

COLLEGE STUDENTS' PERCEPTIONS OF NON-MEDICAL USE OF PRESCRIPTION STIMULANTS BY THEIR PEERS

“Everyone has a friend that is prescribed Adderall® at this point.”

“It’s (Adderall use) increasingly acceptable, even some people’s parents know they use it to study and don’t even care as long as they’re getting good grades.”

Findings from the April 2005 Administration of The Student Drug Research (SDR) Survey

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Center for Substance Abuse Research
University of Maryland, College Park*

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OVERVIEW

The Student Drug Research survey (SDR) is a new indicator of emerging drug use trends to be monitored by the Maryland Drug Early Warning System (DEWS) staff at CESAR. Each month, the SDR will collect college students' perceptions of drugs use trends among fellow students. A structured questionnaire will be mailed to a consistent panel of 26 student researchers. These students report on drugs that they have observed or heard about in the past month, but they do not report on their personal drug use. While the survey covers a variety of drugs, this report focuses only on the findings about non-medical use of prescription stimulants. Future DEWS reports will contain findings about other drugs.

Note: The findings presented are obtained from a small group of students believed to be most familiar with psychoactive drug use. The results, therefore, may not reflect the perceptions of the general student population.

METHODS

- A consistent panel of 26 local college students was recruited to be student researchers, based on their responses to a prior drug use inventory.
- A structured questionnaire (Appendix A) was mailed to each of these students to complete and return by mail. The questionnaire obtains perceptions of emerging drugs and drug trends around campus; no information about the personal use of drugs is obtained.

- **April survey topics:**
 - Perceptions of the availability of drugs around campus
 - Observations on new drug fads or trends around campus
 - Perceptions of the availability and use of different prescription stimulants around campus for non-medical use
 - Perceptions of the harmfulness of using Rx stimulants non-medically
 - Perceptions of the social acceptability of using Rx stimulants non-medically
- 21 of 26 students completed the April survey and received a payment of \$20.
- This report contains only findings regarding the non-medical use of prescription drugs, with special emphasis on the use of Concerta,[®] due to its increasing prescribed use.

SECTION I. FINDINGS FROM APRIL 2005 SDR SURVEY

Table 1. Availability of Drugs around Campus

(N=21 respondents)

<u>Drug*</u>	<u>Very Easy or Easy (to get)</u> (f)	<u>Don't Know</u> (f)
Alcohol	21	0
Marijuana	20	0
Adderall	20	0
Psychedelic Mushrooms	13	2
Ritalin [®]	11	4
Powder Cocaine	10	3
Percocet [®]	9	7
Amphetamines	8	7
Steroids	8	9
Vicodin [®]	7	3
Ecstasy	7	4
Concerta [®]	7	12

* 12 other drugs that had 4 or fewer responses of Very Easy or Easy were omitted from this table.

KEY POINTS

- During April, almost all respondents said that alcohol, marijuana, and Adderall were easy or very easy to obtain on campus.
- Respondents were much less likely to perceive Concerta (7) to be easy to obtain, compared to Adderall (20) and Ritalin (11).
- Respondents (12) were most likely to say they did not know about the availability of Concerta.

**Table 2. Availability of Prescription Stimulants for Non-medical Use
(n=21 respondents*)**

<u>Type of Rx Stimulant</u>	<u>Very Easy or Easy (to get)</u> (f)	<u>Don't Know</u> (f)
Adderall (10mg)	20	0
Adderall (XR)	17	3
Ritalin (20mg)	11	4
Ritalin (SR)	8	11
Concerta	7	14
Generic Concerta	6	15
Dexedrine® (5mg)	5	15
Dexedrine Spansule	4	14

* Totals may not equal 21 because students who responded that the Rx stimulant was difficult, very difficult, or impossible to obtain were omitted from the table.

KEY POINTS

- Almost all respondents (19) reported Adderall 10mg was very easy or easy to obtain in April; both forms of Concerta, “generic Concerta” (not marketed yet) and name brand Concerta, as well as both forms of Dexedrine were least likely to be reported easily available—nearly three-fourths of the respondents did not even know whether these drugs were available.
- Respondents knew on average between 10 to 15 people who used either type of Adderall and between 2 to 4 people who used Ritalin in the month of April for non-medical reasons (data not shown).
- Respondents reported they knew, on average, 1.3 people who had used generic Concerta (though not marketed yet) and on average 2.6 students who had used Concerta non-medically in the month of April (data not shown).

