

Power Off Stimulants. PowerON You.

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Eastern Handed Communications

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#### **Business Letter**

221 Mann Library Cornell University Ithaca, New York 14853

April, 30, 2015

110 Ho Plaza Gannett Health Services Ithaca, New York 14853

Dear Catherine Thrasher-Carroll:

We represent Eastern Handed Communications. Eastern Handed is a public relations firm that specializes in public health and drug abuse campaigns. In the following document we have proposed a publicity plan that aims to reduce the amount of stimulant use on the Cornell University campus. In pursuing this goal, we hope to increase the amount of sleep students receive and improve their overall health.

Cornell is a highly competitive university that thrusts students into a competitive and stressful environment that they may not be entirely prepared for. As a result many students turn to the use of stimulants such as Adderall and caffeine to keep up with their studies. The use of these drugs often results in the sacrifice of sleep which can be detrimental to overall health.

We have conducted several in-depth qualitative and quantitative studies with Cornell students and an analysis of the problems and opportunities that are unique to Cornell in an effort to produce the best possible campaign.

We are confident that the following document presents the best possible way to address these issues.

Thank you for your time.

Sincerely,

Jewel Melvin, Jackie Yang, and Colin Wentworth

# **Executive Summary**

The following report outlines the research, development, and proposed implementation of a campaign primarily designed to reduce the use of illegal stimulants, such as Adderall, at Cornell University. Eastern Handed Communications began the campaign development process by conducting an initial analysis of the and strengths and weaknesses that Gannett Health Center possesses, as well as the opportunities and threats that could potentially derail a public health campaign against stimulants. Following this analysis, we display the findings of both our qualitative and quantitative research. We then use these findings to develop a new situational analysis that serves as the basis of many of our primary campaign goal.

Through our extensive research, we discovered the following three main barriers to decreasing stimulant use: (1) procrastination often results in the use of stimulants by forcing students to use the drugs to complete large assignments or study in short periods of time, (2) students often feel like they are incapable of being successful without using stimulants, and (3) students often ignore the long-term consequences of stimulants in favor of the short-term benefits.

By addressing these barriers, we hope to achieve our ultimate goal of reducing stimulant use on Cornell's campus, and thereby increasing the amount of sleep students receive and, subsequently, improving their mental and physical overall health. Particularly, we hope to reach our objective of increasing students' sleep by two additional hours per night.

Our PowerON campaign was built to fulfill these ambitions through our carefully constructed strategies and tactics. We tackle the issue of (1) procrastination by creating social media profiles such as Twitter and Facebook that give students daily tips to help combat procrastination. We attempt to amend students' (2) feelings of inadequacy by distributing posters with messages that are intended to boost confidence that might read "you don't need Adderall. You're here for a reason. You're smarter than you think." Finally, we address the ignorance of the (3) long-term health effects of stimulants by launching a video campaign where Cornell Alumni talk about how stimulant use has affected their daily life in the "real world."

## **Situational Analysis and Research Needs**

An initial analysis of the problems our campaign faces and the strengths, weaknesses, opportunities, and threats that could help or harm our campaign.

#### **Problem Statement**

Cornell University is known for its heavy workload and competitive academic environment. Undergraduate students at the university often feel a great deal of pressure from the university, parents, peers, and themselves to maintain a consistent high-quality of work. As a result, students often turn to stimulants such as amphetamines and coffee in an attempt to gain more hours of productivity. This use of stimulants by students often comes at the cost of reduced sleep and a lessened quality of physical and mental health. Due to these potential health threats, it is important that Gannett addresses these detriments with a public health campaign.

#### **Strengths**

Gannett Health Services has several strengths that will help it achieve this program's goals. First and foremost, Gannett has a history of strong health campaigns on campus. *Stick to the Buzz*, and *Target Safety* are two campaigns that are well known among Cornell undergraduate students. The same strategies that made those campaigns popular could have the same effect on our campaign. Second, Gannett is committed to students' well-being. This commitment will help ensure that the Health Center makes devoted efforts to protect students from the improper use of stimulants. Third, Gannett has strong branding on campus that many students associate with a trustworthy and professional healthcare system. Thus, since the Gannett brand is on our posters it could help the campaign gain credibility. Fourth, Gannett has a nearmonopoly over healthcare for Cornell students. Students that come into Gannett for sleep, drug, or stress related problems could be given our literature on stimulant abuse. Fifth, this campaign

is being planned by Cornell Undergraduates who have an in-depth knowledge of the current undergraduate culture at Cornell. Finally, Gannett has the backing of the Cornell University Communication Department. The Department could help Gannett analyze the campaign after it is distributed and make adjustments based on how successful it has been with Cornell undergraduates.

#### Weaknesses

Despite the great number of strengths that Gannett Health Service has, it also has a number of weaknesses that could inhibit the success of this campaign. The first weakness is that some students may not take Gannett's messages seriously. This lack of trust could cause students to disregard our campaign entirely. Second, posters will be one means of distributing our messages. The places where posters are typically placed on campus are cluttered with posters, since our campaign is covering a "boring" topic it may be overlooked in favor of other advertising campaigns. Finally, this campaign is being planned by Cornell undergraduates who may not have the experience and know of a professional advertising agency. This inexperience may lead to campaign being created that could be easily misinterpreted by viewers.

## **Opportunities**

By distributing our campaign Gannett has the opportunity to reduce substance use at Cornell, increase the amount of sleep Cornell students get overall, and improve the overall physical and mental health of undergraduate students. Gannett also has the opportunity to utilize social media to distribute this campaign's messages, which will increase the campaign's online presence. Additionally, Gannett will provide quarter cards as literature to distribute to students in the Health Center, thus directly addressing student health concerns. Posters will also be placed on campus, which will increase the campaign's reach on campus.

#### **Threats**

Some external threats that could potentially destabilize our campaign and prevent students from following its guidelines are that many students find that it is easier to acquire amphetamines than it is to both get adequate sleep and complete work on time. In addition, Cornell students have a great deal of commitments, such as homework, activities, and a desire for social interaction. These large number of commitments could drive students to use stimulants in an effort to be as successful in their interests as possible.

#### **SWOT Chart**

For simplicity, we have condensed the information above into a chart outlining our campaign's strengths, weaknesses, opportunities, and threats.

## **Strengths**

- History of Strong Health Campaigns
- Strong Commitment to Student's wellbeing.
- Well known branding.
- Monopoly over Healthcare at Cornell.
- Campaign is being planned by Cornell undergraduates.
- Backing by Cornell's Communication Department.

#### Weaknesses

- Some students may not trust Gannett after negative experiences.
- A lot of competition for ad space.
- Campaign is being planned by Cornell undergraduates.

# **Opportunities**

- Reduce substance abuse.
- Increase sleep on campus.
- Improve student's physical and mental health.

#### **Threats**

- Easier to acquire stimulants than get adequate sleep.
- Over commitment by students could cause them to turn to stimulants.

#### **Research Needs**

Based on our situational analysis we were able to develop several research needs. In order to develop and execute the best campaign possible for Gannett, it is necessary for us to collect a significant amount of information on Cornell students.

We would like to know how students view stimulant use on campus. Finding the answer to this question could help us determine if there is a positive or negative stigma surrounding the drug on campus, which could help provide a strategy for our campaign or eliminate the need for a campaign overall. We would like to know why and when students use stimulants.

Understanding the rationale for why students use stimulants could help us develop messages that combat these rationales.

Another research need is that we would like to find out the degree to which Cornell students value sleep. If students do not value sleep, we could develop a campaign that emphasizes its importance. We would also like to know how knowledgeable students are about the relationship between stimulants and sleep. If students do not know that stimulants can negatively affect their sleep, it could be necessary to create an educational campaign. Finally,

we would like to know how stress affects the use of stimulants. If students who are highly stressed are more likely to use stimulants, then it might be necessary to include alternative stress coping mechanisms in our campaign.

## Research Goals, Objectives, and Strategies

A summary of our research goals and the strategies we used to accomplish them.

Our main research goals underwent some changes throughout the development of our campaign, largely due to the new information ascertained from data collected through our surveys, focus group, and other forms of research. Our initial overarching research goal was to identify and understand popular perceptions of stress and sleep, so as to understand the reasons for stimulant use on campus at which we could aim our campaign message. However, after analyzing and understanding quantitative survey results and qualitative responses from individual students in the focus groups and in-depth interview, our research goals were adjusted accordingly. Through this process, we were able to develop more detailed and thorough research goals and objectives, upon which we built our well-informed campaign.

## **Goals and Objectives of the Survey Analysis**

In order to create a quantitative basis for our campaign, we completed a secondary analysis using data from a survey on college student sleep used in Robbins & Niederdeppe (2014), the results of which can be seen in Appendix B. Our initial research goal for the survey analysis was to identify any relationships among stress, sleep, and stimulant use on campus, in order to identify any possible motivators that might influence stimulant use. However, any mention of stimulant use did not seem to be a factor in the survey study. Therefore, we changed our research goals to be more fitting to our resources. Given the available factors surveyed, we

assumed that sleep was a possible contributor to stimulant use, and that lack of sleep was attributable to many of the factors available from the survey results. Thus, we adjusted our research goals for the survey analysis to identify the general student perception of stress, sleep, and order of priorities, to gauge contributors to lack of sleep, and therefore, possible contributors to stimulant use.

Remaining under the assumption that stimulant use results from lack of sleep, we attempted to determine various reasons why students might not receive much sleep, from an academic, personal, and social perspective. We evaluated the survey results to tailor to our adjusted research goals by specifically analyzing the following relationships:

## 1. How does stress relate to lack of sleep?

We used SPSS to analyze the data results between the two ordinal factors in the Robbins & Niederdeppe (2014) study, Control Belief 1: "I am stress-free most nights of the week (on a scale of 1 to 7, 1 is disagree, 7 is agree)", and Behavior 1: "In the average week, I sleep for between 8-9 hours at night most weeknights (on a scale of 1 to 7, 1 is never, 7 is almost always)." In other words, in this research question, we examined the relationship between students' stress perception, and the actual amount of sleep they received on weeknights. The Pearson correlation demonstrates that the relationship between one variable (range of feeling stressed [Control Belief 1]) and the other variable (amount of sleep received most weeknights [Behavior 1]) is a significant one. The relationship observed is also a positive correlation, implying that as students feel more stress-free during the week, they will be more likely to receive 8-9 hours of sleep a night on the weeknights. The frequency counts reflected that the majority (30%) of students disagree about feeling stress-free; therefore, the distribution is skewed to the left. Additionally, there were no outliers contaminating the data set. Upon studying

the bivariate mean comparison, we can see that mean and number scale for Control Belief 1 have a direct relationship. Therefore, since the mean is lower since the Control Belief 1 scale is lower, it shows that as students feel more stressed, they will be less likely to receive an adequate amount of sleep during the week.

This analysis expands upon and solidifies our knowledge regarding the potential threats discussed in our SWOT Analysis, particularly focusing on the issues of (1) prior and overcommitments and (2) not having enough time. These factors are assumed to be factors in high levels of stress, which, according to the survey analysis, lead to a lack of sleep. Thus, considering the dedication and drive of the high-achieving students in Cornell's student body, we can assume that many students, in general, feel that they must accomplish all of their weekly tasks at the expense of sleep. Our findings have helped us to explain, understand, and utilize the underlying motivations and behaviors that lead to increased stress levels, lack of sleep, and stimulant usage in order to ultimately increase the average amount of sleep that undergraduate students receive by two more hours per night. We were then able to begin to shape our campaign, gearing the message towards encouraging time management and lowering stress. From this, we began to shape our focus group direction and questions as well, focusing on general perceptions of stress, origins of stress, and how students might reduce their stress.

# 2. How does my belief that sleeping 8-9 hours a night relate to how much sleep I actually get?

We used SPSS to analyze the data results between two more ordinal factors in the Robbins & Niederdeppe (2014) study, Outcome 5\_Strength: "My sleeping for between 8-9 hours at most nights per week will cause me to have less time to do all the things I want (on a scale of

1-7, one is unlikely, 7 is likely)," and Behavior 1: "In the average week, I sleep for between 8-9 hours at night most weeknights (on a scale of 1 to 7, 1 is never, 7 is almost always)." In this study, we examined the relationship between whether students believe sleeping an adequate amount will still allow them to have time to do all other desired activities versus how much sleep they actually receive.

According to our results, the Pearson correlation was less than .01, showing that there is statistical significance with a 99% confidence interval that students are sleeping less than 8-9 hours per night. The Pearson correlation also demonstrates the strength of the relationship between one variable (whether sleeping 8-9 hours a night will cause me to have less time to do all the things I want [Outcome 5\_Strength]) and the other variable (amount of sleep received most weeknights [Behavior 1]). The relationship is negative (i.e., inverse), implying that as the belief that sleeping more will cause less time to do other desired things becomes more likely, students will sleep less. Additionally, the frequency counts reflected a normative distribution, and the results were not skewed by outliers.

The survey results further expand upon our knowledge in the listed threats of our SWOT analysis, focusing again on (1) prior and overcommitments and (2) not having enough time. According to the quantitative results, we can conclude that students feel that they must decrease their amount of sleep in order to take part in and achieve all the things they want to do. Our findings have helped us to explain, understand, and utilize the underlying motivations and behaviors that lead to increased feelings of overcommitments, lack of sleep, and stimulant use. This has further aided our objective of ultimately increasing the average amount of sleep that undergraduate students receive by two more hours per night, through helping us shape our

overall understanding behind the problem. By understanding the student priorities of other activities over sleep, we could then tailor our campaign towards changing or shifting this mentality. Furthermore, the findings from our data analysis allowed us to shape the direction and questions in our focus group. Based off of the data analysis results, we planned to inquire into why some students might believe sleeping more might reduce the amount of time to do other desired things, priorities that are ranked higher over sleep, general time management skills, and possible ways in which students might get more sleep.

# 3. What is the relationship between having social events during the week and the amount of sleep received on weekend nights?

We used SPSS to analyze the data results between two final ordinal factors in the Robbins & Niederdeppe (2014) study, Control Belief 3: "I have social events most days per week (on a scale of 1-7, one is disagree, 7 is agree)", and Behavior 2: "In the average week, I sleep for between 8 - 9 hours at night most weekend nights (on a scale of 1 to 7, 1 is never, 7 is almost always)." In this study, we examined the relationship between the number of social events one might be committed to during the week, and the amount of sleep received on weekend nights. In this instance, we wanted to delve into whether there was a social aspect that contributed to a student's lack of sleep (and therefore, stimulant use) by examining a student's social schedule and amount of sleep over the weekend, when most social outings tend to occur.

The Pearson Correlation demonstrates the strength of the relationship between one variable (number of social events during the week [Control Belief 3]) and the other variable (amount of sleep received during weekend nights [Behavior 2]). The relationship observed is negative (i.e., inverse), implying that as one's social events during week increase, one's sleep

received during weekend nights decreases. The frequency counts reflected a normative distribution, and the results were not skewed by outliers.

These variables also expand upon our knowledge in our listed threats from our SWOT Analysis, specifying the issues of (1) prior and overcommitments and (2) not having enough time. Based off of these results, we can conclude that students often prioritize social event attendance over sleep. Our findings have helped us make progress towards our objective of increasing students' sleep by two more hours per night through helping us to understand the underlying motivations and reasoning as to why students do not receive an adequate amount of sleep. By learning that students typically prioritize their social calendar over sleep, we were able to further develop our campaign towards focusing on the prioritization of sleep and health over all else. Furthermore, the findings from our data analysis allowed us to further shape the questions in our focus group. Based off of the results from the data analysis, we planned to inquire into the motivations and behaviors from a perspective of social convention and pressures. We planned to ask which social events take priority over sleep, whether social pressures cause any behaviors regarding sleep, and what about the Cornell social culture might affect the amount of sleep received.

