during the research process!

Thank you so much for your time and feel free to reach out to me with additional questions!

To participate in the online survey, click on the link below:

- Please read the consent page before completing the survey for detailed information related to human rights protections and anonymity.

Laura Witteveen
(678)225-9273
Eagle ID: 900963854

Appendix C – Informed Consent

Georgia Southern University
Waters College of Health Professions
School of Nursing

CONSENT TO PARTICIPATE IN A RESEARCH PROJECT:

Non-medical use of ADHD prescription medications among US nursing students at a public research university in a small rural town.

I understand that the study in which I am about to participate in is a part of a research project entitled “Non-medical use of ADHD prescription medications among US nursing students at a public research university in a small rural town” conducted by Laura Witteveen (lw05091@georgiasouthern.edu) and Dr. Melissa Garo (mel@georgiasouthern.edu) Laura Witteveen is a Bachelor of Science Nursing Student and Dr. Melissa Garo is a Research Advisor and Nursing Professor at Georgia Southern University. This research is conducted for an Honors Program Thesis requirement.

The survey is anonymous and voluntarily, there is no penalty for deciding not to participate in the study.

The main purpose of the proposed study is to highlight how often college students use ADHD prescription drugs for nonmedical purposes, how they acquire these prescription drugs, and for what intended purposes they are taking them. This study also includes students’ demographics, academic performance, and campus involvement, to see if there is any specific group of the population who is more at risk to abuse prescription drugs.

Participation in this research will include completion of a Qualtrics survey one time which should take around 5 minutes.

The risks involved in this study are comparable to risks experienced on a daily basis.

Deidentified or coded data from this study may be placed in a publicly available repository for study validation and further research. You will not be identified by name in the data set or any reports using information obtained from this study, and your confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.

You have the right to ask questions and have those questions answered. If you have questions about this study, please contact the researcher named above or the researcher’s faculty advisor, whose contact information is located at the end of the informed consent. For questions concerning your rights as a research participant, contact Georgia Southern University Institutional Review Board at 912-478-5465.

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