Non-medical Adderall and Concerta use in Brief

Following is a summary of the qualitative responses given by respondents who were asked specifically about the non-medical use of Adderall and Concerta around campus. Adderall was selected because the March SDR survey indicated that Adderall was the most available prescription stimulant for non-medical use on campus. Concerta was selected because it is a prescription stimulant of interest to those funding this project.

Students were asked specific questions dealing with non-medical use of Rx stimulants for reasons of performance enhancement and assisting in partying. (See Appendix A: April Survey pages 7 and 8 for the exact questions).

Adderall: (20 of 21 respondents responded)

- **General use-**
 - Respondents report that students pay between \$2 to \$3 per 10mg or \$4 to \$5 for 20mg or may get pills free from friends.
 - Students are primarily getting the pills from friends with prescriptions, but they also are available through regular drug dealers and at fraternities/sororities.
 - Respondents gave mixed reports on whether prices increase around finals. Some reported that there is an accepted price that students will pay, and because it is a relatively cheap drug, the price does not change much.

- **Use to study-**
 - Students use between 10 to 30mg and generally orally ingest the pills. Some report crushing and inhaling as well.
 - Usually taken with coffee or some other type of caffeine/energy drink such as “red bull.”
 - One respondent reported that students then take sleeping pills if they cannot sleep after taking Adderall.

- **Use to party-**
 - Students use between 10 to 15mg and typically crush and snort the pills. Some students, however, are taking the pills orally.
 - Generally taking in combination with alcohol.
 - One report of students using anywhere from 40 to 120mg of Adderall without combining with alcohol.

Concerta: (6 of 21 respondents responded)

- **General use-**
 - Respondents report that students pay between \$3 to \$5 for Concerta but they are not sure of the size of the average dose.
 - Students are primarily getting the pills from friends with prescriptions.
- **Use to study-**
 - Students use between 15 to 60mg of Concerta to help them study.
 - Respondents report that students are orally ingesting the pills.
 - One respondent reported that students are taking along with caffeine.
- **Use to party-**
 - One respondent reported that students use 1 pill of Concerta (did not indicate dose size). No other mentions of using Concerta to party.
 - One respondent reported that students mix the pills with alcohol.

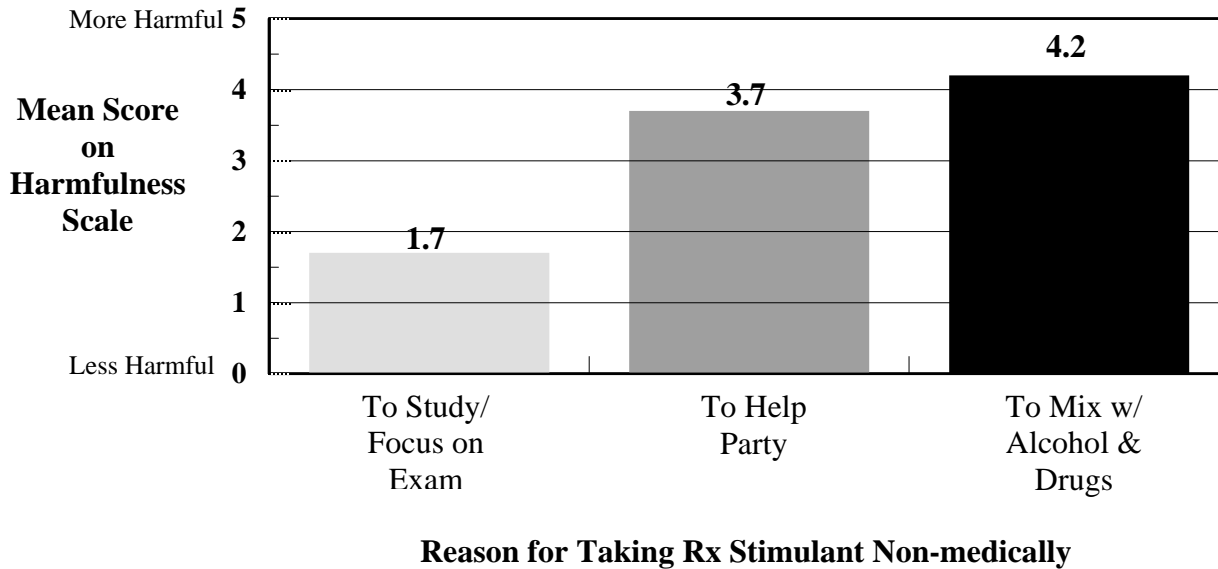
Table 3. Comparison of Non-Medical Prescription Stimulant Use
(N=20 respondents)

