Supplemental Material

CBE—Life Sciences Education

Busch *et al.*

Supplemental Material for

Costs and benefits of undergraduates revealing depression to online science instructors

Authors: Carly A. Busch[1,2], Tasneem F. Mohammed[1,2]*, Erika M. Nadile[2]*, Madison L. Witt[2+], Cindy Vargas[2+], Missy Tran[2+], Joseph Gazing Wolf[1,2+], Danielle Brister[2+], Katelyn M. Cooper[1]^

[1]Research for Inclusive STEM Education Center, School of Life Sciences, Arizona State University
[2]Biology Education Research Course, School of Life Sciences, Arizona State University
*These authors contributed equally
+These authors contributed equally
^Corresponding author

This supplement document contains the following:

Copy of survey questions analyzed

We are interested in creating more inclusive environments for students with depression at [institution name]. For this reason, we will be asking you a set of questions about your experience with depression in online courses. Please feel free to skip any question you do not want to answer.

Please indicate how you most closely identify. You do not need to have a formal diagnosis to identify as having currently or previously struggled with depression or a depressive disorder.

o Currently or having previously struggled with depression or a depressive disorder

o Having never struggled with depression

o Prefer not to say

Have you been diagnosed with **depression**?

o Yes

o No

o Prefer not to say

Are you currently being treated, or have you previously been treated for **depression**? Select all that apply.

☐ Medication

☐ Counseling/therapy (e.g., working with a psychologist or therapist)

☐ Other, please describe_____

☐ I am not/have not been treated for depression

☐ Prefer not to say

How would you rate the severity of your depression, on average, in the context of **ONLINE college science courses**?

o Little to no depression

o Mild depression

o Moderate depression

o Severe depression

Have you ever told an instructor of an online college science course that you have depression?

o Yes

o No

Please explain what factors encouraged you to reveal your depression to an instructor of an online college science course.

Please explain what factors discouraged you from revealing your depression to an instructor of an online college science course.

What do you think are the **benefits** of revealing your depression to an instructor of an **ONLINE college science course**?

What do you think are the **risks** of revealing your depression to an instructor of an **ONLINE college science course**?

What behaviors of an instructor of an **ONLINE college science course** might **increase** your willingness to reveal your depression to them?

What behaviors of an instructor of an **ONLINE college science course** might **decrease** your willingness to reveal your depression to them?

I most closely identify as
o Woman
o Man
o Non-binary
o Other, please describe _____
o Prefer not to say

I most closely identify as
o American Indian or Alaska Native
o Asian
o Black or African American
o Hispanic, Latinx, or Spanish origin
o Pacific Islander
o White/Caucasian
o Other, please describe _____
o Prefer not to say

What is your parent or guardian's highest level of education? If you have more than one parent or guardian with differing levels of education, choose the higher of the two.
o Less than high school completed
o High school diploma or GED
o Some college but no degree
o Associate degree (e.g., AA, AS)
o Bachelor's degree (e.g., BA, AB, BS)
o Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)

o Higher than a master's degree (e.g., PhD, MD, JD)
o Prefer not to say

During the time you have taken online science courses, have you considered yourself financially stable (e.g., had enough money for necessities such as groceries and rent)?
o Yes
o Yes, but only sometimes
o No
o Prefer not to say

What is your GPA (on a 4.0 scale)?

How long have you attended college while pursuing your undergraduate degree?
o 1 year or less
o 2 years
o 3 years
o 4 years
o 5 years or more
o I have graduated with my undergraduate degree
o Prefer not to say

How many **ONLINE college science courses (of any size)** have you enrolled in?

Please include courses that were fully or partially online due to the COVID-19 pandemic in your count. We consider science courses to be any biology, chemistry, geosciences, or physics courses. These are courses with prefixes such as BIO, MIC, CHM, BCH, PHY, GLG, AST, SES.

o None*
o 1-3
o 4-6
o 7 or more
Students who selected this were automatically sent to the end of the survey.