Through the analysis of our survey results, we were able to gather comprehensive background information that revealed that the importance of sleep is often undermined by the perceived importance of other academic, social, and personal factors. From these conclusions, we were then able to develop the desired direction and questions for our focus groups in order to further delve into the motivations behind these behaviors. The background information also allowed us to outline the development of our campaign towards changing the priorities of

students' sleep, social schedule, attitudes, and stress, in order to reach our original campaign goals and objectives to better the health and mindsets of students on campus.

## Goals and Objectives of the Focus Group

After analyzing the data from the survey results, we were able to reshape and refocus our focus group questions. With the new understanding of the relationships between sleep and stress, sleep and priorities, and sleep and social factors, we were able to tailor our focus group questions more towards delving into students' priorities, stress, and behaviors with regards to stimulant use. We were also able to adhere to the underlying assumption that lack of sleep strongly correlates with stimulant usage. Thus, our main goals and objectives of our focus group were to determine the reasons behind student stress, order of priorities, and whether these factors played a role in stimulant use and subsequently, lack of sleep.

In order to learn more about the relationship between each of these factors and stimulant use, we decided to analyze all undergraduate students at Cornell University, hoping to recruit students from a variety of graduating classes, majors, and experiences with stimulants. Thus, with such a wide array of participants in our focus group, we hoped to explore the various factors that play a role in stimulant use and abuse, and attempted to infer which factors best explained stimulant use on Cornell's campus.

In the focus group questions, we avoided asking questions that might allow students to feel singled out in any positive or negative way. The questions were designed to be open-ended, general questions that would elicit personal, in-depth responses. To begin the conversation, we began with a set of brief opening questions, including the students' graduating years and majors, thus allowing the focus group participants to feel more comfortable with the group. The

moderator went first, as to create a more open environment with the participants. We then went on to ask our next questions, separated into the following three main categories of questions in order to focus on each of the potential influencers in stimulant use. The focus group transcript can be referred to in Appendix C.

## 1. Engagement Questions

These questions were asked and organized in a particular manner in order to engage the participating students through inquiring into their general perceptions of stress, priorities of overcommitments, and social influences. We chose not to introduce the notion of stimulants so early into the discussion, since the topic is often considered a sensitive one. Instead, we hoped to first allow the students to become more accustomed and comfortable answering questions in the group setting, while also acquiring information simultaneously. We began by asking students about how they viewed stress, and about their ways to deal with said stress. For instance, we asked a set of questions that touched on their own stress such as, "What are the biggest contributors to your stress here?" With these questions, we were hoping to elicit responses linked to time management, academics, and general stressors due to balancing commitments to various different activities and organizations. We then asked about students' perception of overcommitments, hoping to elicit responses linked to how they deal with the pressure from the overcommitments. This set of engagement questions consisted of questions such as, "Do you think students here generally feel overcommitted or like they have too much to do at once?" By asking questions that would subtly introduce the notion of stress and possible ways to cope, we were hoping to prime the focus group to possibly begin thinking about stimulant use.

We then asked students about their perception on the importance of sleep, as well as their perception of the "norm" of sleeping patterns. Based off of the findings from the survey analysis, we asked these questions to determine how important students perceived sleep, in hopes to elicit responses regarding where sleep would rank on their list of priorities. We also asked these questions in order to potentially link the students' perceptions of sleep with any social influences they may have from their peers and the perceived amounts of sleep their peers receive. To achieve this, we asked questions such as, "How much sleep do you think students typically get on campus?" In this sense, we explored the social factors and subjective norms that might play into the students' perceptions on the importance of sleep. In order to make the section of engagement questions more comprehensive, we then asked how the students balance all of their responsibilities and assignments, in hopes to once again prime the focus group to begin thinking about whether they complete these commitments at the expense of sleep. For example, we asked questions such as, "How do you think students deal with managing their stress and balancing it out?" Based off of the notion of balancing overcommitments--and in order to successfully transition into the next section of more sensitive questions--we then asked students what they believed consumed most of their time, and how they typically found the energy to complete everything if not from sleep. This seemed to transition smoothly into the notion of stimulant use as a substitute for sleep.

## 2. Exploration Questions

Our next set of questions introduced the discussion of stimulant use on campus, with the goal of receiving more in-depth and sensitive responses as to the motivations behind why students choose to use stimulants. We hoped to discover the reasoning behind stimulant use, in

order to combat these reasonings and ultimately achieve our campaign goal of bettering overall health and sleep--as well as the campaign objective of increasing each student's sleep by two more hours per night. We began by asking the students what they considered to be classified as stimulants. We asked this in hopes to create a consensus on a general definition, so as to ensure that every participant understood the topic of discussion.

Next, we asked students what they believed was the prevalence of stimulant use on campus, in order to gauge the possible social pressures or influence felt on campus. We then asked students about their perception of stimulant use in terms of general health and academic success, hoping to elicit more acknowledgement of negative consequences than positive benefits. For example, in this set of exploration questions, we asked questions such as, "Do you know any health effects that come from taking Adderall?" and "What do you think its [stimulants] effects are in an academic context?"

Furthermore, in order to determine the importance that students placed on their health and their academic success, we asked questions that pit potential long-term health consequences against potential short-term academic benefits. These probing questions read, "What do you think are the effects of stimulant use in the academic short-run versus the long-run?" We hoped to use these questions to prime the students into considering any motivations behind using stimulants, even despite knowing the negative consequences the stimulants might have. Finally, we hoped to obtain as many possible motivations as possible from our final question, where we inquired into why students use stimulants in general. For instance, we asked, "Considering all of the effects discussed, why do you think students use and continue to use stimulants?" We asked these questions in an open-ended fashion, hoping to receive as many opinions, thoughts, and

perspectives as possible, so as to consider all possibilities and to ultimately combat and create the most comprehensive campaign possible.

## 2. Exit Questions

Finally, our exit questions covered the concepts that might not have been necessarily covered in the prior sections. The goal of these focus group questions was to collect all potentially helpful information that might prove helpful in our overall analysis. We wanted to ensure that the relationship between sleep and stimulant use was recognized. We added these questions at the end of the focus group protocol as an insurance of its coverage, though we hoped to have organically discussed the concepts throughout the conversation. At the end of the Exit Questions section, we asked if any members of the focus group had any more information or questions to add, in hopes to not limit any more contributions to the information gathered and to allow for closure in the conversation and final thoughts.

#### Other Forms of Research: In-Depth Interview

Although our survey analysis and focus group had provided us with much insight into the nature of student perceptions on sleep, stimulant use and other factors, as well as many of the motivations behind these factors, we also decided to conduct an in-depth interview. We chose to conduct an in-depth interview with an individual who admits to illegally using unprescribed Vyvanse. This in-depth interview was conducted with hopes to offer additional information and more personal and in-depth motivations behind why some choose to take part in stimulant use. By individually discussing the issue, we were able to elicit personal experiences and more detailed perceptions on stress, overcommitments, and stimulant use.

## Goals and Objectives of the In-Depth Interview

Based off of the findings from our focus group results, we conducted our in-depth interview with the goal of expanding more upon the "Exploration Questions" asked in the focus groups and analyzing illegal amphetamine use and stimulant use in depth, and the relationship, if any, between stimulant use and sleep. We hoped to elicit more detailed responses and personal accounts from our interviewee, who had admitted to using stimulants illegally for academic purposes. Namely, the main themes we explored in the focus groups were the reasons behind using stimulants, the attitudes towards stimulant usage, the overall perception of stimulant usage in Cornell, the accessibility of stimulants, perceived detriments and benefits of the stimulant, and the value and prioritization of sleep. Our objectives for asking these questions was to solidify the responses received in the focus group, as well as to ascertain if any other attitudes or behaviors existed among actual stimulant users. Due to the scope, focus, and nature of the in-depth interview, we did not include engagement or exit questions, in order to maximize information from personal accounts and in-depth responses on the sensitive topic of stimulants.

## Strategies of the Survey Analysis, Focus Group, and In-Depth Interview

For the survey analysis, we used SPSS to examine the relationships between three pairs of factors relevant to the notion of sleep. The factors, taken from the Robbins & Niederdeppe (2014) study, were examined through studying their Pearson correlations, mean values, and frequencies, in order to determine the nature of the relationships between the factors. Since our group is based around stimulants and sleep, and since there were no factors in the Robbins & Niederdeppe (2014) study regarding stimulants, we examined available factors under the assumption that lack of sleep and stimulant use were heavily correlated. Thus, we instead

examined other factors that might influence a lack of sleep, which included the relationship between amount of sleep received and amount of stress, order of priorities, and social influence.

For our focus group, we recruited a variety of undergraduate Cornell students of different graduating years, majors, and experience with stimulants. We also did not mention the notion of stimulants to any of the participants prior to the focus group, in hopes to not impede or prime their opinions before discussing stimulants. The focus group consisted of eight undergraduate students, one moderator, and two note-takers. The note-takers recorded the expressions and body language of the participants in order to gauge any additional information regarding the discussion. The focus groups maintained a small sample size that might not be indicative of the entire Cornell undergraduate population. However, despite this, we were able to ascertain indepth and personal information regarding the perceptions of stress, stimulants, sleep, and commitments at Cornell.

For the in-depth interview, we followed virtually the same strategy as the focus group. We interviewed an individual who had admitted to using stimulants illegally, in order to get a competitive edge and to keep up with his various commitments. However, in the in-depth interview, we asked more personal and detailed "Exploration Questions" in order to elicit more information than received from the focus group. This interview consisted of just the individual interviewee and the moderator (or interviewer). We hoped to learn a very personal account of stimulant use and the detailed motivations behind it.

## **Analysis and Results of Qualitative Research**

An analysis of the results from our focus group and in-depth interview.

To collect information on the use of stimulants at Cornell, our team conducted one focus group comprised of eight participants, and one in-depth interview with an individual who illegally uses stimulants. The focus group consisted exclusively of Cornell undergraduate students from seven different majors. The experiences with stimulant use for each of the individuals participating in the focus group were mixed, ranging from daily prescriptions of Adderall and daily caffeine intake, to no exposure to stimulants, whatsoever. The class range of the focus group spanned from students in their second to fourth year, consisting of five juniors, two sophomores, and one senior. Initially, we had intended to study a wider range of classes in our focus group, but recruiting and time constraints had prevented us from doing so. Despite this minor setback, we still received a wealth of information from our focus group results. The indepth interview examined the opinions, perceptions, and behaviors of a junior science major pursuing medicine, who is actively involved in many extracurricular organizations on campus.

Both the focus group and the in-depth interview were recorded and transcribed for analysis. During both of these sessions, we also took notes on how the participants interacted with each other or with the moderator, in order to better understand the information participants were relaying. Through analysis of both the discussion and the body language of the participants, we were able to identify several themes in regards to student tendencies with stimulant use and sleep.

## **Focus Group Analysis**

The energy of the focus group was fairly light in tone throughout the entire session. Many of the participants made jokes about the use of stimulants and other drugs, like cocaine, alcohol,

and marijuana. Many students were also fairly unsure of themselves on these topics. They used the qualifiers, "umm," "uhhh," and "like," to make themselves more comfortable. When the conversation went to more serious topics (drugs, stimulants, alcohol, policy), it was often balanced out by a joke to break the tension, or laughter. From analyzing the results of our focus group discussion, we were able to extract several overarching themes that our focus group participants seemed to unanimously agree upon. The themes identified for the focus group are as follows:

- 1. Most students tended to fixate on illegal performance-enhancing stimulants, but did not seem to actively stigmatize, judge, or pressure the use of them.
- 2. Many students seem to emphasize the short-term benefits of stimulant use in terms of academic success, and fail to recognize the long-term benefit of developing an effective work ethic and the long-term health consequences
- **3.** Amphetamines are usually a last resort that students use to cram. Reducing procrastination would reduce amphetamine usage.
- **4.** Cornell encourages coffee consumption. It is sold in every building, provided as a refreshment at events, and there are low-cost coffee refills. Coffee seems to be a social norm on campus.
- 5. Students seem unknowledgeable about stimulants. Some said that marijuana and alcohol were stimulants. Most were unaware of any long-term health effects of the drugs.
- **6.** Perceived consequences of illegal stimulant use at Cornell seems to be rather lenient and tolerant.

In addition to these main themes from the focus discussion, one participant suggested that there should be "anti-procrastination seminars" and then apologized for having said that. Both of

these factors could indicate that students are not as knowledgeable about amphetamine drug use as we had previously thought. This idea is supported by the fact that several students did not know exactly what a stimulant was, and suggested that marijuana and alcohol were stimulants.

Probably the most prominent topic that was discussed was that Adderall was often used in a panic to complete a last minute assignment. Key reasons for using stimulants included procrastination, lack of time, overcommitments, and desire to succeed. Students felt that if they had planned out their assignments over a longer period they would be less likely to resort to using Adderall. This belief was heavily emphasized towards the last twenty minutes of the focus group. Some students also advocated for the use of drugs that were not stimulants as an alternative to coffee and Adderall. One student in particular said that using marijuana would help people balance out their sleep schedules and reduce stress. Another prominent point that we noticed was that most students did not believe that using amphetamines was stigmatized on campus and that use of the drug was very popular on campus. However, most of the students in the focus group had never used strong amphetamines such as Adderall themselves. Additionally, many students did not report feeling peer pressured to use stimulants, citing that most students used them because of internal or self-pressure via a desire to "get As," and "get good grades."

## **In-Depth Interview Analysis**

The themes of the in depth interview are as follows:

- 1. The participant had feelings of intellectual inadequacy. He said that he used unprescribed amphetamines in order to get a competitive edge over his classmates.
- 2. The participant says that drugs are socially acceptable in his friend groups and he has easy access to the drugs. However, he says that he does not feel social pressure to use amphetamines.

- **3.** The participant feels that he has overcommitted himself and also has a problem with procrastination. He uses Amphetamines as a "cram drug" to make up for his procrastination and overcommitments.
- **4.** The participant prioritizes academics and extracurriculars over sleep.

The individual who participated in the in-depth interview provided us with additional insights. He was in his third year at Cornell and in a major with a traditionally heavy workload. Our in-depth interview centered on the themes found in the focus group, particularly the attitudes, beliefs, and behaviors of the respondent's use of illegally prescribed Vyvanse and other stimulants. His primary reasons for using Vyvanse were procrastination, overcommitments, cramming, desire to gain a "competitive edge" against other classmates, desire to absorb the material, feelings of academic or intellectual inadequacy, and under-prioritization for sleep. He explained that he preferred losing sleep to finish his assignments over experiencing "panic" to finish his assignments the next day after having had sleep. This low prioritization of sleep allows our interviewee to turn to "cram drugs," particularly Vyvanse, in academic situations where time restraints cause pressure and "emergencies" to finish his assignments on time. However, since he is a science student, he claims to understand the long-term health detriments of using unprescribed stimulants excessively, and tries to limit his usage to these times of "emergencies" only.

This respondent is a member of Greek life. He stated that he had easy access to amphetamines in his social circles and stated that he has never "sought out" the drug. His membership in Greek life may have made access to the stimulant easier, although he did not

explicitly state this. However, he stated that while the drug is socially acceptable among his friends, he never felt pressured to use the drug, feeling that its use is usually self-induced.

However, he did mention that the effects of amphetamines are often a "feel good" sensation in which one is "on top of" and "owning" their work and "focused," and that some people use the drug as a party drug. He had some knowledge of the negative health benefits of amphetamines and long-term effects, although he was generally unknowledgeable on the subject. He tended to prioritize his social life and extracurriculars and displayed a pattern of habitual cramming, in which he would turn to stimulants to stay awake, understand the depth of material, or gain a "competitive edge." He also states that he drinks coffee on a daily basis, which he began in his "second semester of college" due to the "depth of the course material and workload." Overall, he felt that he obtains less sleep when he uses amphetamines due to a disruption of his sleep cycle and inability to be able to sleep while on a stimulant. In sum, it appears his overcommitments, prioritization of extracurriculars and social life, low priority of sleep, procrastination, competitive desire to succeed, feelings of academic or intellectual inadequacy, and heavy course load lead him to utilize stimulants on a daily basis (caffeine) and unprescribed amphetamines when cramming or as a last resort.