	<u>More Often</u>	<u>The Same</u>	<u>Less Often</u>	<u>Don't Know</u>	
Concerta is used:	0	0	8	12	than Adderall.
Concerta is used:	1	2	3	14	than Ritalin.
Adderall is used:	17	0	0	3	than Ritalin.

KEY POINTS

- Most respondents (12) did not know whether Concerta or Adderall was used more often. The remaining respondents (8) thought that Concerta was used less often than Adderall .
- Most respondents (14) did not know whether Concerta or Ritalin was used more often. The remaining responses were mixed.
- Most respondents (17) thought Adderall was used more often than Ritalin.
- Respondents indicated most often that Adderall was the most prevalent and most easily accessible prescription stimulant on campus (data not shown).
- Many students reported they did not know what Concerta was so they did not know which prescription stimulant was used more often.
- Common reasons why Adderall was believed to be used most often included: most prevalent or easily accessible, better reputation, less emotional ups and downs, stronger effects, and works best.

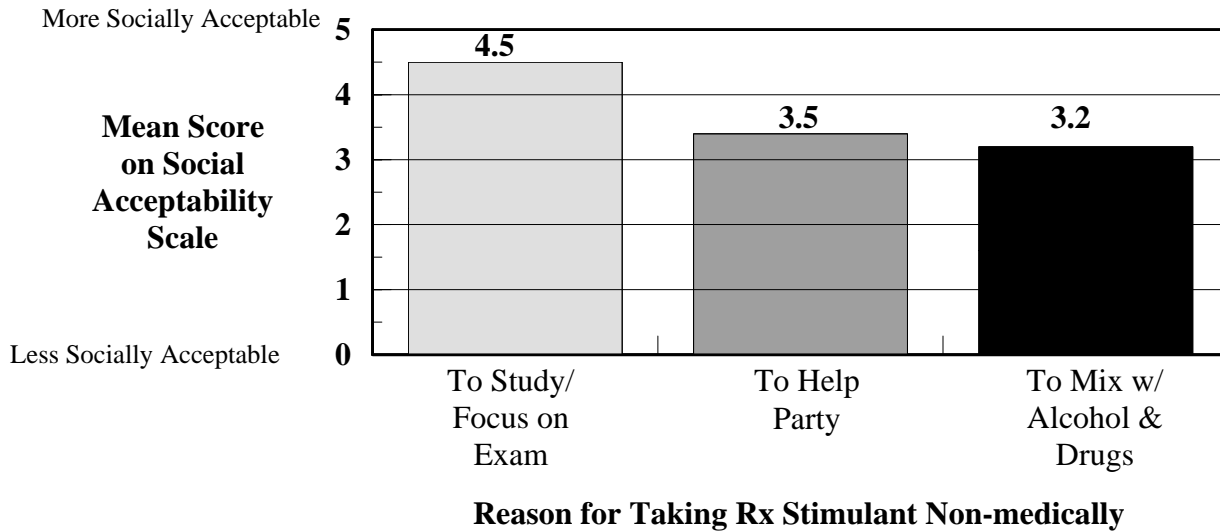
Table 4. Mean Ratings of the Harmfulness of Non-medical Rx Stimulant Use for Specified Purposes
(N=21 Respondents)



KEY POINTS

- Respondents think that it is most harmful to use Rx stimulants non-medically when they are mixed with alcohol or other drugs, followed by non-medical use to party in general.
- Students perceive it to be least harmful to use Rx stimulants non-medically when they are used to help study/focus for exams.