Do you identify as a member of the LGBTQIA* community?
*lesbian, gay, bisexual, transgender, queer/questioning, intersex, asexual/aromantic
o Yes
o No
o Prefer not to say

If yes: Please select the word or words that best describe your identity:

☐ Lesbian

☐ Gay

☐ Bisexual

☐ Queer

☐ Transgender

☐ Intersex

☐ Asexual

☐ Other, please describe _____

☐ Prefer not to say

Please select the major that is closest to yours. If you have more than one major, please choose all that apply.

☐ Biology

☐ Biochemistry

☐ Chemistry

☐ Physics

☐ Geosciences

☐ Business

☐ English

☐ Psychology

☐ Sociology

☐ Other, please describe _____

Table S1. Demographic information for participants.

Student demographic	Participants % (n) N = 1,179	Student demographic	Participants % (n) N = 1,179
Gender		**College generation status**	
Woman	72.7 (857)	Continuing-generation	58.5 (690)
Man	24.1 (284)	First-generation	40.0 (472)
Non-binary	2.0 (24)	Decline to state	1.4 (17)
Other	0.4 (5)	**Financially stable[a]**	
Decline to state	0.8 (9)	Yes	50.6 (597)
Race/ethnicity		Yes, but only sometimes	32.7 (386)
White	52.3 (617)	No	14.2 (167)
Hispanic, Latinx, or Spanish Origin	21.4 (252)	Decline to state	2.5 (29)
Asian	12.1 (143)	**Major**	
Other, including multiracial	5.3 (63)	A STEM major	80.5 (949)
Black or African American	4.4 (52)	A non-STEM major	19.4 (229)
American Indian or Alaska Native	2.0 (23)	Decline to state	0.1 (1)
Pacific Islander	0.6 (7)	**Year in college**	
Decline to state	1.9 (22)	2nd year or less (lower division)	54.9 (647)
LGBTQ+		3rd year or more (upper division)	44.4 (524)
No	69.6 (821)	Decline to state	0.7 (8)
Yes	24.8 (292)	**GPA**	
Decline to state	5.6 (66)	Mean ± standard deviation	3.5 ± 0.5
		(Range)	(1.5 – 4.0)

[a]Students were asked whether they considered themselves financially stable (e.g., had enough money for necessity such as groceries and rent) during the time that they have been enrolled in online college science courses.

Table S2. Summary of logistic regression results of revealing depression to an instructor of an online college science course and their gender, race/ethnicity, LGBTQ+ status, college generation status, whether they consider themselves financially stable, major, GPA, division, experience in online courses, and severity of depression.

Variable	B	SE B	*p*
Intercept	-1.83	1.32	.163
Gender (Woman)	0.25	0.38	.514
Race/ethnicity (Asian)	0.08	0.42	.848
Race/ethnicity (Black)	-0.76	0.78	.327
Race/ethnicity (Latinx)	-0.77	0.42	.066
LGBTQ+ (yes)	0.89	0.29	.003
College generation status (first-gen)	0.20	0.31	.527
Not financially stable	-0.23	0.30	.451
STEM major	1.21	0.62	.050
GPA	-0.79	0.29	.007
Division (lower)	-0.52	0.30	.086
Less experience online	0.08	0.30	.800
Moderate depression	0.86	0.34	.011
Severe depression	1.86	0.40	< .001

B represents unstandardized coefficients from the regression. Focus categories are provided in parentheses in the first column and reference groups are men, white, non-LGBTQ+, continuing-generation, financially stable, non-STEM major, upper division, more experience in online courses, and little to mild depression.

Table S3. Factors that encouraged undergraduates to reveal their depression to their online college science instructors (N = 67).