## **Common Results Between Focus Group and In-Depth Interview**

Gathered from the information from both our focus group and our in-depth interview, we compiled shared perceptions, opinions, and behaviors among the participants involved (See Appendix E: Qualitative Analysis Chart). Shared reasons for using stimulants, particularly amphetamines, between the focus group and the in-depth interview include procrastination, overcommitments, cramming, lack of time, competitive environment (desire to focus or get good

grades), enhance academic performance, short-term gain, good feeling, and self-pressure to use. For the knowledge of health effects, both shared lack of in-depth knowledge on amphetamines' long-term effects. However, both groups agreed that other students choose not use amphetamines or stimulants for fear of addiction and the negative health effects of stimulants.

Since the in-depth respondent is a member of Greek life and has easy access to amphetamines in his social network, and the focus group believes that Greek life has a higher incidence of access to amphetamines, this is a commonality. Both agreed that amphetamines are relatively easy to access. However, they disagreed on the prevalence of usage: the focus group agreed that a small percentage of students use unprescribed amphetamines, while the in-depth interview respondent believed the prevalence to be much higher, since amphetamine use was high within his social circles.

In terms of social acceptability, both agreed that students do not feel peer pressured to use stimulants, and that amphetamine use and stimulant use is generally socially acceptable. In fact, they both agreed that the pressure to use amphetamines is self-induced. However, one respondent in the focus group felt that amphetamine use was akin to cheating, since it provides an "unnatural advantage."

In terms of the stimulant climate at Cornell, both agreed that many students use stimulants. Both groups generally placed sleep on a low priority, although one respondent in the focus group highly valued sleep. The in-depth interview respondent did not appear to prioritize his sleep, which could be a contributing factor to his daily caffeine (coffee) and occasional amphetamine use. Both groups agreed that they spend much time on extracurriculars and homework. In terms of stressors, both stated the volume of work, lack of time, overcommitment, extracurricular activities, competitive atmosphere, and desire to do well academically as

stressors, although the focus group included additional life stressors such as money, housing, and relationships.

Neither groups shared the same stress relief practices, with the in-depth interview respondent turning to his social life and extracurriculars to relieve stress, while the focus group respondents turned to naps, sleep, alcohol, drugs, and Netflix. Both groups pulled all-nighters and used stimulants as part of their workload management strategy, although the focus group also mentioned naps as a strategy. Both agreed that stimulants were things they used to boost their energy, although the focus group had marijuana, as well as some healthier energy boosters such as exercise and fresh air. The fact that the in-depth respondent stated that he turned to stimulants to boost his energy levels instead of healthier alternatives such as naps or exercise, may corroborate his disregard for his overall health.

The in-depth respondent considered stimulants to be amphetamines, coffee, and energy drinks, while the focus group also erroneously added alcohol and marijuana as a stimulant. This misconception illustrates that there could be a general lack of knowledge among students as to what defines a stimulant. In terms of attitudes on amphetamines, both groups agreed that Adderall is a "cram drug," is used for short-term benefits, and can be detrimental to future functioning in terms of learning good study habits or skills. However, the focus group also felt that it gives an "unnatural advantage," that it sets a "self-imposed bar of achievement," that certain high performing majors utilize it more than others such as engineers, that amphetamines are used irresponsibly, that it will give uncertain effects, and that some like it. In terms of the relationship between stimulant use and sleep, both groups reported an inverse relationship between stimulant use and sleep, with sleep being lessened when stimulants are used.

From these reasons for using stimulants, we have chosen to target procrastination, feelings of inadequacy or competitiveness, and intangible long-term consequences. We chose to focus on these particular issues because they seem to be the most common and influential reasons for why students choose to turn to stimulants at the expense of sleep. We believe targeting these three key issues for why students turn to stimulants will help us effectively reach our target audience's problems with our campaign and will produce the biggest behavioral change.

## **Revised Situational Analysis**

Following the completion of our research we were able to refocus our situational analysis to be better aligned with our findings. While findings from the original analysis are still applicable to the campaign, our new SWOT contains more specific factors that will help our program be as successful as possible.

#### **Strengths**

In conducting our qualitative analysis, we found that many students felt that using amphetamines was very socially acceptable on campus. However, when questioned many students said they had never done amphetamines and had no plans to do the drugs in the future. This disconnect could be exploited to show that these are not as acceptable at Cornell as students think. We also found that Gannett prescribes amphetamines to students. When Gannett distributes these prescriptions it could be an ideal time to show students our advertising material warning them of the dangers of these prescription stimulants.

## Weaknesses

In addition to the new strengths of our SWOT we also found several new weaknesses. The first new weakness is that Cornell seems to encourage the use of lesser stimulants such as caffeine. It was brought up in the focus group that there are a large number of coffee shops on campus. Sometimes professors will even encourage students to drink coffee to get their work done. Second, students feel that Cornell is very lenient towards the use of unprescribed stimulants. Participants felt there were no real repercussions from the University for using the drugs. Additionally, due to the competitive work environment and heavy workload that Cornell cultivates, many students feel that they have to use stimulants to succeed academically. Finally, our qualitative study may need to have a larger sample size in order to get a better view of the perceptions of stimulants and the reasons behind their use. Our focus group only contained eight individuals and our in-depth interview had only one. For future research we would recommend having a larger sample size.

#### **Threats**

The first new threat that we discovered was that many students were not as knowledgeable about stimulants as we had anticipated. This lack of knowledge could make students not take the potential health threats of stimulants seriously. Second, there is a culture of procrastination at Cornell. Students will often wait until the last minute to complete the assignments they were given. As a result, students turn to stimulants to complete their work within a shortened time period. Third, illegal stimulants are perceived by students to be socially acceptable. This perception could encourage the use of stimulants by making them seem more unobjectionable. Finally, students pay more attention to the short term gains of stimulant use than to the long-term consequences of these drugs. This way of thinking could make changing perceptions regarding stimulant use to be more challenging.

## **Opportunities**

We have also discovered several new opportunities after conducting our research. There is the opportunity to educate students about stimulants. Many students lack knowledge about what stimulants are and the long-term health effects of the drugs. Educating students about the drugs could reduce their use overall. Additionally, providing students with anti-procrastination tips and incentives could help reduce the use of the drugs since they are usually used for last minute "cramming." Our campaign also has the opportunity to reduce the social acceptance of the stimulants, thus making the drugs appear to be less safe. Finally, there is the opportunity to show students that learning how to have a good study/sleep balance is more important than getting a good a grade. Instilling this belief in students will hopefully encourage better study habits and reduce the use of stimulants overall.

#### **SWOT Chart**

For simplicity we have condensed the above information into a chart.

## **Strengths**

- Using Adderall/amphetamines isn't as socially acceptable at Cornell as students think
- Gannett prescribes
  Adderall/amphetamines to students

#### Weaknesses

- Cornell encourages caffeine consumption
- Permissive attitude towards the use of unprescribed stimulants
- Heavy workload
- Inadequacy from high-achieving environment
- Study may need a bigger sample size

# **Opportunities**

- Educate students about drug use
- Tips to reduce procrastination
- Long-term health effects might deter students
- Reduce the widespread social acceptance
- Emphasize "real world" value of the learning process, rather than importance of grades

#### **Threats**

- Unaware of the health detriments of drug use
- Culture of procrastination
- Easier accessibility in Greek life
- Perceived social acceptance of Adderall
- Students pay more attention to shortterm benefits than long-term consequences

## Proposed Communication Plan for the **Power On** Campaign

The goals, objectives, strategies, and tactics of our campaign supplemented by the theory we used to develop it.

Ultimate Mission: To combat the motivations behind stimulant use, and subsequently eliminate stimulant use to increase the healthy sleeping behaviors of students on campus.

## Goals, Objectives, Strategies, and Tactics

From the information ascertained from various forms of research, we have learned that students at Cornell University turn to the use of stimulants to combat the following three major barriers: (1) students tend to procrastinate their work due to a lack of time from overcommitments, (2) students feel intellectually inadequate and feel that they must use stimulants to keep up with their peers, and (3) students face difficulties in understanding and internalizing the long-term detriments of using stimulants for short-term benefits. In order to

create the most effective campaign to achieve our ultimate mission, we believe that directly combatting these barriers is the most productive and efficient way in which we can do so. Thus, our communication plan utilizes social media, posters, and video campaigns to (1) teach students how to best accomplish their commitments and reduce procrastination, (2) change the student mentality to instill confidence and reassurance, and (3) demonstrate the relevant and relatable negative effects of stimulant reliance over the proper learning process.

Finally, we propose to show relevant long-term detriments through our Alumni Videos, where we will display real testimonials of notable and recent alumni, who will demonstrate their real experiences encountering difficulties due to stimulant reliance while at Cornell, and failure to properly partake in the learning process necessary in the "real world."

## **Theoretical Inspiration for Campaign**

The theory we chose to base our campaigns off of was the Theory of Planned Behavior developed by Icek Ajzen (Ajzen, 1991; Ajzen, 2011; Witte, Meyer, & Martell, 2001). The Theory of Planned Behavior (or TPB) is a model for predictive behavioral intention and behavior (Ajzen, 1991; Ajzen, 2011; Witte et al., 2001). TPB postulates that the combination of attitude, subjective norms, and perceived behavioral control predict an individual's behavioral intention and subsequent behaviors (Ajzen, 1991; Ajzen, 2011; Witte et al., 2001). An individual's attitude, subjective norm, and perceived behavioral control are defined by his evaluation of a particular behavior, his perception influenced by the discernment of his significant others regarding the behavior, and his believed ease or difficulty in accomplishing this behavior,

respectively (Ajzen, 1991; Ajzen, 2011; Witte et al., 2001). Considering all of these factors, we are then able to predict the individual's behavior and behavioral intention, which is the immediate precedent to behavior, and is defined as his preparedness to carry out the predicted behavior (Ajzen, 1991; Ajzen, 2011; Witte et al., 2001). See Figure 1 below for a model of the Theory of Planned Behavior.

We have chosen this theory for our campaign because we have decided to target the changes in attitude, subjective norms, and perceived behavioral control regarding stimulant use, in order to predict a change in behavioral intention and behavior in terms of using stimulants at the expense of sleep. Through our campaigns of Procrastination Tips, Confidence Posters, and Alumni Videos, we attempt to change the perceived behavioral control, attitudes, and subjective norms of students on campus.

Figure 1. Model of Theory of Planned Behavior

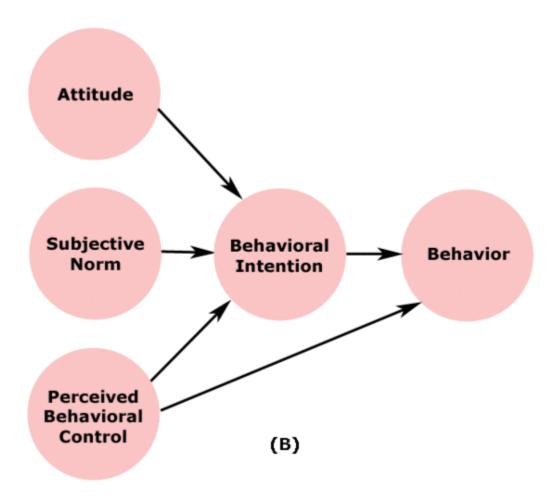


Figure 1. Theory of planned behavior. Copyright 2015 by Frompo. Reprinted with permission.

# **Target Audience**

The target audience of our campaign will be Cornell undergraduates. All of the research we conducted used undergraduates as participants. Therefore, we feel that the strategies and messages we developed are best suited to this demographic.

# **Procrastination Tips Campaign**

**Goal:** Improve student's time management skills in an effort to reduce legal and illegal stimulant use for last minute assignments and studying.

Objective: Reduce the number of students who say they have used unprescribed stimulants to complete assignments at the last minute by 20% and legal stimulants by 10% by May 2016.

Tactic: Develop a Facebook page and a Twitter account that distribute anti-procrastination tips.

One of the largest barriers that causes students to use stimulants and reduces the amount of sleep students receive overall is the procrastination culture on campus. After acquiring information from the focus group and in-depth interview, we learned that much of the motivation to use stimulants and forgo sleep arises from the desperate, last-minute rush to complete assignments or study for exams after a period of procrastination. We have determined that, especially in a high-achieving environment such as Cornell University, many students may attribute their procrastination to the simple overcommitment of extracurricular activities, athletics, or other responsibilities. Thus, while wanting to continue to encourage the ambitious drive of the students involved on campus, but also find a way in which to reduce procrastination and promote healthier sleep behaviors, we developed our Procrastination Tips campaign to solve this problem. We propose to diminish procrastination through our Procrastination Tips campaign by using social media outlets such as Facebook and Twitter through which we may send daily motivational messages and tips. Rather than discouraging students to get involved and commit to extracurricular activities, we instead aim to teach them tips for how to use their spare time and to be the most efficient and resourceful as possible, so that they may avoid turning to stimulant use and losing sleep. By distributing these messages through these outlets, we hope to remind students to use their time efficiently and to stop procrastinating through their most likely means of procrastination: their social media accounts.

The Theory of Planned Behavior helped guide our decision to use this strategy. By demonstrating to students that they can diminish procrastination with ease through this campaign we will be able to change the perceived behavioral control of achieving such a feat.

Additionally, by launching a social media campaign and gathering more and more public followers, the subjective norm will also grow towards reducing procrastination. This will also change the attitude of the students, allowing them to positively evaluate this change and subsequently will allow us to predict a positive behavioral intention and behavioral change.

## **Confidence Boosting Campaign**

**Goal:** Reduce students' feelings of intellectual inadequacy so that they do not think they need amphetamines or stimulants to succeed.

**Objective:** Decrease the number of students who say that they feel they need to use legal or illegal stimulants to succeed by 5% by May 2016.

**Tactic:** Distribute posters with positive messages that tell students they do not need stimulants to succeed.

Another very large barrier that prevents students from getting an adequate amount of sleep because of stimulant use is the notion that many students feel the need to use these stimulants in order to stay competitive and to survive at Cornell. While Cornell's high-achieving environment may be a motivator for some, we have found that many students actually feel the opposite--they seem to be discouraged about their natural abilities because of their competitive environment. Participants of our focus group and in-depth interview have claimed that they do not feel as if they can "keep up" with their peers and classmates without the "competitive edge"

and mental boost from stimulants. Thus, these students have begun relying on stimulants and disregarding the importance of sleep, simply because they do not believe that they are capable to remain competitive with their natural cognitive abilities. Our Confidence Poster campaign was launched to combat this problem. We propose to instill confidence and healthier mentalities in students through our Confidence Poster campaign, where we will hang posters all over campus with motivational messages reminding students of their capabilities and natural adeptness. We plan to hang these posters in areas in which students might encounter the most stress, namely in libraries, bathrooms, residence halls, and classrooms. By hanging these posters informing these students they are adequate enough, we hope to boost the students' confidence, particularly when they might be feeling especially stressed and below the Cornell average. We also plan on distributing these messages via quarter cards at Gannett in order to help alter the beliefs of the students who may think about distributing the drugs. The quarter cards can be disseminated by staff such as healthcare providers at Gannett to students who have concerns about sleep, stimulant use, or stress. The quarter cards can also be placed on tables in the waiting areas of Gannett.

In terms of the Theory of Planned Behavior, this campaign primarily targets perceived behavior control of using stimulants and amphetamines. Students may feel that they need stimulants to be academically successful because they are not as capable as their peers. By telling students that they are capable we hope to alter this belief and show students that they are just as capable of accomplishing their goals without amphetamines as they are with them. Thus, this tactic will help in our goal of overall reduction of stimulant use.