Table 5. Mean Responses of Students' Perceptions of the Social Acceptability of Non-medical Rx Stimulant Use for Specified Purposes
(N=21 respondents)



KEY POINTS

- Respondents perceive using Rx stimulants to party and mix with alcohol or other drugs to be less socially acceptable ways of using Rx stimulants non-medically.
- Respondents perceive using Rx stimulants to study/focus for exams as a more socially acceptable way that Rx stimulants are used non-medically around campus.

Selected Responses to Qualitative Questions

Adderall Use:

- “Adderall use is always on the rise. More and more people are trying it and having a lot of success. As finals approach and the weather gets nicer, the use of Adderall will spike until the end of the semester (then drop drastically)... Academics are using it a lot around finals. The price is definitely increasing. The demand at finals far exceeds the supply and this puts a lot of people who sell it in a bind. The dose sizes also increase because of finals. Most people won’t do less than 20mg.”
- “It is not extremely common. Around finals time Adderall runs rampant for students who want all the help they can get in studying. The pressure of school gets to kids and this is how they deal and try to do better.”
- “Everyone has a friend that is prescribed Adderall at this point.”
- “It’s (Adderall use) increasingly acceptable, even some people’s parents know they use it to study and don’t even care as long as they’re getting good grades.”

Ritalin[®] Use:

- “I feel like Ritalin used to be the study drug, but since Adderall has become more popular it is used more often.”
- “Ritalin has a reputation of being used for hyper-active little kids and is not easy to come by.”

Concerta Use:

- “My roommates and I know nothing about Concerta. Never heard of it or anyone using it!”
- “I’ve only heard of a couple of people using it to study, but don’t know enough to answer questions accurately.”

Note: When asked to report on specific information about student’s detailed use (dose size, price, etc... most students (16 of 21) either left the questions blank or did not know anything about the use of Concerta.

General Use:

- “People like to mix ‘scripts’ with alcohol to enhance effects, especially because drink are expensive at the bar.”
- “People that use stimulants to study seem to feel they have to. That they cannot study without them. Some groups find stimulant use to be acceptable/reasonable, while other groups find it shocking.”

**SECTION II. FINDINGS COMPARING MARCH and APRIL 2005
SDR SURVEYS**

Table 6. Rank Order Comparison of Drug Availability around Campus For March and April Surveys

<u>Drug</u>	<u>April</u>	<u>March</u>
Alcohol	1	1.5
Marijuana	2.5	1.5
Adderall	2.5	3
Psychedelic Mushrooms	4	4
Ritalin	5	5
Powder cocaine	6	7
Amphetamines	7.5	9.5
Steroids	7.5	11
Vicodin	10	6
Ecstasy	10	9.5
Concerta	10	8

NOTES: Respondents were asked how easy it is for UMCP students to obtain a list of specific drugs. Each respondent chose one answer from the following choices: very easy, easy, difficult, very difficult, impossible, or don't know, for each drug. We then ranked the availability of each drug based on the number of responses of "very easy or easy" to get. (1 = most available; 11 = least available).

Percocet was omitted from Table 2 because it was not included in the March survey.

KEY POINTS

- Alcohol, marijuana, and Adderall were most likely to be perceived to be easily available in both months.
- Concerta ranked relatively low in availability in both March and April.
- Rankings from the April and March surveys were quite similar, as indicated by the Spearman rank correlation = + .82.

Table 7. Rank Order Comparison of Rx Stimulant Availability around Campus for Non-medical Use: March and April Surveys

<u>Drug</u>	<u>April</u>	<u>March</u>
Adderall (10mg)	1	1
Adderall (XR)	2	2
Ritalin (20mg)	3	3
Ritalin (SR)	4	4
Concerta	5	6.5
Generic Concerta	6	8
Dexedrine (5mg)	7	5
Dexedrine Spansule	8	6.5

NOTE: Respondents were asked how easy it is for UMCP students to obtain a list of specific Rx stimulants for non-medical use. Each respondent chose one answer from the following choices: very easy, easy, difficult, very difficult, impossible, or don't know, for each type of stimulant. We ranked the availability of each Rx stimulant based on the number of responses of "very easy or easy" (1 = most available; 8 = least available).

KEY POINTS

- In March and April, Adderall and Ritalin were most likely perceived to be easy to obtain for non-medical use around campus.
- Concerta ranked relatively low in availability in both months.
- Rankings from the April and March surveys were quite similar, as indicated by the Spearman rank correlation = + .85.