Factor	Description	% (n)	Example quote #1	Example quote #2
Needs accommodations from the instructor	Student describes that they reveal their depression because they need accommodations to ensure their academic success given their depression.	31.3 (21)	Student 180: "I was falling behind in the course and in the middle of a mental health crisis. I needed an extension on a deadline in order to get the assignment done."	Student 1661: "[I told my instructor about my depression because I needed help with] my testing accommodations."
Feels overwhelmed, is struggling with course material, or is falling behind	Student describes that they reveal their depression because they feel overwhelmed by the amount of work they have to complete for the course, because they are struggling with the course material, or when they start falling behind on deadlines and course requirements.	29.9 (20)	Student 20: "I was struggling with my courses and wanted to let the professors know why I was struggling."	Student 1306: "Feelings of being overwhelmed and very alone."
Perceives instructor is kind or concerned about the mental health of students	Student describes that they reveal their depression because they feel comfortable with the instructor and perceive them as kind, approachable, or understanding. The instructor also displays care for students' mental health.	17.9 (12)	Student 851: "[I reveal my depression] when professors make it clear that it is a safe space and they are here to work with you for whatever life may throw at you; [if the instructor is] genuine and understanding."	Student 1444: "The professor I [revealed my depression] to was very approachable and understanding."
Has a close relationship with the instructor	Student describes that they reveal their depression because they feel close to the instructor	10.4 (7)	Student 176: "I revealed my struggles [to my instructors] because they already know me well	Student 822: "My professor was taking time to discuss how I came to my choice of major and

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	and they want the instructor to know that they care about the course and that they are not being lazy or disengaged.		and I want them to know I care about their courses."	the challenges it faces. Telling them about my diagnosis came up organically in the conversation."
Perceives the instructor provides an opportunity for students to reveal their depression	Student describes that they reveal their depression because the instructor provides an opportunity for them to do so through an assignment or survey. The instructor may also reach out to the student when they perceive that the student is struggling or falling behind, which provides an opportunity for the student to reveal their depression.	7.5 (5)	Student 51: "The instructor asked us to write a personal narrative paper."	Student 1732: "My math teacher asked us in a survey if there was anything we would like to share that may hinder our learning."
Has received a recommendation from someone to reveal	Student describes that they reveal their depression because someone recommended that they reveal their condition to the instructor. These recommendations may come from their mental health provider or as part of protocol that is recommended by the institution's disability resource center.	4.5 (3)	Student 1298: "During a psychiatric appointment my doctor encouraged me to communicate with my professors on an action plan to get me back on track after a depressive episode."	Student 1950: "I have registered with [the school's disability resource center] so I always send a hello email to my professors before the session starts and introduce myself, disclosing my disabilities."
Has revealed their depression as a matter of habit	Student describes that they reveal their depression because they are open about their condition and practice a	3.0 (2)	Student 2048: "I am not shy about [my depression], and it is important to let someone know if it is possibly	Student 1454: "I have had mental health and physical health issues my entire life. I think it's incredibly important to

	habit of self-advocacy with regard to their mental health.		affecting you or your work."	destigmatize these issues, especially in professional environments."
Feels the COVID-19 pandemic exacerbated the student's experiences with depression	Student describes that they reveal their depression because their experience with depression was made worse by the COVID-19 pandemic or that they wanted to raise awareness about students' experiences with depression during the pandemic.	3.0 (2)	Student 1306: "[I reveled my depression in hopes of] increasing awareness of student experiences during COVID-19 and how certain educational practices affect these experiences."	Student 613: "We are in a pandemic and I need to be honest with my professors or they will never know."
Seventy students indicated that they have revealed their depression and received the question asking them what encouraged them to reveal their depression; 3 students did not give a response (4.3%). Of the 67 students who provided a response, 5 (7.5%) provided a response that could not be categorized into one of the above factors.				

Table S4. Factors that discouraged undergraduates from revealing their depression to their online college science instructors (N = 1,055).