## **Alumni and Long-Term Consequences**

Goal: Show students the long-term consequences of legal and illegal stimulant use.

**Objective:** Increase the percentage of students who are aware of the negative long-term effects of stimulants by 30% by May 2016.

**Tactic:** Develop a video campaign where Cornell alumni who used amphetamines or other stimulants during their time at the University talk about the negative effects stimulants have had on their lives.

The final barrier we hope to address is that many students are unknowledgeable about the long-term health effects of stimulant use. However, many students say that they may consider changing their habits if they were made aware of any negative long-term effects of the drugs. We feel that the best way to show the long-term effects of stimulants would be to have people whom students respect, in this case alumni, talk about the negative effects prescribed stimulants have had on their lives. We feel as though these talks would be most effective as videos, where the emotion of the speakers could be captured fully and have the most impact on students' perceptions of stimulant use. These videos would be posted on YouTube and also the campaign's Facebook page. We will create a PowerON YouTube channel to post the alumni videos on. Additionally, we learned from our research that many students focus more on the short-term benefits that stimulants might bring, rather than the long-term detriments of the usage. We have speculated the reasoning for this to be attributed to the lack of relevancy and tangibleness in long-term warnings. Thus, by showcasing the difficulties encountered by recent and notable alumni, with whom students might be able to relate and understand, we plan to take steps towards creating more relatable future dangers. Additionally, we plan to use our campaign to emphasize the notion that, while using stimulants may help in the short-run with assignments and grades, the students will be failing to develop a learning process that will ultimately be more applicable in the "real world."

In terms of the Theory of Planned Behavior, this strategy directly targets the attitude towards amphetamine use and to a lesser degree legal stimulants. In our qualitative analysis we found that students had a lackadaisical attitude towards stimulant use and did not know about the long-term health effects of stimulants. By having alumni talk about the negative effects of stimulants we force students to think about the effects the drugs are having on their health and alter the belief that amphetamines are relatively harmless.

## **Proposed Campaign Timeline**

Jan-May 1	May 1-July 31	May 1-Aug 14	Aug 15	Jan 10	Jan 30	May 1
2015	2015	2015	2015	2016	2016	2016
Research and Development of Campaign.	Filming Video Campaign. Design Posters and other images.	Launch Preanalysis of campaigns.	Make & launch Facebook & Twitter. Distribute Posters. Post video campaign on YouTube.	Film second video series.	Redistribute posters. Launch video series on YouTube.	Post-analysis Survey and Post-analysis Focus Group.

## **Possible Unintended Consequences**

A description of the potential negative effects the campaign could have on viewers.

Though we designed our campaign utilizing the Theory of Planned Behavior, there are still potential unintentional consequences that may result from the implementation of this theory and our campaign. While the goal of our campaigns is to decrease stimulant use within the

Cornell student body and increase students' sleep and overall health, the possible unintended consequences may cause students to disregard or even directly oppose our intended behavioral changes. Thus, by understanding and acknowledging the possible unintended consequences of each of our specific campaign messages, we hope to minimize these consequences and maximize our intended elements. We hope to do so by analyzing the theories and elements of our campaign that might spur these unintended consequences, and to directly combat and diminish them.

## **Unintended Consequences of Confidence Poster Campaign**

Possible unintended consequences of the Confidence Boosting campaign include social norming. This is because, according to Cho and Salmon (2007) "Campaigns, via social norming, can render individuals vulnerable to shame and isolation" (p. 305). Cho and Salmon (2007) explain that a campaign might achieve this by unintentionally promoting a social norm, and thereby causing an individual to feel an obligation to comply with this social norm through setting implicit and explicit social expectations. This individual might view this campaign and recognize a misalignment between himself and the perceived social norm. Thus, when the individual becomes aware that he or she is not considered to be within the social norm, this will lead him or her to feel isolated and shameful (Cho & Salmon, 2007).

Our Confidence Posters might promote the social norm of inherent intellectual capability and diligence on campus. Therefore, social norming may unintentionally cause individuals to feel ashamed or isolated if they do not believe that they are naturally capable or deserving of being a high achieving member of the Cornell community. This outcome may produce a possible dislike of the message and a boomerang effect wherein someone could adopt or strengthen the

opposite viewpoint of the intended message (i.e. feeling less confident in his or her abilities than before) (Hart, 2013; Wolburg, 2006; Byrne, 2015; Cho & Salmon, 2007).

This particular campaign might also introduce a psychological reactance to our Confidence Posters. Psychological reactance occurs when an individual is faced with the threat of having his or her freedom to perform an action limited. Fearing this threat, the individual's desire to carry out the behavior from which the threat arises will increase (Brehm & Brehm, 2013; Byrne, 2015). Thus, in the display of these campaigns that explicitly tell students that they do not need stimulants, the posters could be interpreted by some as limiting the students' freedom to partake in stimulant use. A psychological reactance might occur in this instance, causing students to develop a greater desire to use stimulants and disregard their natural abilities, simply because the Confidence Posters presumably attempted to limit their freedom to do so.

#### **Unintended Consequences of the Procrastination Tips Campaign**

The possible unintended consequences could include a psychological reactance, as possible in our Confidence Poster campaign. Though our tips revolved around avoiding or halting procrastination, focusing on schoolwork, and maintaining a healthy sleep schedule, we attempt to remind students to stay motivated in a positive and productive manner. However, many students may interpret these tips as commands that impinge on their freedom to spend their time however they wish. Thus, a psychological reactance to our Procrastination Tips may occur, prompting students to procrastinate more as a backlash to our intended help.

The possible unintended consequences of our Procrastination Tips campaign could also cause an ambiguity reduction through its discussion of amphetamine usage. Ambiguity reduction occurs when, upon specifying certain topics or subjects, a viewer might experience a greater

desire to try or encounter the subject in question (Byrne, 2015). In the case of our campaign, by specifically discussing how students do not need amphetamines and simply need to reduce procrastination, we might inadvertently spur curiosity and desire within our students to try amphetamines.

Yet another unintentional consequence of our Procrastination Tips campaign is the notion of inadvertent priming. While our campaign will feature mentions of coffee, amphetamines such as Adderall, energy drinks, and other stimulants with the intention of motivating our audience to avoid them, there is a possibility that this might induce a counterproductive response. Priming is the activation of the most unique, outstanding, or recent image or message in an overall campaign that might prompt the viewer to concentrate on that image when recalling the original message (Fishbein & Yzer, 2003; Byrne, 2015). In regards to our campaign, our showcasing or mentioning coffee, for instance, might prompt our viewer to remember the image of coffee and focus on the coffee itself, rather than the message to avoid consuming it. This result of priming might lead our viewer to not only think about coffee, but realize that he or she desires the coffee, leading to an undesired indulgence of stimulant use.

Along the same vein, ironic processing could occur as a result of our Procrastination Tips campaign. Ironic processing occurs when a message is intended to suppress certain thoughts or behaviors, but instead causes the viewer to focus on the said thoughts more intently (Hart, 2013; Byrne, 2015). Thus, if students are explicitly told to not use stimulants and to not procrastinate, they may focus more on stimulant use or procrastination as a result.

## **Unintended Consequences of the Alumni Video Campaign**

An unintended consequence of our Alumni Video Campaign might be the unintentional influence for students to emulate negative behaviors with stimulants through observational learning. Stemming from Bandura's Social Cognitive theory, observational learning states that a message may illustrate unintentional rewards for partaking in negative behavior (Hart, 2013, p. 309). Observational learning, or the replication of a behavior that is observed (Hart, 2013; Byrne, 2015), could be one consequence of the Alumni Video Campaign because the students may find that they wish to replicate the behaviors of the showcased alumni in the videos. The Cornell alumni will be shown retelling their own accounts of how they used stimulants while they were students, and how this stimulant use negatively affected their ability to learn a productive and practical work ethic for the "real world." While this strategy was intended to demonstrate the long-term consequences of forgoing a work ethic in exchange for short-term benefits, students might instead replicate the decisions of the alumni and use the stimulants.

## **Proposed Budget**

BUDGET BY TACTIC	COST
Tactic 1 — Procrastination Tips	
Facebook Page	\$0
Facebook Page Post Boosts	\$200 (Facebook.com advertising quote)
Twitter Page	\$0
Sub Total:	\$200
Tactic 2 — Confidence Posters	
Poster design consultation	\$195 (designcontest.com)
5,000 Quarter Cards	\$125 (Cornell Print Shop)

Printing 200 Posters	\$300 (Cornell Print Shop)
Sub Total:	\$620
Tactic 3 — Alumni Long-Term Consequences Campaign.	
Renting of video equipment	\$0 (Mann Library)
Production Cost	\$1,320 (Cornell AV Services)
YouTube Account	\$0
Sub Total:	\$1,320
TOTAL CAMPAIGN BUDGET	\$2,140

#### **Evaluation Plan**

An important part of any communication plan is an evaluation of the campaign's success. To begin the evaluation, we should do a pre-analysis survey that will be sent out via email. The pre-analysis survey will analyze people's attitudes, perceived behavioral control, subjective norms, and typical behaviors in relation to stimulant use and sleep. We will measure our participants' attitudes through questions that focus on their current perceptions and opinions on stimulant use and sleep, and will measure the subjective norms through asking questions that focus on their peers' perceptions, behaviors, and opinions on both stimulants and sleep.

Additionally, in our survey, we will measure perceived behavioral control through asking questions on whether the participants believe certain behaviors regarding stimulant use or sleep are easy or difficult to accomplish. Finally, we will measure the initial behaviors of our participants through our survey by asking questions regarding their typical behaviors with or in regards to stimulants and in regards to sleeping habits. We will implement this survey from May

1 to August 14, to provide our campaign three months and two weeks to gather cohesive data in which to base our campaign strategies and tactics upon.

We will utilize both a survey and focus group to evaluate the campaign one year from its launch. The survey will provide us quantitative data upon which to base our campaign, while the focus group will provide us qualitative data and live student feedback.

A post-analysis survey one year from the date of the launch of the campaign will ideally analyze the effectiveness of the campaign. The survey will again analyze the attitudes, perceived behavioral control, subjective norms, and behaviors with stimulants and sleeping patterns of the original participants to determine any change from their original responses. We plan to administer a new survey with similar questions directed at personal perceptions, peers' perceptions and behaviors, ease or difficulty in completing certain behaviors, and current personal behaviors in order to consistently measure the new attitudes, subjective norms, perceived behavioral control, and behaviors, respectively. Comparing the new survey results to the results prior to our campaign will allow us to examine the success of the campaign's strategy, tactics, and messages (granted that there are no external factors or extenuating circumstances).

We will utilize a post-analysis focus group, as well, one year from the date of the launch of the campaign. A post-analysis focus group will determine if student's attitudes, perceived behavioral control, subjective norms, and behaviors regarding stimulants have changed as a result of the campaign. The post-analysis focus group will also analyze any new strategies or tactics that can be incorporated in the campaign, in addition to whether or not students like or dislike the campaign, the mediums used, and the campaign's messages.

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## Question 1: How does stress (Control Belief 1) relate to lack of sleep (Behavior 1)?

Control Belief 1: I am stress-free most nights per week (1 disagree - 7 agree)

**Behavior 1:** In the average week, I sleep for between 8 - 9 hours at night most weeknights (on a scale of 1-7, 1 is never, 7 is almost always)

## ControlBelief1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	109	29.8	30.0	30.0
	2	89	24.3	24.5	54.5
	3	69	18.9	19.0	73.6
	4	27	7.4	7.4	81.0
	5	31	8.5	8.5	89.5
	6	22	6.0	6.1	95.6
	7	16	4.4	4.4	100.0
	Total	363	99.2	100.0	

Missing System	3	.8	
Total	366	100.0	

# Report

# Behavior1

ControlBelief			Std.
1	Mean	N	Deviation
1	2.41	109	1.701
2	2.93	87	1.784
3	3.51	69	1.828
4	3.70	27	1.463
5	4.42	31	1.876
6	4.73	22	1.579
7	4.13	16	2.125
Total	3.23	361	1.895

# Correlations

ControlBelie	Behavior

		f1	1
ControlBelief	Pearson	1	.374**
1	Correlation	1	.574
	Sig. (2-tailed)		.000
	N	363	361
Behavior1	Pearson	.374**	1
	Correlation	.574	1
	Sig. (2-tailed)	.000	
	N	361	361

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Question 2: How does my belief that sleeping 8-9 hours a night (Outcome 5\_Strength) relate to how much sleep I actually get (Behavior 1)?

Outcome5\_Strength: My sleeping for between 8-9 hours at most nights per week will cause me to have less time to do all the things I want (on a scale of 1-7, one is unlikely, 7 is likely)

**Behavior 1:** In the average week, I sleep for between 8 - 9 hours at night most weeknights (on a scale of 1-7, 1 is never, 7 is almost always)

My sleeping for between 8-9 hours at night most nights per week

# (outcome 5\_Strength)

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1	29	7.9	7.9	7.9
	2	37	10.1	10.1	18.1
	3	37	10.1	10.1	28.2
	4	38	10.4	10.4	38.6
	5	65	17.8	17.8	56.4
	6	78	21.3	21.4	77.8
	7	81	22.1	22.2	100.0
	Total	365	99.7	100.0	
Missing	System	1	.3		
Total		366	100.0		

# Report

# Behavior1

Mysleepingforbetween8			
9hoursatnightmostnights			
perweek (Outcome			
5_Strength)	Mean	N	Std. Deviation

1	4.24	29	2.231
2	4.19	37	1.681
3	4.24	37	1.964
4	3.89	37	1.882
5	3.31	64	1.735
6	2.82	77	1.545
7	1.99	80	1.419
Total	3.23	361	1.895

# Correlations

			Mysleepingf
			orbetween89
			hoursatnight
			mostnightspe
			rwee
		Behavior	(Outcome5_
		1	Strength)
Behavior1	Pearson	1	419**
	Correlation	1	419
	Sig. (2-tailed)		.000

	N	361	361
Mysleepingforbetween	Pearson	419**	1
89hoursatnightmostnig	Correlation		
htsperweek (Outcome	Sig. (2-tailed)	.000	
5_Strength)	N	361	365

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

# Question 3: What is the relationship between having social events during the week (Control Belief 3) and the amount of sleep received on weekend nights (Behavior 2)?

Control Belief 3: I have social events most days per week

**Behavior 2:** In the average week, I sleep for between 8 - 9 hours at night most weekend nights

## **Correlations**

	Intheaverage		
	weekIsleepfo		
	rbetween89h	Behavior	ControlBelie
	oursatnightm	1	f3
IntheaverageweekIslee Pearson	1	.443**	105*
pforbetween89hoursatn Correlation			

ightm	Sig. (2-tailed)		.000	.045
	N	361	361	361
Behavior1	Pearson  Correlation	.443**	1	021
	Sig. (2-tailed)	.000		.695
	N	361	361	361
ControlBelief3	Pearson  Correlation	105*	021	1
	Sig. (2-tailed)	.045	.695	
	N	361	361	363

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Report

In the average week Is leep for between 89 hours at night

m

ControlBelief	Mean	N	Std.
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st. Correlation is significant at the 0.05 level (2-tailed).

3			Deviation
1	4.69	42	2.236
2	4.34	58	2.132
3	4.84	61	1.942
4	3.80	75	1.959
5	3.79	68	2.099
6	4.47	34	2.048
7	4.00	23	2.296
Total	4.24	361	2.099

# ControlBelief3

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1	42	11.5	11.6	11.6
	2	58	15.8	16.0	27.5
	3	62	16.9	17.1	44.6
	4	75	20.5	20.7	65.3
	5	69	18.9	19.0	84.3
	6	34	9.3	9.4	93.7
	7	23	6.3	6.3	100.0

Total	363	99.2	100.0	
Missing System	3	.8		
Total	366	100.0		

## **Appendix B: Focus Group Protocol**

Hi everyone! I'm (Jackie/Jewel/Colin), and we're student researchers working on a project for our Planning Communication Campaigns class. Today we will be discussing some potentially sensitive issues, so that being said, I just wanted to emphasize that all of the information is completely confidential, so none of the information discussed will be linked to your names.