CONCLUSIONS/IMPLICATIONS

- Adderall appears to still be the prescription stimulant most commonly used by students non-medically on campus. Respondents report that it remains easy to obtain and has a good reputation for success in helping students study. Students mainly use it to help them study.
- As in March, Concerta is rarely used non-medically. Many students did not know about its availability, know many students who use it, or even what exactly Concerta was.
- Students are combining Rx stimulants with caffeine (coffee and energy drinks) when using them non-medically to help them study. Students may then be taking sleeping pills once they complete their long study sessions to help them sleep. Therefore, the effects of combining Rx stimulants with large doses of caffeine or sleeping pills should be monitored for health risks.
- The harmfulness and acceptability of non-medical Rx stimulant use depends on the goals or purposes of use. Students perceive non-medical use for studying to be less harmful than for partying or mixing with alcohol or other drugs. Similarly, the non-medical use of Rx stimulants for studying is perceived to be more socially acceptable than use to party or mix with alcohol or other drugs.

Note: The findings presented are obtained from a small group of students believed to be most familiar with psychoactive drug use. The results therefore may not reflect the perceptions of the general student population.

APPENDIX A.

**STUDENT DRUG RESEARCH
APRIL 1-30 SURVEY**

Student Drug Research

April 1-30 Survey

The Center for Substance Abuse Research

4321 Hartwick Road, Suite 501
College Park, MD 20740

University of Maryland
College Park, MD

**CONFIDENTIAL—DO NOT WRITE ANY NAMES
ANYWHERE ON SURVEY**

Volume 2.

CESAR

April, 2005

We were very pleased with the responses from the first survey. We know that you are busy with the end of the semester, and we thank you for taking the time to complete April's survey. Again, the survey should take about 15 minutes to complete depending on the content of your answers.

New Information:

- **Your perceptions/observations for this survey should be based on information that you have observed since the last time you completed the monthly survey.**
- **Some questions may be similar to last month's survey, please be patient and answer them as accurately as possible.**
- **We are not asking for any specific names of people, just general observations of groups or types of people.**

General Information:

- **Answers should be based on observations made around campus; however, feel free to ask friends for their observations as well.**
- **Our primary goal is to get an accurate picture of drug use by University of Maryland, College Park students.**
- **Place the completed survey and yellow address sheet in the provided self-addressed stamped envelope and mail back to CESAR.**
- **Expect \$20 cash payment in the mail two weeks after CESAR receives your completed survey. (see yellow address sheet for instructions)**
- **If there are any questions contact the staff at CESAR at SDR@cesar.umd.edu or (301) 405-9796 for Emy or (301) 405-9792 for Ben.**

PLEASE MAIL COMPLETED SURVEY BY MAY 16

Section A. General Drug Use

1. Availability of Drugs Around Campus- How easy do you think it is for University of Maryland College Park (UMCP) students to get each of the following drugs? Base your answers only on perceptions/observations since completing the March survey.

Please Circle One Response

Drug	Very Easy	Easy	Difficult	Very Difficult	Impossible	Don't Know
Alcohol	1	2	3	4	5	6
Ritalin®	1	2	3	4	5	6
Ecstasy (X, MDMA)	1	2	3	4	5	6
Powder Cocaine (excluding crack)	1	2	3	4	5	6
Crack Cocaine	1	2	3	4	5	6
Adderall®	1	2	3	4	5	6
Marijuana	1	2	3	4	5	6
Psychedelic Mushrooms (shrooms)	1	2	3	4	5	6
Ketamine (special K)	1	2	3	4	5	6
Concerta®	1	2	3	4	5	6
Methamphetamine	1	2	3	4	5	6
Kryptonal	1	2	3	4	5	6
Ephedra®	1	2	3	4	5	6
LSD	1	2	3	4	5	6
Rohypnol (roofies)	1	2	3	4	5	6
Vicodin®	1	2	3	4	5	6
Amphetamines (speed)	1	2	3	4	5	6
OxyContin®	1	2	3	4	5	6
Heroin	1	2	3	4	5	6
Steroids	1	2	3	4	5	6
Opium	1	2	3	4	5	6
Percocet®	1	2	3	4	5	6
Vicodin®	1	2	3	4	5	6
GHB	1	2	3	4	5	6
PCP	1	2	3	4	5	6