Factor	Description	% (n)	Example quote #1	Example quote #2
Perceives depression is not severe, is currently managed, or has never impacted coursework	Student describes that they conceal their depression because they do not think it is necessary to reveal it, often because they perceive it to not be severe enough, because it is undiagnosed, or because it is not impacting their schoolwork.	30.5 (322)	Student 213: "[My depression] is not severe, and it has not impacted my grades so far."	Student 1774: "My depression is not bad. […] This is why I never bring up that I have any sort of depression."
Feels personally uncomfortable revealing depression	Student describes that they conceal their depression because they do not share emotional things, would find it awkward, hard to communicate, intimidating, embarrassing, weird, too personal, or uncomfortable to reveal their depression.	23.6 (249)	Student 1358: "It is kind of awkward to talk about [my depression]."	Student 957: "[My depression] is not really something that I would feel inclined to share."
Perceives instructor would not care or would dismiss their depression	Student describes that they conceal their depression because they perceive the instructor would not believe them or care about depression, would dismiss it, or would not see it as a valid excuse.	20.3 (214)	Student 1478: "I feel that instructors wouldn't really care about mental health but [instead would care about] an assignment to be turned in at 11:59pm."	Student 1366: "[Instructors] make it clear they do not care for their students."
Perceives instructor would	Student describes that they conceal their	12.8 (135)	Student 800: "It just seemed like [my	Student 1604: "Instructors may not

not make accommodations	depression because they would not get an extension, instructors would see it as an excuse, it would not help them or solve anything, it would not change how the instructor teaches, and/or the instructor has a "no exceptions" policy.		instructor] wouldn't really accommodate so what was the point [of revealing my depression]?"	compensate by being lenient with deadlines and assignments."
Does not want accommodations or to be seen as making excuses	Student describes that they conceal their depression because they do not want special treatment, their depression seems minor compared to what other people are experiencing, or they do not want to use it as an excuse.	12.6 (133)	Student 2076: "I've never brought [my depression] up to my professor as I didn't want to seem like making excuses for falling behind/struggling."	Student 1502: "I don't want it to seem as if I'm trying to get a free pass."
Lacks a relationship with instructor	Student describes that they conceal their depression because they do not have a relationship with the instructor, the instructor does not see them as human, they are not close to instructor, the instructor is a "temporary" person in the student's life, the instructor does not care about students, or it would be one of a small number of things the professor knows about the student.	9.7 (102)	Student 95: "I don't feel like I have a personal relationship with any instructors."	Student 181: "I don't have any sort of relationship with [my instructors] that would make me feel comfortable doing so."
Perceives the	Student describes that	8.5 (90)	Student 354: "I believe	Student 1178:

instructor could not do anything to help	they conceal their depression because it is not the instructor's job to help them, the instructor cannot do anything to help, it is not the instructor's problem or business, instructors have too much going on already and would not know how to handle disclosure.		it's not [my instructors'] responsibility to deal with my emotions."	"[Instructors] have their own lives to worry about; my personal problems are not their problems."
Perceived it is not an appropriate setting	Student describes that they conceal their depression because it is not professional, not appropriate for any situation the student has experienced including during a lecture, the general science environment, or the impersonal nature of online courses. Further, online courses provide no face-to-face interaction to explain feelings. Moreover, student describes that the class is not an appropriate setting due to it being very large.	8.3 (88)	Student 805: "Being online you don't get to meet the instructor in person."	Student 305: "[Revealing depression] seems like a conversation that should be had in person."
Feels stigma associated with depression	Student describes that they conceal their depression due to the stigma or other negative attributes associated with depression, that they want to avoid being viewed as weak, facing judgement or	8.0 (84)	Student 168: "I am afraid [my instructors] will stigmatize me."	Student 990: "[My instructors] would judge me and think I am incompetent to be a doctor because of this."

	pity, or being looked down upon. Further, student describes the fear of facing judgement, fear of not knowing how instructor would respond, and/or fear of revealing make them want to conceal.			
Of the 1,109 students with depression who had not revealed their depression to an instructor and received the question asking them what discouraged them from revealing their depression, 54 students did not give a response (4.9%). Of the 1,055 students who provided a response, 60 (5.7%) provided a response that could not be categorized into one of the above factors.				

Table S5. Potential benefits of students revealing depression to their online college science instructors (N = 1,118).