For today's discussion, we want all of you to do the talking. We want you to treat this as more of an in-class discussion format, so feel free to openly talk with each other. With that, please be respectful of each other; don't cut people off, and if you disagree with each other (which is encouraged if you feel that way), please do so respectfully. We want everyone to contribute to today's discussion; please try not to dominate the conversation, as everyone's input and opinion is very important. And finally, keep in mind that again, this is confidential information, and there are no right or wrong answers, so please speak your mind and say what you wish!

We will be tape recording this discussion for our own records, but your name and identity will never be associated with what is being said. The discussion will hopefully last about an hour, and please feel free to help yourself to our provided snacks.

Does anyone have any questions about what we just went over? [Yes/No] Great, so let's get started!

#### **Opening Questions:**

For starters can we have everyone go around and say their names, what year they are in, and what your major is?

I can start; I'm a junior this year and I'm a communication major.

## **Engagement Questions:**

1. Great. So let's begin by discussing stress on campus--what stresses you out the most when you're here at school? (What are the biggest contributors to your stress.)

- 2. So, what are some of the ways that you reduce that stress? What are your coping mechanisms?
- **3.** Do you think students are frequently overcommitted here? Like, that people try to do too much.
  - a. **Probe:** How do you think students deal with it?
- **4.** Do you personally feel overwhelmed or overcommitted at Cornell?
  - a. **Probe:** How do you deal with it?
- **5.** How do you think your sleep is affected by your overcommitments?
- **6.** How important do you think it is to get a good amount of sleep?
  - a. **Probe:** What do you consider a "good amount of sleep"?
- 7. How much sleep do you think students on campus typically get?
- **8.** What takes up your most time and how do you find the energy to do them?
  - a. **Probe:** Do you go to every class every time?
- **9.** If you don't get your energy from sleep, where do you get it from?

## **Exploration Questions:**

- 1. Now I'm sure at least some of you have heard the term, "stimulant use" in the context of on-campus activities, academics, social life, etc. What do you guys consider to be stimulants?
  - a. **Probe:** How do students typically access these?
  - b. **Probe:** How easy is it to get them?
- 2. How prevalent do you think stimulant usage is on campus?
- 3. Does anyone personally know people who uses stimulants? We don't need names, we just want to see patterns
  - a. **Probe:** Which groups are more receptive to them?
  - b. **Probe:** Have you had social networks where it's been more prevalent?
- 4. How do you think stimulant use affects your academic performance?
  - a. **Probe:** How does stimulant use affect one's **short-run** academic performance?

- b. **Probe:** How does stimulant use affect one's **long-run** academic performance?
- 5. Do you know about any adverse effects from stimulant use?
  - a. **Probe:** If we were to tell you about adverse effects of stimulants, do you think that would change your perception of them?
- 6. Have you noticed or seen any changes to sleeping patterns or health (or any of the adverse effects) in users since beginning to use stimulants?
  - **a. Probe:** So why do you think people continue to use these stimulants?
- 7. Do you ever feel or do you know anyone who feels pressured to use stimulants by their peers?
  - a. **Probe:** In what contexts? Partying, school work, etc.?
- 8. How socially acceptable do you think it is to use stimulants like caffeine?
  - a. **Probe:** How about the unprescribed use of Adderall and other high-performing drugs, do you believe it's just as acceptable or not acceptable?
  - b. **Probe:** What do you think is a socially acceptable amount? At what point is someone crossing the line?
- 9. Personally, how do you feel about the use of stimulants such as caffeine?
  - a. **Probe:** What about the unprescribed use of Adderall and high-performing drugs?
- 10. Why do you think students use it?
  - a. **Probe:** That's interesting, what about \_\_\_\_ do you think makes students want to use it?
- 11. Imagine that a friend of yours was so heavily dependent on a stimulant that you started becoming worried about their health--what would be your argument to them to quit or cut back to salvage their health?
  - a. **Probe:** What are the barriers?

#### **Exit Questions:**

If not discussed so far, make sure to discuss...

- 1. What do you think is the relationship between stimulant use and sleep?
  - a. Probe and ask "what behaviors could you change/control in order to decrease stimulant use and increase amount of sleep?"
- 2. Great, does anyone have anything else they would like to add or comment on?

- a. So one last question I want to ask you is what question would you ask about stimulant use and abuse?
  - i. Probe: how would you guys answer that?

## **Closing:**

Thanks so much for coming and participating--all of your inputs were extremely helpful for our project and our ongoing study. Again, all of your responses are confidential and none of your responses will be traced back to you. Thanks again so much! You were all great.

## **Appendix C: Focus Group Transcript**

**Date:** April 11, 2015 **Time:** 3pm-4pm

Target Population: Undergraduate Students at Cornell University

**Moderator:** Jackie Yang

Note Takers: Colin Wentworth, Jewel Melvin

**Moderator:** So again, hi everyone, I'm Jackie. That's Jewel. This is Colin.

Colin: Hi.

Jewel: Hi.

**Moderator:** And we're student researchers working on a project for our planning communications campaign. Ummm, so today, we're going to be discussing some potentially sensitive topics and issues. Ummm, so that being said, I just want to emphasize that you guys say is confidential and won't be connected back to your names. Umm, for today's discussion, we want you guys to do all the talking. Umm, it's more of an in class discussion format, so you'll talk to each other, you don't have to talk to me. Feel free to openly talk, say whatever. Umm, but with that, please be respectful of each other, don't cut people off. And if you disagree, which if you do, if you feel that way, it's highly encouraged, umm please do so respectfully. We want everyone to contribute to today's discussion, so please try not to dominate the conversation (whispers heard in background). Everyone's input and opinion is important. And keep in mind, again, that everything is confidential, so whatever we talk about, there is no right or wrong answer, speak your mind. Umm, so you may have noticed, we will be tape recording this discussion for our own records, but again, your name and identity will never be linked or associated with what you say. Umm, the discussion will hopefully last an hour and help yourself to all the snacks! So does anyone have any questions about what we just went over?

Ok, good (laughing), cool, let's get started. Umm, so for starters, could we all go around and say each other's names, and majors, and what year you're in? I can start. I'm [Moderator], I'm a junior and I'm a communication major, with a minor in business.

**Respondent 1:** I'm [Respondent 1], I'm a junior, I'm a history major with a linguistics minor.

**Respondent 2:** I'm [Respondent 2], I'm a sophomore, Hotelie.

**Respondent 3:** I'm [Respondent 3], I'm a sophomore in material science and engineering.

**Respondent 4:** I'm [Respondent 4], I'm a junior, I'm an AEM major.

**Respondent 5:** I'm [Respondent 5], I'm a junior, ILR.

**Respondent 6:** I'm [Respondent 6], I'm a junior, ILR.

**Respondent 7:** I'm [Respondent 7], I'm a junior, government major.

**Respondent 8:** I'm uhh, [Respondent 8], I'm a senior English major.

**Moderator:** Cool, ok, great, so...let's begin by discussing stress on campus. What stresses you guys out the most while you're here, at this school? (Giggle) Like what are the biggest contributors to your stress?

[Silence]

**Moderator:** Again, it's an open discussion (louder giggle), so you can just say...

**Respondent 2:** Volume of work...?

**Moderator:** Sorry?

**Respondent 2:** Volume of work...?

**Moderator:** Volume of work.

**Respondent 2:** Within a certain time period

**Respondent 8:** For my first three and half years, it was volume of work. And for this semester, it's been finding work (loud chuckle in room). And I, uhh, don't care about the volume of work so much anymore. So... yeah...

**Moderator:** Ok. So I mean, yes, obviously like, especially at Cornell, work is a huge factor to stress, but are there any other things that you know, sometimes, you find yourself freaking out over?

**Respondent 6:** Relationships with people?

**Moderator:** That's a good one. Ok.

**Respondent 8:** Housing sometimes...for short periods.

**Respondent 2:** Like extracurricular activities, and their requirements.

**Respondent 8:** Yeah.

Moderator: Cool.

**Respondent 7:** Terrible weather. (Lots of laughing afterwards)

**Moderator:** That's a good one. That's a good one.

**Respondent 5:** Early morning classes... (Noise) Like having to get up early.

**Moderator:** Right. All good.

**Respondent 8:** Money.

**Moderator:** Money. Ok. Yeah, for real. Uhhh, ok, so what are some of the mechanisms that you guys use to reduce this stress that you get from all this stuff going on?

**Respondent 3:** Sleep a lot.

**Respondent 4:** Naps.

**Respondent 2:** Alcohol (lots of laughing...)

**Respondent 5:** Drugs (more laughing...)

**Respondent 6:** Netflix?

**Moderator:** Ok, cool. (Laughing in room). More on all that later. Do you want to talk about that later, [removed]?

(Loud interjection... with lots of laughter... more interjections).

**Moderator:** Sorry, uhh, so do you guys, uhh, do you think students, generally here feel overcommitted or feel like they have too much to do at once? And how do you think students, like other students, deal with it?

Respondent 4: Uhh, I'd say yes, and that's, but that's a lot of it is like self-induced

**Moderator:** How so?

**Respondent 4:** People join a lot of things, uhh, because they feel like they need to, uhh to, you know keep up with everyone else, because it is competitive.

**Respondent 8:** Yep, and just, when you're in a class, you want to get all A's. You know, we're a highly competitive, self-selective group. Not only do we want to do well on tons of things, but we want to do really well in every single thing that we do.

**Moderator:** Ummm, so again, so how, let's not to, so how do you think students sort of deal with managing all that stress and like managing, balancing everything out?

**Respondent 2:** Like that we don't?

**Moderator:** No, just generally, just generally on campus.

**Respondent 2:** I mean I think it would be the same things that we said. Like sleeping, or drugs...

**Respondent 6:** Or do you mean like, how to like, for example like, it's like, like pulling all-nighters and taking Adderall and stuff. Like, that's how some of the students deal with all the work.

**Respondent 5:** Some just don't do well in school (laughing).

**Moderator:** Yeah, right...so... um... again, going off what you said about, you know, Adderall and pulling all-nighters, umm, how do you think your sleep is affected by all this, all this stress, all these overcommitments?

**Respondent 6:** Messed up sleep schedule?

**Moderator:** Right, see that's interesting, 'cause you say that you know like, some students, don't sleep, like ever, just to like make up and then, then you take a lot of naps (laughing)

**Respondent 3:** I like naps. (Laughing)

**Moderator:** So, do you guys think, well what do you consider a good amount of sleep? Like what do you consider like a healthy dosage?

**Respondent 5:** Nine hours

**Moderator:** Nine hours?

**Respondent 2:** Or even like, even getting the same amount every night.

**Moderator:** Yeah

**Respondent 2:** And having it be regular instead of like pulling an all-nighter and then sleeping 10 hours on the weekends, and then four hours on Monday, you know like, it's just like all over the place?

**Respondent 1:** You know like I take naps a lot also, but my sleep isn't regular because it's like, I'll sleep for like, probably a 1 hour nap during the day and then like sleep for 3 hours during the night, and stuff like that, so it's not regularly scheduled.

**Moderator:** So do you guys find that, you, so you sleep to reduce stress, but then, how do you manage to sort of keep up with everything, while sort of having like a weird, whacked up, sleep schedule?

**Respondent 5:** Panic???? (Lots of laughter)

**Respondent 3:** I don't know. I would say that umm, like, I'm more often asleep than like most people would be, and I definitely don't like keep up with all of my work because of it.

**Respondent 2:** It's like what you prioritize... You prioritize sleep.

**Respondent 3:** I haven't gotten sick this semester.

**Respondent 2:** Oh, good for you. That's fabulous (incoherent talk).

**Moderator:** Ok. Um, so in terms of sleep, what do you, I mean, you just said like (laughing), you sleep more than most people. But what do you think, or how much sleep do you think students typically get around campus?

**Respondent 3:** 7 hours?

**Respondent 8:** 7 hours?

**Respondent 5:** 5 hours?

**Respondent 4:** I think it really varies, based on like the amount of commitments you have. I know some people who sleep like two, three hours a day, because they have so much to do, but then there are people, there's I'd say a large portion of students who aren't that involved, and they probably sleep, you know, 7-8 hours on a regular day, so it really depends, I think.

**Respondent 6:** I think it also depends on your major, like, I know engineers have some problem sets that are due, like every single day basically, like if they're taking a wide range of classes, whereas like, in ILR, you have like one really big essay due, like a couple of times a semester, so an engineer probably gets a lot less sleep.

**Moderator:** Cool. Ok. (Laughing)... So, what's your topic? (More laughing). Umm, so what do you guys find takes up the most of your time and how do you usually find, you know, the energy to do them?

**Respondent 1:** You sleep... And that takes up most of your time...? (Giggling)

**Respondent 3:** It also gives me energy... (More laughing) I mean I think my extracurriculars take up, like almost all of my time, when I'm awake, so...

**Respondent 2:** Who are you?

**Respondent 5:** It's a sloth. (Laughter)

**Respondent 2:** So I feel like study time or like actual like homework time....

**Respondent 5:** Or actual like time in class.

**Respondent 3:** Yeah.

**Respondent 5:** I mean if you're in class like six hours a day, that's significant.

**Moderator:** Very true, do you guys uhhh usually go to all of your classes?

**Respondent 4:** No, strategically (laughter).

**Moderator:** Strategically?...

**Respondent 5:** I only go when [Respondent 6] goes... (More laughter).

**Moderator:** Ok, ummm, so, you said-I'm trying not to say names-you said that uhh you get most of your energy from sleeping, because you're already sleeping. But, I mean, what, how do you guys usually, how do the rest of you usually find energy to you know, get up every day, and like keep going, get your assignments done, do all your extracurriculars,

**Respondent 2:** Coffee.

**Moderator:** Coffee?

**Respondent 5:** I mean if I have the time I'll take a nap, but...

**Respondent 2:** 10 minute naps, that's what I did for a while.

**Respondent 7:** I just wake and bake (laughter). Wake at 7:30, bake, you're good for the whole day (lots of laughter).

**Moderator:** (laughing) This is good, this is good, we're all talking now (more laughter)...

**Respondent 3:** Running helps too, like, like...

**Moderator:** Like exercise?

**Respondent 3:** Yeah.

**Moderator:** Cool, anything else?

**Respondent 5:** I go, I go outside sometimes (laughter)...

**Moderator:** That's a good one, yeah. (Laughter)

**Respondent 5:** Like breathe fresh air. (Laughter)

Moderator: Yeah.

**Respondent 2:** Like listen, like if, if it's like you're trying to stay awake, I listen to music.

**Moderator:** Ok. Cool. All good. Alright, now we're getting down to business. I'm sure at least some of you have heard the term "stimulant use," umm, in the context of on campus activities, academics, social life, etc. So what do you guys consider to be stimulants?

**Respondent 5:** Caffeine.

**Moderator:** Caffeine?

**Respondent 6:** Alcohol?

**Moderator:** mmhmmm

**Respondent 2:** Drugs?

**Respondent 5:** Amphetamines.

**Respondent 2:** Alcohol is a depressant.

**Respondent 6:** Sorry, what?

**Respondent 2:** Alcohol is a depressant.

**Respondent 6:** Oh, it's a depressant.

Moderator: Ok.