2. New Drug Fads or Trends-

Since completing the March survey, are there any new drug fads or patterns that you have seen or heard about around campus during the last month? List the drug/drugs below and then comment on the following items (please print): (some examples might include)

- increases or decreases in use of a certain type of drug like cocaine, opium, 'shrooms' or some other type of drug;
- changes in use of certain drugs due to the weather, time of the semester, availability, change in price \$
- a new way a drug is being used (i.e. smoked vs. inhaled; in combination with another substance)
- new reasons to use certain drugs
- over-the-counter (non prescription) medicines being used more frequently or in new way such as (DXM, pseudoephedrine, etc.)

Drug 1 : _____

Changes in use (use gone up/down, manner taken changed, frequency in use): _____

Types of people using (jocks, frats, academics, general student population): _____

Other Comments (price of drug increasing, average dose size change, when used, reasons for use):

Drug 2 : _____

Changes in use (use gone up/down, manner taken changed, frequency in use): _____

Types of people using (jocks, frats, academics, general student population): _____

Other Comments (price of drug increasing, average dose size change, when used, reasons for use):

2. continued-

Drug 3 : _____

Changes in use (use gone up/down, manner taken changed, frequency in use): _____

Types of people using (jocks, frats, academics, general student population): _____

Other Comments (price of drug increasing, average dose size change, when used, reasons for use):

**3. What is the hottest psychoactive drug on campus right now? Explain-
_____ or using their acquaintance in a gla**

**4. Is there anything else you would like to report about emerging drugs, changes in use or
drug use in general around campus since you last reported in the March survey. (Please
print):** _____





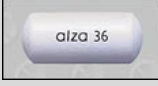

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Section B. Non-medical Use of Prescription Stimulants

5. Based on observations since the March survey, how easy do you think it is for UMCP students to get the following types of prescription stimulants around campus for non-medical use? Circle the corresponding response.

In the last column, list the number of people that you know who have used these types of prescription stimulants non-medically in the past month.

“Non-medical use” refers to a person being prescribed a drug but then uses the drug inconsistently with the doctor’s orders, like using too much or too frequently. It also refers to a person who does not have a prescription, but obtains the drug from someone else and then uses the drug.

Please Circle One Response

Type of Prescription Stimulant	Very Easy	Easy	Difficult	Very Difficult	Impossible	Don't Know	# of People You Know Who Use
A. Adderall (10mg) 	1	2	3	4	5	6	_____
B. Adderall (XR 10mg) 	1	2	3	4	5	6	_____
C. Dexedrine Spansule 	1	2	3	4	5	6	_____
D. Dexedrine (5mg) 	1	2	3	4	5	6	_____
E. Ritalin (20mg) 	1	2	3	4	5	6	_____
F. Concerta (36mg) 	1	2	3	4	5	6	_____
G. Ritalin-SR 	1	2	3	4	5	6	_____
H. Generic Concerta	1	2	3	4	5	6	_____
I. Benzedrine	1	2	3	4	5	6	_____

6. Please report additional information that you have seen or heard about on the non-medical use of Adderall[®] and Concerta[®] since the last survey: (please print)

Adderall[®] -

a. Typical dose size (please list size of pill if you know):

For studying: _____ For partying: _____

b. Route of administration (crushed/inhaled, swallowed, w/ alcohol or other drugs):

For studying: _____ For partying: _____

c. Please specify what other drugs are used in combination with Adderall[®]: _____

d. List the average cost per pill (please list size of pill if you are aware): _____

e. Where are students primarily getting Adderall[®]?(friends w/ prescriptions, strangers w/ prescriptions, dealers, etc.): _____

f. How often are students who use Adderall[®] non-medically using it? Please circle one response for each type of non-medical use of Adderall[®].