**Respondent 5:** Amphetamines, so Adderall and cocaine.

**Respondent 6:** ...It Makes me excited.

**Moderator:** Mmhmm. (Incoherent voice and laughter in the background)

**Respondent 6:** Cocaine is an upper, right?

**Respondent 5:** So are amphetamines, right?

**Moderator:** Cocaine is an upper. Yes. (Laughing)

**Respondent 1:** So is crack?

**Moderator:** Yes. (Laughing)

**Respondent 1:** Crack is an upper (amongst incoherent voices).

**Respondent 5:** Lots of crack... (More laughter and incoherent voices).

**Moderator:** This is good. (Laughter) Uhhh... Ok.... So... How do you think students typically access these stimulants? Even like, all of them, every single one you listed, like even caffeine, like, what, crack? (Laughter).

**Respondent 6:** Well caffeine's like through coffee, and crack is through like the local drug dealer. (Laughter)

**Respondent 7:** I mean Cornell sponsors part of people's caffeine addiction.

**Respondent 5:** Crack is nice.

**Respondent 7:** If you buy a mug you get dollar refills. It is very easy to get crack by the way.

**Respondent 8:** And in every new building there is a coffee shop. Like Gates or... (Mumbling)

**Respondent 6:** Even umm, in like, in one of my classes, our professor like, takes us out to coffee if like, he feels like, we're not like, being up and like, perky...

**Respondent 5:** It's Nelson right?

**Respondent 6:** Yeah

Moderator: Ah. Mhmmm

**Respondent 1:** What class is that?

**Respondent 6:** Umm, it was Rhetoric of Labor (laughing). We were all just like not answering like any of his questions, and he was like, alright, let's go to Mann and get coffee.

**Moderator:** So would you say that... So you're saying, a lot of you are saying especially, that Cornell on campus is kind of promoting stimulant use?

**Respondent 7:** I would say only... I mean the legal ones...

**Moderator:** Right, right....

**Respondent 7:** Obviously...the illegal ones... the other one's you have to access through the black market...

(Incoherent mumbling)

**Respondent 6:** Black market?!?!?! (Laughter)

(Incoherent mumbling)

**Respondent 5:** What are the illegal ones, though?

**Respondent 6:** Like, drugs...

**Moderator:** Like, I mean what do you guys think?

**Respondent 2:** Like...acquiring... I mean, that's true...that's not actually illegal.

**Respondent 7:** Like Adderall without a prescription.

**Respondent 5:** Like, I mean I have a prescription for it, so that's totally legal.

**Moderator:** Right

**Respondent 2:** So, what? That's true...

**Moderator:** But then there's also like selling... (Incoherent mumbling)

**Respondent 2:** ... If you acquire it illegally...

**Respondent 5:** ...yeah...

**Moderator:** And like unprescribed use is also illegal.

**Respondent 2:** That's true.

**Respondent 8:** Also, I think that if Cornell really cared about illegal drug use, they would refer drug possession crimes to the Ithaca Police Department. But what happens is, you go to like, you get "J-A'd."

**Moderator:** Right.

**Respondent 8:** So if they, if they really cared about stopping it, they would let real police officers have real consequences.

**Moderator:** That's true.

**Respondent 2:** There's almost like no... yeah, no real consequences

**Respondent 4:** Right.

**Respondent 7:** At the same time, that really wouldn't stop it, would it?

**Respondent 4:** No

**Respondent 6:** But if there's a legitimate threat of drug use... (Cuts off)

**Respondent 7:** I mean people are going to still be using stimulants, it just sort of screws over people who (cut off),

**Respondent 8:** Yeah, yeah, I don't agree with drug laws, but if they really wanted to deter it, seriously, they would.

**Respondent 6:** Yeah, I mean they also don't want to make the university look bad.

**Moderator:** That's true.

**Respondent 8:** Yeah. Right?

**Respondent 5:** But I feel like the biggest reason to deter it, is like you can overdose on these drugs, like... It's way dangerous.

**Respondent 6:** Can you overdose on Adderall?

**Respondent 5:** Yeah, well... yeah, you can. Yes.

**Respondent 1:** Yeah, I'm sure you can. (Mumbling)

**Respondent 5:** If you do enough...it's really unlikely though.

**Moderator:** I mean, so do you guys know any like adverse health effects, or... anything, or even like good health effects, any health effects that, you know like taking Adderall or like cocaine... anything, caffeine....

**Respondent 5:** Well like, in theory like, if you're taking Adderall for more than a few months, like, it's like bad for your heart and you can develop, when you're older, some heart diseases.

**Moderator:** Mmhmm.

**Respondent 7:** On the positive side it does make your room usually a lot cleaner... (Laughter)

**Respondent 6:** "Coke" also messes up your heart...

**Moderator:** Your heart? Ok. So, what do you think that it does sort of in an academic context, do you think it has any... uh, yeah, what effects does it have?

**Respondent 2:** I think it's unfair if some people have that advantage over others... Uh, like, I mean, it's like not a level, level playing ground any more...

**Moderator:** Right.

**Respondent 8:** I think there's a psychological effect, where it's like if you took Adderall and did really well on something, it's like, uh, you, you knew, that's some bar you just set that you have to keep obtaining...

**Respondent 5:** Right.

**Moderator:** Very true....

**Respondent 5:** But, also, I feel like most of the time, it's just like a self-created bar...

**Respondent 6:** Yeah.

**Respondent 5:** Like you'll still do well without the Adderall, like...

**Respondent 2:** Like from a personal perspective, like I like, I've never done that just because I'm afraid that if I do it once and there's a positive reaction to it, that I won't be able to be ok with not, like, I feel like I won't do well like at all without it, so I like don't want to do it the first time.

Moderator: Right.

Respondent 5: I mean you can get addicted to it... or like

**Respondent 2:** like psychologically addicted to the benefits

Moderator: True. So. Yeah.

**Respondent 7:** It's like more of a cram drug though, isn't it? So it's more like...

**Moderator:** What do you mean by that?

**Respondent 7:** Like it's, sort of, Adderall is a product of bad planning.

**Moderator:** Mmhmm.

**Respondent 7:** So if you have a 10 page paper, and you need to get it done in 2 days, you might be tempted to do Adderall.

**Moderator:** Right.

**Respondent 7:** Versus having spread it out over the course of a couple of weeks that the paper was most likely assigned over...

**Respondent 2:** Right, well like don't some people take it for like tests, and it's like, "Oh if I take it for this prelim, like why wouldn't I take it for this prelim or this prelim?" kinda thing. Like, then you have to like reprioritize like...

**Respondent 6:** Yeah, you become like dependent.

**Respondent 5:** I would say definitely the worst is when you have to wake up in the morning to have to take it that sucks.

Moderator: Oh.

**Respondent 5:** Like, like your body depends on it.

Moderator: Right.

**Respondent 8:** That's, that's most people with coffee though, like with caffeine.

**Respondent 2:** That's true, yeah (Voices in agreement)

**Respondent 8:** People like, "Don't talk to me before I have caffeine."

**Moderator:** Right.

**Respondent 8:** That's a terrible thing that people say. (Laughter)

**Moderator:** Um, so, I mean, going back to the sort of academic perspective, what do you guys think the effects of like, you know, like Adderall use... or caffeine... or any stimulant uses in the sort of academic long run vs. the short run.

**Respondent 4:** So from the, I mean from the long run, like from what she was saying about the planning and stuff, it will deter that. Also, we talked about the health, umm aspect of it. On the short run, I mean, that's what I think most of us actually really care about, so that's why we make these decisions, because we're not very forward looking... like our age group. So, it, it could help in the short run and that's what we really care about.

**Respondent 2:** It's like what happens when you get into a real job environment, then you're dependent on like only getting things done with Adderall or with caffeine or with anything like that then you're just setting yourself up, like you're never learning how to do it like normally.

**Moderator:** Um, so, does anyone, or I mean, how prevalent do you guys think stimulant use is on this campus. Especially, I know we were talking about before how Cornell almost promotes stimulant use, so how prevalent do you think it is, do you think it's working on their half, or how prevalent or widespread on campus do you think it is?

**Respondent 6:** Well like really like people always come in late to class because they are carrying coffee, like if you look around a classroom almost everyone has coffee, so, it's pretty prevalent.

**Respondent 3:** I know a lot of people think coffee does not work anymore, like they've had too much coffee.

**Moderator:** Oh it's like their tolerance.

**Respondent 3:** Yeah, their tolerance to coffee is so high coffee is useless.

Moderator: Yeah, gotcha.

**Respondent 4:** I mean, yeah, I think it depends on what stimulant you're talking about. Like coffee is obviously very prevalent.

**Respondent 2:** Like energy drinks too.

**Respondent 4:** Energy drinks, and then I think but like Adderall is used I mean, I haven't surveyed this or anything, but I just assume that there is a much less amount of people. Like instead of 80% of people who drink coffee, maybe like 25% use Adderall. These are just random numbers, but...

Moderator: Right.

**Respondent 5:** I feel like our finals week everyone is like antied up.

**Respondent 6:** Yeah everyone.

**Respondent 5:** Yeah there are a lot of people on stimulants.

**Moderator:** So, what do you guys think the difference is between like using Adderall, like why do you say specifically during finals week, like why are more people on Adderall as opposed to drinking more coffee?

**Respondent 5:** I would say it goes to your point, or whoever said it, people freak out because they're like alright, I don't have enough time, so I'll try Adderall to make time.

**Respondent 6:** Well also more intense, like, different stimulants have different effects, like caffeine just kind of wakes you up, whereas Adderall like makes you focus on something.

**Moderator:** Right.

**Respondent 7:** And Adderall does like allow you to study 'cause it is difficult to study when you're stressed out and there's very little time and it's like hard to focus on assignments when you have multiple things happening at once. And you need to get multiple assignments done. Adderall can sort of help you focus on a single sort of thing. Unfortunately, that can lead you to cleaning your room for like three hours straight instead of studying then you're like God, no, where did my time go? (Laughter)

**Moderator:** (laughter) Right.

**Respondent 6:** But I think like the school also kind of promotes, like my high school was like very competitive and there was a lot of Adderall use too, whereas like in other schools like in more public schools, or like "easier" quote unquote schools, like some of my friends have never even heard of Adderall, whereas here I feel like it's super prevalent, and that's because like Cornell does prelims week where it's like you have this whole rush of tests, so they kind of like make students feel like they are forced to do this.

**Moderator:** Right, so it's definitely like what we were talking about, like a time crunch sort of factor, where it plays a big factor that in terms of like the decision from you know caffeine, which, I'll get back to that in a sec. In terms of caffeine, versus Adderall, so what do you guys think in terms of like how socially acceptable it is between like caffeine. Like what do you think?

**Respondent 2:** It's like 100% socially acceptable (laughter, multiple people talking at once)

**Respondent 5:** It's 100% weird if you don't.

**Respondent 2:** I would never consider not having coffee.

**Respondent 5:** It's encouraged.

**Respondent 6:** Yeah, like I don't drink coffee and people think that's like bizarre.

**Respondent 5:** Yeah, yeah.

**Respondent 8:** So it's kind of like a reverse.

**Respondent 5:** It is a reverse.

**Respondent 3:** But even with Adderall, I feel like people think of it the same way they think of weed, where it's kind of like illegal, but it's not legal, it's kind of like saying that like it's illegal but you're really not judged for it very much.

**Respondent 5:** I don't think there's a stigma with Adderall.

**Respondent 6:** Although I feel like some people are like, how you were saying before how it's like not a level playing field, like some people like look down on people for using Adderall, like they can't like naturally be smart or naturally do all this stuff.

**Moderator:** Mhmm.

**Respondent 2:** Or like not necessarily that they can't like naturally do it, it's just that it's like having an advantage that someone else doesn't have that's not natural.

**Moderator:** Right, so, obviously this is not directed at anyone, but if there is sort of the mentality that like if somebody has access to it, and like you guys said it's pretty easy to get around campus, then if someone has access to it, then why doesn't everyone just do it? What do you think those stigma, or like what do you think, how socially acceptable is it to use unprescribed stimulants, or illegal stimulants?

**Respondent 4:** I think there's also, like I don't personally subscribe to it because I feel like it could affect me, even in the short run, like in terms of how I sleep the night before, or what if it doesn't wear off? Because of the uncertainty with it, from a non-user, that's why I stick to something I know, which is coffee.

**Moderator:** Right.

**Respondent 4:** And I know the effects aren't as strong either, and so that's enough for me, and so that's why I wouldn't use it.

**Respondent 6:** Yeah, I'm the same way, I've just never done it just cause, like, I don't want to like take it and then have like a bad effect and then I like screw up or like something goes wrong and I end up like not being able to do the assignment or something.

**Respondent 5:** Yeah, like also a lot of people with Adderall are so irresponsible with it. You should take the smallest amount that's effective, and then you have these people taking like 40 milligrams. That's so unhealthy.

**Moderator:** Is that a lot?

**Respondent 5:** Yeah, that's way too much. Yeah, I would say like 5 or 10 milligrams at most, is the most you should take. So, it's just like really irresponsible drug use. (Laughter)

**Respondent 2:** As far as like the socially acceptable part, though, I would kind of liken it to weed, like it's I think for the majority socially acceptable, but then you do have the people that choose not to and like don't think that it's like a good thing, but like I feel like overall people think that it's fine.

**Respondent 1:** But it's different from like weed in a sense that I feel like with weed and alcohol it's like oh it's more of like a social thing,

**Respondent 2:** It's like a recreational thing.

**Respondent 1:** (continues) Yeah like recreationally. I think Adderall has a bigger weight to it because it's like you are taking it for school work. (People agree)

**Respondent 2:** Yeah, so you like rationalize it.

**Respondent 5:** Well some people like party with Adderall (people agree), like snorting Adderall.

**Respondent 2:** Yeah, that's true.

**Moderator:** Yeah, Adderall can be used recreationally. Have you guys seen that around campus? Like we don't need names or anything, but has that been something that's been noticed?

**Respondent 6:** Uh, yeah, but I don't think it's that popular because usually, I know that you're not supposed to snort Adderall and mix alcohol together just because they don't, like, mix together well so like, and I feel like drinking games and like drinking is such a part of the culture, so you kind of miss out on that.

**Moderator:** Mhm. So from a peer perspective, do any of you feel or know anyone who feels pressured to use stimulants? Sort of, academically, socially, anywhere?

**Respondent 6:** I don't think anybody feels pressured.

**Respondent 2:** Not like peer pressured, maybe internally pressured, like, oh I should take Adderall because it'll make me do better, and so like, why am I not? So does that mean I'm not making the choice to do as well as I can. You know? But nobody's coming up to me like 'well why aren't you taking Adderall.' (Laughter) Like, 'lazy shit.' (Laughter)

Moderator: Right.

**Respondent 5:** Also the biggest difference between taking Adderall and caffeine is that, like, Adderall itself produces dopamine, so you do get, like, you have like a happy effect that comes with it, so it's like a serious drug, compared to caffeine which is just like, a regular stimulant.

**Moderator:** Right. So what, I mean you kind of touched on this, but what is the distinction between a regular stimulant and something like Adderall?

**Respondent 5:** Well, Adderall is an amphetamine.

**Moderator:** Right. Maybe in terms of its effects and such though.

**Respondent 5:** Like, dopamine.

**Respondent 6:** Well there's like a really noticeable effect when someone's on Adderall, whereas when with like coffee, if someone might just like perk up or something, whereas with Adderall, like you can tell when someone's on Adderall.

**Moderator:** Right, so what, just extending this out to other stimulants, too, but like, is there?

**Respondent 2:** I feel like you can also tell when someone's on cocaine.

(Laughter)

**Respondent 5:** Cocaine's an aphrodisiac.

**Respondent 6:** Oh God. [Respondent 5]

(Laughter)

**Respondent 2:** Oh God.

**Respondent 6:** Proud of yourself?

(Laughter)

**Moderator:** OK, no, that's fine. So, knowing all these effects in terms of health that we were discussing earlier, have you noticed or seen any changes specifically to sleeping patterns? Um, changes, adverse effects, benefits, anything--in any users since beginning to use stimulants?

**Respondent 2:** Like, sometimes if I drink coffee to, like, sometimes if I drink coffee with the intent of staying up and staying at the library and then I decide to just give up for the night anyway and then I go home to try to go to sleep early and then wake up early, and then it just doesn't work out because I'm still hyped up from the coffee...and that's when I realize that it really does make a difference because you don't always feel it when you're studying and you'll realize like, 'Oh that didn't do anything' but then if you tried to go to sleep then you can't.

**Respondent 4:** Happens all the time.

**Respondent 6:** Or like, if you take Adderall you're up all night and then you just crash for the next day once it wears off, so, that's like an unhealthy sleeping pattern.

**Moderator:** Mhm, so going back to what she said earlier how, like, you guys consider a good amount of sleep to be a regular dose of sleep, so it would be unhealthy, I guess is what you're saying, to...

**Respondent 6:** Yeah, I mean, it's like you're up for 24 hours, and then you sleep for like 15 hours.

Moderator: Mhm.

**Respondent 4:** And just, I think it takes a few days then to really get back to where you were, and then if you have a prelim then the next week and you're a regular user, then you have to go through that again and you never really get to re-establish your sleeping pattern.

**Moderator:** So in the short-term, your sleep is affected, and in the long-term, it's whatever health...

**Respondent 4:** Depending on your schedule it could be affected also.

**Moderator:** Right, that's true, depending on your schedule as well. Especially going back to the whole overcommitment thing on campus. Right, so, sort of considering all these effects and all of these things we've discussed, why do you think students use and continue to use these stimulants?

**Respondent 6:** People want good grades.

**Respondent 5:** Self-created pressure.

**Respondent 2:** Yeah, the ends justify the means kind of thing. Like it doesn't matter how I got the A but I did, you know?

**Moderator:** And so, you think students in general, it could be you guys, it could be people you know, um, sort of believe that a good academic performance might trump any health benefits or detriments?

(Agreement)

**Moderator:** You think so? And do you think that's sort of the general consensus on campus?

**Respondent 5:** Yeah, I agree.

**Respondent 2:** Yeah, I mean I think that's even just in general, like not even just with stimulants, like if you're gonna pull an all-nighter, you're obviously putting your grades before your health because you're not sleeping, and that's obviously something that's like super relevant, like [Respondent 3] was saying she hasn't gotten sick because she sleeps a lot. You know, you're like lowering your immune system, so...

**Respondent 6:** Everyone's always like coughing in class, everyone's always sick.

**Respondent 5:** I feel like people would probably be a lot happier if they were all rested too.

**Respondent 4:** That being said, I feel like some people don't make like the same decisions, like say they have a prelim earlier in the week, they still might go out like on weekends and things and that, like, a few days before they wouldn't be prioritizing their grades over sleep, but then like as it gets closer, then they start to like shift their priorities, so it changes depending on when...it is.

**Moderator:** Why do you think that's a pattern?

**Respondent 3:** There's like a lot more procrastination here than I think anyone would've expected.

**Moderator:** Do you mean here at Cornell?

**Respondent 3:** Yeah, at Cornell. Like, when you think of like the Ivy League school when you come in, and like almost everyone procrastinates...a lot.

**Moderator:** Mhm. That's interesting because we were talking about how everyone here is so like high-performing, and everyone here wants to do everything and be the best at it, but you say there's like a lot of procrastination so that's... (Cut off)

**Respondent 2:** That's like what you say, like I think it goes hand-in-hand with the stimulant thing, like you said like, using Adderall is like a product of procrastination, you know?

(Agreement)

**Respondent 3:** Like, I think there's like, high performing but also procrastinating. (Laughter)

**Respondent 2:** Right, and also like having kind of, like, no boundaries for what they'll do to get a good grade instead of actually like, planning, like, it's like we revert to stimulants instead of pre-planning or whatever.

**Respondent 7:** Yeah, and that changes person to person depending on whether they got the good grade or not.

Moderator: Right.

**Respondent 7:** For example, if you got the good grade and still failed a test, like it's likely you'll say okay, I can just wait and do Adderall, cause if it failed you once, why won't it do it again the second time? So like, eventually people might change their habits if they're not working, but I think people at Cornell can generally make it work, and that's sort of like a self-perpetuating problem.

**Respondent 5:** Mhm.

**Moderator:** Good, um, so, imagine that a friend of yours was so heavily dependent on a stimulant that you started becoming worried about their health. What would be your argument to them to quit or cut back to salvage their health, do you think? Yeah, go ahead.

**Respondent 5:** Well, uh, I remember when I was ...Well you know I have a prescription for Adderall and over finals week my doctor was like, oh you should get some more, like have some more. And I was like oh, okay. So naturally I just started selling it.

(Laughter)

**Moderator:** The natural progression, yeah. (Laughter)

**Respondent 5:** No, seriously, like so many people were like 'oh let me get some of that' and I thought I might as well, and well, obviously I'm not gonna name names, but there was one

person where I was just like, 'You're having like, too much, because he bought like, four 10 milligram pills from me, and like he wanted four more, so like that probably means he's doing 40 milligrams a day, and that's really unsafe, so I told him like, I'm just not gonna sell it to you anymore. And he was just like, alright, and I'm assuming he just like, got from someone else, but like, it was just, like that was Adderall abuse.

**Respondent 6:** Well, I mean the argument that you can make is that like, like you said, like it's affecting their health in a negative way, so...

**Respondent 5:** Yeah, I mean you're like staying up all night, like even if this person was to sleep he couldn't, like that's so unhealthy.

**Moderator:** Wait, what do you mean by that?

**Respondent 5:** Like, his body physically couldn't let him sleep.

**Respondent 4:** I think that the problem is that, like I said before, like we care about the short-term and those arguments, like you can make the rational argument, but, if you're looking to use Adderall, you're probably not being very, you probably weren't very rational in the first place, so, people were probably not going to listen to you.

**Respondent 1:** Yeah, like if I had to convince my friends to not use Adderall, I'm not gonna make the argument based on like, health, because I feel like that's already discounted.

**Respondent 6:** Well then, like, what argument can you make, if not health, you know? Because if you think of short-term, it's basically positive. Like, the person's gonna get their work done, so like I don't know.

**Respondent 3:** I mean long-term, the reason that I don't is that like, as an engineer, like maybe it's specific to this major, but like, a lot of people say that engineers are good because of the study habits they learn, and they learn how to work and not necessarily the information, and so if I use Adderall, I'm ...it's like allowing myself to continue without learning any sort of like, study habits, and like it's kind of, like, it wouldn't be possible to be in the workforce that I'm going into if I don't make those study habits. And so like long-term, you'd really just be like hurting yourself.

**Respondent 5:** Also I feel like a good argument would just be like, like if you're always on Adderall, how are you ever gonna do, like if you're always using Adderall to do like, big assignments, then how are you ever gonna do the assignment without Adderall like in the real world. You can't always rely on Adderall.

**Respondent 3:** And like the real world has like a way different structure, and like, maybe it'll work for this specific 4 years, but like, in the future...

**Respondent 2:** But like, also what we're saying is that like, as a group of people, we don't focus on the long-term but more on the short-term, so it's like finding that one thing to combat the

short-term benefits, I mean, but if there aren't any like, I mean, focus on the short-term disadvantages, but like, I don't know what those are

**Respondent 6:** Yeah, I feel like we...

**Respondent 3:** Money?

**Respondent 2:** Yeah.

**Respondent 6:** I mean like, yeah they can probably afford it if they're doing it.

**Respondent 5:** Yeah, well I also feel like money's not so much of an issue at Cornell, like I don't think it's a problem.

**Respondent 6:** I feel like there's like no short-term argument for if Adderall is bad.

(Laughter)

**Respondent 8:** Well, I feel like if someone's doing it to the point of it being detrimental to their health seriously, then they're not even being successful. Like if someone's taking so much Adderall that they're really unhealthy it means that they're probably still getting C's and D's and like, not doing well on all their classes, so I'd say you know that this isn't working, like you've tried the Adderall method, just try getting a good night's sleep and see if you can get like a B- or something, you know? Like you might do incrementally better if you just get sleep, maybe. Right? That's just one short-term argument.

**Respondent 5:** I also think using like a scare factor, like if you do too much Adderall, like your nose might start bleeding, like I don't know I guess, that's scary.

(Laughter)

**Respondent 4:** The horror.

**Respondent 6:** Say it isn't so.

(Laughter)

**Respondent 2:** The way you said that, like I thought you were gonna say something a lot worse.

**Respondent 5:** I mean, in theory like you can die from doing too much.

(laughter)

**Respondent 5:** You'll get really cranky.

(laughter)

**Moderator:** Okay, well, kind of going back to what you were saying, you were saying that sleep might be a better contributor to sort of helping out the stimulant use, so, just wondering, what do we think about Adderall use or stimulant use in order to stay awake, not just sort of as like performance enhancers?

**Respondent 6:** Well, but why would you need to stay awake? In a college setting, why would you need to stay awake?

**Moderator:** Yeah, just sort of like a social setting, academic setting, just any...

**Respondent 7:** Well, classes are boring, you can just say it. Like a lot of people fall asleep in class.

**Respondent 2:** Oh yeah, I drink coffee so I don't fall asleep in class.

**Respondent 7:** Yeah, like even if you like the class that you're in, it doesn't mean that every lecture is capturing your attention. Like sometimes you just zone out. So coffee helps to alleviate that problem.

**Respondent 8:** Also sometimes the work that we do here isn't like, you need to be like super critically thinking for four hours. You just need to be conscious and putting words on paper for four hours. You know what I mean? At some point it's like staying awake all night will get you there. You don't need to be really sharp mentally, but you just need to be conscious.

**Moderator:** Okay. So... Just generally. What do we think about the relationship between stimulant use and sleep? We kind of just discussed this, but kind of an overall.

**Respondent 1:** Bad.

**Respondent 5:** Very Negative.

(Laughter)

**Moderator:** Can you kind of expand a little?

**Respondent 1:** Stimulants make it so you can't sleep (chuckles.) So it's bad.

**Respondent 7:** I'll add in a positive word for stimulants. I'll add marijuana to the list. You know I smoke three times a day and it helps me sleep. You know I do get more, better consistent sleep as a result of drug use. Continued Drug Use.

(Laughter)

**Respondent 5:** Yeah, but does it keep you up and like focussed if you're gonna do work?

Respondent 7: No. Because I don't do marijuana if I'm gonna do work. I sort of block it out.

**Moderator:** So you use it recreationally? Do you ever find that you can't sleep without it? You obviously don't have to answer this as a personal. But do you think of it as a dependency on stimulants?

**Respondent 7:** I'm exceptionally addicted to marijuana. I can't sleep without it, but it's not really a problem the way I see it. Just cause like, if I get more consistent sleep from it. The relative cost is that I get better grades when I smoke more than when I sleep less. Because I was getting consistent sleep I was getting good sleep. I have a consistent schedule.

**Moderator:** Right, So we're seeing sort of a... at least from what you just said we're seeing a sort of clear correlation between amount of sleep and sort of academic performance and health. Is that what you're saying?

**Respondent 7:** I would say consistent sleep, because I varied between 10 hours and 3 hours depending on the work. Now I get 5.5 every single day, and that works for me.

**Moderator:** And you feel better about that? Okay interesting. Okay. Um. So what behaviors could you guys change or control in order to generally decrease stimulant use and increase the amount of sleep. *To [Respondent 7]*. You were just telling us a fun way to increase sleep. (Laughter.)

**Respondent 5:** Drinking tea.

**Moderator:** Although tea is caffeinated sometimes.

**Respondent 5:** Yeah, but like much less, you know like green tea.

**Respondent 2:** I think like going back to the procrastination thing. Like if I planned out my work, and if I did it when I was supposed to do it. Then I would sleep a lot more regularly. Like or if you even plan, like if you get assignments ahead of time and you start them the day you get them. It evens out everything.

**Respondent 3:** It's also like a never ending cycle. We like cram so much towards the end we're so exhausted that we never want to look at another piece of work until the next thing we have to cram for.

**Respondent 6:** As soon as you cram it just sort of continues.

**Respondent 3:** There's other things we could like do to get sleep. But ultimately it's just: stop procrastinating. Over the summer. I feel like over the summer all of us don't have the same problem.

**Respondent 6:** Just a thought though, why aren't there like anti-procrastination seminars. Seriously. No seriously, because I think that's a legitimate problem. Sorry.

**Moderator:** No that's good.

(Laughter)

**Respondent 2:** Like I don't know. What do you procrastinate with? You watch Netflix. You go on Facebook. I think about the amount of time I spend in the library and I think the amount of time I spend in the library being productive. It's not even a good ratio at all.

**Respondent 3:** I would never go on Buzzfeed if I didn't have homework. Like, there are things you do so you just don't do you work.

**Respondent 5:** Definitely. I would definitely Facebook less if I didn't have work.

**Respondent 6:** Yeah!

**Moderator:** Out of curiosity, what is your sort of distribution between. So a lot of you said that you, that students here cram, and use stimulants because they cram, and use stimulants because they procrastinate or don't have enough time. So I'm wonder what the distribution is between not having enough time from overcommitments and not having enough time from just general procrastinating?

**Respondent 2:** I think it's both. If you procrastinate one thing it's fine. Well not fine, but like it won't be as salvageable if you cram at the end.

**Respondent 3:** Also you can procrastinate with your extracurriculars, because they're usually more fun and you can overcommit to them.

**Respondent 8:** I also think it happens where like you just get like really sick. Like maybe a really bad head cold for three days. So you maybe just want to get two hours extra sleep a night, and you can't do you work, but like that snowballs like you can never work back to where you were after those three days, and there are some things that set you back and you spend the whole semester trying to catch up but you never do.

**Moderator:** Okay, so. This is all great, but does anyone have anything else they'd like to add or comment on. Actually, no I do have a question. What question would you guys like to ask about stimulant use or abuse if you had any wonder in the world?

**Respondent 2:** I'd want to know the actual percentage of students that use Adderall.

**Moderator:** On campus or just generally?

**Respondent 2:** On campus or maybe compared to other campuses.

**Respondent 3:** Probably a lot more than you'd think.

**Respondent 8:** I want a psychological study about how people perceive other people's use, because a lot of stuff we've even said here is like, "I think these majors do it this much, and these majors do it this much." I think we tend to think, like "Oh, engineers they must always be using stimulants." or something like that, but in reality I think it might be a little bit lower than we'd like to think.

**Respondent 7:** I'd like to know the prevalence comparing Greek organization members and non-Greek organization people's. People who aren't in fraternities or sororities or anything like that. I feel like it's be higher in fraternities than in sororities but I'm not sure.

**Moderator:** Can I ask why you think that?

**Respondent 7:** Because in my social circle of people. The people who I know who do take Adderall are almost exclusively in fraternities and sororities.

**Respondent 2:** It's more accessible, like if like if someone in your frat has it..... (Indiscernible)

**Moderator:** Why is that any different than if I purchase Adderall from my sister as opposed to just purchasing it from a friend? Or like a close friend or like my best friend.

**Respondent 2:** It's like power of suggestion. If you see other people using it. Or if someone offers it to you. Or if they're willing to sell it to you. You think about it more.

**Moderator:** So in that sense. We did discuss this kind of, but in that sense is there any sort of social pressure or influence?

**Respondent 3:** I don't know about social pressure, but it might just be an easier to consider this option if it's more prevalent. Like if no one you know is doing it or if it's not even easy to get. Like during finals or crunch time or whatever you don't even consider it because it's not around.

**Respondent 2:** It's like would you drink alcohol if no one else did? I feel like most people drink alcohol because their friends do or you know?