Circle one response

Type of Use	Every Day	Couple times a week	Once a week	Once a month	A couple times a semester	Don't Know
A. To help study/focus for exams	1	2	3	4	5	6
B. To help party	1	2	3	4	5	6

g. Does the supply or demand of Adderall[®] affect the use and price of Adderall? Explain- _____

h. Does the supply or demand of Adderall[®] affect the use and price of other types of prescription stimulants? Explain- _____

i. Are prescription stimulant users particular about the type of prescription stimulants they use or will they take whatever stimulant is available? Explain- _____

Concerta[®]

a. Typical dose size (please list size of pill if you know):

For studying: _____ For partying: _____

b. Route of administration (crushed/inhaled, swallowed, w/ alcohol or other drugs):

For studying: _____ For partying: _____

c. What other drugs have you heard people using in combination with Concerta[®]: _____

d. List the average price per pill (please list size of pill if you are aware): _____

e. Where are students primarily getting Concerta[®]? (friends w/ prescriptions, strangers w/ prescriptions, dealers, etc.): _____

f. How often are students who use Concerta[®] non-medically using it? Please circle one response for each type of non-medical user of Concerta[®].

Circle one response

Type of Use	Every Day	Couple times a week	Once a week	Once a month	A couple times a semester	Don't Know
A. To help study/focus for exams	1	2	3	4	5	6
B. To help party	1	2	3	4	5	6

g. Do students use Concerta[®] more often, the same, or less often than Adderall? Circle one of the following choices then explain why you think this is the case.

A. More often	B. The same	C. Less often	D. Don't know
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Why?

h. Do students use Concerta[®] more often, the same, or less often than Ritalin? Circle one of the following choices then explain why you think this is the case.

A. More often	B. The same	C. Less often	D. Don't know
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Why?

i. Do students use Adderall[®] more often, the same, or less often than Ritalin? Circle one of the following choices then explain why you think this is the case.

A. More often	B. The same	C. Less often	D. Don't know
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Why?

j. Some students have reported that Concerta[®] is stronger than Adderall[®], while others have reported that Adderall[®] is stronger than Concerta[®], what have you heard?: _____

7. Have you heard of students using prescription stimulants to help them focus while driving? (Please circle yes or no)

Yes	No
-----	----

If yes, what percentage of non-medical prescription stimulant users do you feel are using prescription stimulants for this purpose? ____ % of stimulant users

8. Other than prescription stimulants, what other types of substances are students commonly using around campus to help them study? Explain- _____

9. Listed below are several reasons why students may use prescription stimulants non-medically. How harmful do you feel it is for students to be using prescriptions stimulants for these purposes? Circle one response for each reason.

Please Circle One Response for Each Reason

Manner in which students are using prescription stimulants non-medically	Less Harmful	→	→	→	More Harmful
A. Studying/focus on exams	1	2	3	4	5
B. To help party	1	2	3	4	5
C. Mixing w/ alcohol or other drugs	1	2	3	4	5

10. Among college students, how socially acceptable is it to use prescription stimulants non-medically for the following reasons? Please circle one response for each reason.

Manner in which students are using prescription stimulants non-medically.	Less Socially Acceptable	→	→	→	More Socially Acceptable
A. Studying/focus on exams	1	2	3	4	5
B. To help party	1	2	3	4	5
C. Mixing w/ alcohol or other drugs	1	2	3	4	5

11. Based on observations since you last completed this survey, please tell us anything else you would like to report on students' non-medical use of prescription stimulants.

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ONCE COMPLETED, PLEASE PLACE THIS SURVEY AND THE YELLOW ADDRESS SHEET IN THE PROVIDED SELF-ADDRESSED STAMPED ENVELOPE AND MAIL BACK TO CESAR. SEE PAGE 2 FOR INSTRUCTIONS ON RECEIVING YOUR \$20 CASH INCENTIVE. AGAIN, WE THANK YOU FOR YOUR PARTICIPATION.

We know that many of you will be returning home for the summer however, we wish to continue the Student Drug Research Program. If you are returning home, please provide the date that you will be leaving campus and the address that you would like to have your \$20 incentive mailed and the May survey sent.

Date returning home: _____

Where would you like us to send your \$20 payment?

Address:

(Do not put your name on this sheet)

Where would you like you May survey sent?

Address:

(Do not put your name on this sheet)

If you would prefer to pick up your payment at CESAR, email SDR@cesar.umd.edu or call Emy at (301) 405-9796 or Ben at (301) 405-9792 to set up a time to do so.