**Respondent 6:** It doesn't taste good.

**Respondent 2:** Yeah, exactly.

**Moderator:** Okay. So thank you all so much for coming and participating. All of your inputs were extremely helpful for our project and ongoing study. Again, all your responses are confidential. We said some of your names, but our professors aren't going to hear the recording. It's literally just for us. All your responses are confidential. Nothing will be traced back to you, and thank you guys so much for coming. You're all perfect.

#### **Appendix D: In-Depth Interview Transcript**

**Date:** 4/20/2015 **Time:** 4pm-4:30pm

Moderator name: Jackie Yang

**Moderator:** Today we are talking about stimulant use and how it affects sleep.

**Moderator:** What do you know about stimulants, like what they do, etc.?

**Respondent 1:** Not much actually, being a science major and I should probably know more. They trigger serotonin, norepinephrine, and dopamine, it all works together to strengthen, like, your working memory. Essentially it maintains your alertness.

**Moderator:** So tell me more about what you mean by working memory?

**Respondent 1:** Working memory is how many thoughts you can juggle and organize in the moment. If you don't have good working memory I feel you have scattered thoughts and you aren't really able to focus on more than one or two things at a time. For example, if you are making something from scratch, or studying something you don't really have a solid understanding on, it is easier to kind of take information and relate it to each other and organize it. Or you can listen to music or listen to an audiobook while you are studying and you will still be able to focus better if you have a stimulant.

**Moderator:** So you keep discussing stimulants in the context of studying and academics and memorizing facts, do you know of any other uses for stimulants?

**Respondent 1:** Yeah, some are used for athletic uses, like mostly energy drinks.

**Moderator:** So you think athletes use energy drinks to help their athletic performance?

**Respondent 1:** Yeah, like I know Red Bull for instance, I don't know if this is their slogan or not, but it's meant to strengthen mental fortitude. Like, it's not necessarily about, like getting strong or having big muscles for the event, or whatever, so to speak. It's about having kind of a mental stamina.

**Moderator:** So obviously I've recruited you for this in-depth interview because you are one of the random people who have responded that use stimulants, so I just want to know sort of like what types of stimulants you use, and sort of how often?

**Respondent 1:** I drink coffee pretty much every day. I had never drank coffee until pretty much my second semester in college.

**Moderator:** What changed?

**Respondent 1:** Um, workload. Workload, and the depth of the material that I needed to understand for my classes that I take now. It was a big, big jump from high school.

**Moderator:** So it got harder? Significantly harder?

**Respondent 1:** Yeah.

**Moderator:** Um, is that it?

**Respondent 1:** Um, I guess um, restate?

**Moderator:** What other stimulants do you use?

Respondent 1: I guess I use variants of Adderall, I use Vyvanse. The first time I ever used it was a nineteen credit semester of many difficult science classes. I was taking physics, an auto tutorial physiology class, and organic chemistry, and had started a new job and was pledging a fraternity, and I was in my extracurricular group, all in the same semester, so it was heavy. And I was able to handle it, for the most part, until late in the semester I found one of my classes, I was so busy with the extracurricular activities that happened with my extracurricular group and other classes that my physics class I was kind of neglecting, and when it came time to study for the final, I essentially woke up and found myself needing to memorize all of the material from the second prelim until the final in like one day. So there were probably ways in which I could have avoided that situation, but not without being extremely focused and on top of my workload and everything that college life brings.

**Moderator:** So it sounds like you have a lot on your plate in terms of extracurriculars and Greek life and you were also an athlete once right?

**Respondent 1:** I was, I was on the club baseball team.

**Moderator:** And you think that contributed to the factors that sort of led you to want to take stimulants?

**Respondent 1:** I sort of stopped playing on the baseball team before I ever resorted to Vyvanse.

**Moderator:** And just to be clear, are you prescribed Vyvanse?

**Respondent 1:** No. Also a contributing factor is that in my college academic story, I started out real bad, I walked into Cornell a pre-med with no background in science or the medical field. Both of my parents have middle class jobs not in science. I had no guidance of how much work, how much time, and how much thought I needed to put into this process, so I started out very rough academically, so with that I realized how important it was to get exceptional grades in my classes so that's when I started to really put a lot of time into my classes, so that's when I stopped doing my club baseball. Obviously resorting to Vyvanse to make sure that I had the perfect understanding of the things that I was studying.

**Moderator:** So it sounds like you quit baseball because you are overcommitted, but at the same time you are in Greek Life, you are in a group that take up a lot of your time, so did it ever occur

to you to forgo the stimulants and instead quit those instead? How did you decide what to quit, what to keep, all that stuff?

**Respondent 1:** So, um, I was able to quit baseball without too many hard feelings because it was the kind of group that I haven't really formed like strong friendships or bonds with many of the players, at the point that I left the team I had not yet at least, so that's just me as a person, I guess it takes me longer to make friends like that. So for my other extracurriculars, I kind of felt like that ones that I've stuck with are kind of essential for the college experience. I would much rather have a more enriched Cornell experience and occasionally have to use a stimulant to stay on top of it, than to focus all of my energy into school and maybe not have to use a stimulant ever. And also, another important thing, is that limiting your time with extracurricular activities is a good way to keep myself on top of my stuff. So if one day I have 12 hours to get all my work done, it's gonna take me longer to get that same work done than if I only had 8 hours to get that same work done. But I was still able to take my mind off my studies with my extracurriculars or hanging out with my friends or whatever.

**Moderator:** So you mentioned before that you would rather prioritize social life and enriching social experiences over the occasional need to use a stimulant in order to enhance your study skills or whatnot, so do you ever feel almost pressured by social life to use stimulants, in the sense that you prioritize social life or in the sense that maybe your peers or your friends are all using them and so like you feel you should too.

**Respondent 1:** Well obviously I found out about it through like friends and social life and conversations, I didn't just seek out a drug that would...so whatever...the pressure definitely came from like the competitive nature of my academic track and um you know it's um, many of my classes are based on the performance of the entire class. So for example organic chemistry, infamous for always having a low mean but still being a difficult class, in terms of beating the mean, things like that, so as unfair as it might sound, someone using a stimulant to study for the class may have the upper hand at beating the mean than someone who didn't of equal credentials I guess, equal intelligence. Also, I kind of feel the need to use stimulants at times because I think it takes me a lot longer than the average Cornellian to understand and absorb the same material.

**Moderator:** So the reason why you found out about stimulants was because it was already heavily prevalent in your social groups.

**Respondent 1:** It was like a joke topic among students, like some people used it, some people just joked about it.

**Moderator:** So if you think this particular way, like it takes you a lot longer to learn, I think that way too, why do you think everyone else uses stimulants, like why do you think other people, what do you think is the motivation for peers and other people in your class to use stimulants as well?

**Respondent 1:** My impression is that even the smartest people that I know here use it when they have either have had too much fun or have put off their work till the last minute.

**Moderator:** So procrastination, yeah.

**Respondent 1:** Yeah, procrastination, or they just are really tired and they don't want to fall asleep before they get all their work done, so some people use it just to make sure they are awake and alert while they are doing it, rather than prioritize the focus part, just like being awake.

**Moderator:** So off of that, how do you think students in college pursue getting sleep? That's an interesting point, because like you said at the very beginning of this conversation stimulants keep you awake and keep you alert, and so it seems that especially on college campuses people use stimulants a lot. I know I've heard in conversations that Cornell almost pressures students into using stimulants, and so um how important do you think students on college campuses, particularly Cornell, value sleep, in terms of like any performance?

**Respondent 1:** It's so like not important.

**Moderator:** Like downplayed?

Respondent 1: It's so, yeah like the importance of sleep, because like every class you have, you have your weekly homeworks, sometimes two or three times a week, you have your readings professors expect you to do every week, and that's just for one class. And then you have exams that you need to put in a lot of time to study for. And then you have your friends who always want you to have time to hang out with them, and then you have your extracurricular activities and as a group you are expected to be focused on whatever the group is trying to accomplish. And you have some athletes, you know their coaches are expecting their players to prioritize the sport over everything else. And so essentially there are so many things that a student has to juggle and like make sure is accomplished to its fullest every day that sleep often takes a backseat. And sleep doesn't gain any respect here. Sleep is really important, and it doesn't have the respect it deserves. I guess if you want to think of it that way.

**Moderator:** So how important do you value your sleep personally?

**Respondent 1:** I'm the kind of guy who would love to be able to stay up and get all my stuff done if I was able to, but my body just doesn't let me, like sometimes I'll find myself in the middle of work, and just suddenly wake up and find that I fell asleep, because I was just staying up too late and I hadn't slept in too long. My body craves sleep, but my mind is like I need to get all this stuff done. It's just kind of a telltale sign that there's way too much stuff on my plate and I'm not the only one, like it's almost every person at Cornell. I have way more stuff on my plate than my body is capable of keeping up with sometimes.

**Moderator:** Right, right. So would you say it is at that point that you would maybe turn to stimulants to help keep you awake just so you can get everything done and keep up with everything?

**Respondent 1:** Right. And I feel more satisfied after a long night of studying if I got everything done, but I'm really low on sleep, than if I got enough sleep, but I still have to panic about getting my stuff done on time.

**Moderator:** And what do you think are the health consequences of not getting enough sleep? But past that, any consequences you know of from stimulants as well?

**Respondent 1:** In terms of sleep, sleep is literally your entire body rebooting like everything. If you don't get enough sleep then your immune system is working overtime and it starts to fail, and you start getting sick, you start getting the sniffles, whatever. Which could escalate into worse things, obviously. And also, I sing, so my voice is bad when I don't sleep. When I don't sleep, I fall asleep easily in class. When I don't get enough sleep, I'm not able to really take in what's going on in lecture, and I often find myself sleeping through the whole thing if I don't get enough sleep. It's just not good to not get enough sleep.

**Moderator:** Do you know any benefits or consequences of using stimulants and how that would affect your sleep?

**Respondent 1:** Can you ask that again?

**Moderator:** You were talking about the benefits of using stimulants and how a lot of people use that to stay awake, but do you know much about sort of the negative consequences of using stimulants, especially in regards to sleep, but also just in regards to general health of your body?

**Respondent 1:** Not really. I know that it keeps you up, like even if you are done with all your studies and are on an Adderall trip, it sort of makes you want to do things, like you want to clean your room, or call your mom, or whatever, like whatever time of day it is, you'll want to do other things. So, I'm sure it definitely has effects on the sleep cycle, because, I'm gonna sound like a nerd, but the transmitters in your brain are, they're like overflowing, so those kind of need to settle to base line until your body is ready to sleep, and so it definitely causes a speed bump in your sleep cycle, and not to mention it keeps you awake so you don't get as much sleep.

**Moderator:** In terms of the short run, I'm assuming just from what we talked about you sort of think it's a good thing to lose out on sleep, and get all your work done. But in the long run, how do you think stimulants affect your personal sleep in the long run.

**Respondent 1:** I wouldn't say that it would affect sleep in the long run.

**Moderator:** Or like what effects would it have?

**Respondent 1:** But it would probably lower, I guess it could very well lower my attention span without the drug in the future. For example people that smoke cigarettes, it calms them down. But when they're not using cigarettes they're anxious and waiting for another cigarette to get them back to normal. That comes from a dependence. Which is why I can count on two or even one hand how many times I've used Adderall. And that's because I try to avoid using it just like as a backup like a fallback.

**Moderator:** So it's like a last resort?

**Respondent 1:** So it's like a last resort, yeah. But I also feel like people who are prescribed it, people who actually have ADD or ADHD or any attention deficit disorders, if they are prescribed to use it every day, why would there be severe harm in using it less than a dozen times in your whole life?

**Moderator:** Keeping in mind everything you said and all the negative consequences, you said you use it only for emergencies just to get everything done and make sure you are staying on top of everything?

**Respondent 1:** Right, and it's usually like for an exam, cramming for an exam.

**Moderator:** Right, right, so why do you think other people continue to use them illegally?

Respondent 1: Um, I mean, it feels awesome to be on Adderall, it's seriously a drug, it really gets you going, you feel like you can really dominate your work, like even just having a conversation with someone, like you can just talk to them all day if you are on a stimulant drug. I've experienced that several times, and I'm not a talkative person, so it definitely has like serious effects. I have friends who have used it as a party drug, just because it makes you feel on top of the world, it's like similar to cocaine honestly, but probably not as addictive. So, it's definitely on a very low scale of habit forming, it's definitely semi-habit forming, because it causes chemical changes in your brain. So, if you kind of get your brain used to that great feeling, then if you do something while lots of dopamine is being released in your brain, then you learn to like it. So whatever you do when you're on a lot of dopamine, you're going to want to do that again and again.

**Moderator:** Just to relive the experience?

**Respondent 1:** Exactly.

**Moderator:** So if I were to tell you any additional negative consequences about the effects of stimulant use on sleep, just long term, short term, anything about sleep, do you think that would deter you from future use?

**Respondent 1:** Yeah, if there were like a serious or even if I took it upon myself and looked up the effects on *PubMed* of Adderall and similar stimulants and found that long term there were serious effects then I would definitely consider stopping.

**Moderator:** So I'm assuming that goes the same for sports and academics and everything? Like if I were to tell you more negative consequences?

**Respondent 1:** I mean obviously the more I found out about it the more I like [wanted to stop].

**Moderator:** Right. And so just like was there ever a point where you just quit cold turkey, even in a huge academic emergency?

**Respondent 1:** Um, it depends on the severity, but I would say that if you told me now that there were mid to high risk of future effects, and I had one extremely time-sensitive assignment that I needed to get done, I would maybe use it one more time for that. Because, I feel like in the long run, and this is like the common attitude here, it's like I just want to get where I'm trying to get, and if I have to make a couple sacrifices to myself on the way there, so be it. As long as I don't like kill myself.

**Moderator:** So along this whole discussion, I assume it was mostly directed towards Adderall. But you did mention that coffee and energy drinks are included in your definition of stimulants, so what do you think is the biggest difference between using an energy drink to finish an assignment versus using Adderall to finish an assignment?

**Respondent 1:** So coffee and energy drinks, all they really do is keep awake, they get your heart rate going, they get your blood pumping. And depending on the energy drink I guess, I talked about red bull and how it strengthens your mental state, mental fortitude, and that, um, Adderall is just like a powerhouse of attention span, and so like whereas coffee and other stimulating energy drinks will maybe keep you up and get you ready for the assignment and keep you focusing on the assignment. With Adderall, your work becomes your project and it becomes like your baby, so you really kick ass. It's hard to describe it.

**Moderator:** So as a closing, do you have any particular questions about stimulants that you would ask? If your friend were ever so heavily dependent on a stimulant, what would you do to make them stop? Taking into account your own experience and a cost-benefits analysis of your own body, but your friend was so heavily dependent and addicted, what would you say to them or what would you do to try to make them stop?

**Respondent 1:** Well I would ask them why they use it primarily, and if it were pointed towards just feeling good, that would be probably the worst case scenario, is if they use it because of how it makes them feel.

**Moderator:** Like recreationally?

**Respondent 1:** Exactly. And I would maybe suggest taking a step down in using energy drinks, or maybe taking it less frequently, to the point where it was not really harmful. This is such a unique problem that it would definitely be a novel thing. That's probably what I would do. If it were like, "I just have so much work all the time" kind of situation, then I would probably just avoid getting into those situations and do stuff ahead of time, maybe taking a night off with drinking or with your friends so you don't have to kill yourself to do the same work. And also, the same thing, use an energy drink if you need to, or coffee.

**Moderator:** Like a less severe stimulant?

**Respondent 1:** Right, something that can still get the job done, but won't legitimately hurt you. So the question was what would you tell your friends who are using it? I would probably pull a doctor card and start telling them the negative effects and maybe read some articles to them, which is not something that would actually happen, but I would tell them and I would like read

about it and I would like talk to them about the negative effects if they are like really severely addicted to it.

End.

## **Appendix E: Campaign Examples**

### **Procrastination Tips**



# Tip #365

There's no better feeling than finishing a paper three days early.

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