Benefit	Description	% (n)	Example quote #1	Example quote #2
Increase student-instructor communication	Student describes revealing depression could help build a relationship with the instructor or increase the communication between students and the instructor.	28.6 (320)	Student 822, has revealed depression: "I could feel safer asking for help or letting [the instructor] know what's affecting me."	Student 11, has not revealed depression: "Perhaps my instructor would make an effort to check in on the mental health of their students if they knew they were battling depression. Also, maybe the assignments would be more engaging and fun rather than boring ones you dread doing."
Develop instructor understanding of student mental health	Student describes revealing will broaden the instructors view of how depression can present challenges for students.	26.8 (300)	Student 1776, has not revealed depression: "[The instructor] may better understand why I turned in an assignment late, as I occasionally will be depressed to the point of missing homework assignments because of the lack of motivation."	Student 101, has revealed depression: "[My instructors] understand that I do care about the class, I just have other obstacles that are keeping me from being successful."
Increase instructor flexibility	Student describes instructor could potentially accommodate a student by adjusting their workload (e.g., fewer assignments, extended deadlines). Student describes instructor can be more prepared to deal with mental health struggles that may interfere with student's coursework.	22.9 (256)	Student 886, has revealed depression: "Most or all [of my instructors] have been understanding and allowed an extension, which partially relieved the stress of an impending deadline."	Student 1708, has not revealed depression: "[Instructors] would be more considerate of what we are going through and be more flexible with the schedules they give [students]."

Perceive that instructor could provide additional resources	Student describes that revealing their depression to the instructor could help them receive, access, or be directed to resources to help manage their depression. If the instructor cannot help themselves, someone else may be able to assist with coping strategies.	5.9 (66)	Student 1646, has revealed depression: "I think it can be beneficial if the teacher understands how depression can affect a person's behavior/work ethic and it can let the teacher know you're struggling and may need some extra help."	Student 215, has not revealed depression: "[Instructors] may be able to provide resources to seek help or guidance as to how to work through this."
Increase instructor awareness	Student describes the instructor is aware they have depression (no specific benefit mentioned).	2.9 (32)	Student 1273, has revealed depression: "Allowing my professor to become aware of my situation may cause some relief depending on how they respond."	Student 60, has not revealed depression: "They're aware of what I'm going through and what may cause effects on my performance."
Student perceives no benefit or is unsure of benefit	Student describes there are no benefits, or they are unsure of what the benefits would be from revealing their depression to their instructor.	23.2 (259)	Student 858, has revealed depression: "Honestly, I don't believe revealing depression to an online instructor has any benefits."	Student 2056, has not revealed depression: "I don't know that there would be much of a benefit [to revealing depression to an instructor]."
Of the 1,179 students who were asked this question, 61 did not respond (5.2%). Of the 1,118 students who provide responses, 107 (9.6%) provided a response that could not be categorized into one of the above benefits described.				

Table S6. Potential costs of students revealing depression to their online college science instructors (N = 1,096).

Cost	Description	% (n)	Example quote #1	Example quote #2
Cause student or depression to not be taken seriously	Student describes the instructor will not take their depression seriously, not believe them, make them feel ignored or misunderstood, or the instructor may not understand what depression is. Student describes the instructor might not care or respond in a positive or helpful manner.	32.3 (354)	Student 2175, has revealed depression: "[A cost of revealing my depression is] instructors making it worse by telling you to deal with it, they don't think it's an issue, or not working with you. This increases feelings of hopelessness and loneliness."	Student 528, has not revealed depression: "If the professor is not very understanding of mental health issues, they may dismiss a student's depression [after choosing to reveal] rather than trying to help the student."
Cause student to be treated differently in a negative way	Student describes being worried that the professor would pass negative judgment if they revealed their depression. Further, student describes feeling like the instructor will dislike them or that the instructor might hold it against them.	31.2 (342)	Student 511, has revealed depression: "I fear that [my instructors] may judge me, or [revealing my depression] may impact their view of my capabilities as a student. I don't want to be seen as lazy or unfit to do well in the class."	Student 604, has not revealed depression: "The costs of revealing depression can be high since the professor may unconsciously grade assignments differently (even if they are unaware of stigma or prejudice, it still could affect their grading)."
Be viewed as making an excuse	Student describes the professor will think they are revealing their depression as an excuse to explain unfinished or poor quality work.	11.8 (129)	Student 859, has revealed depression: "The instructor thinking that [my depression] is just an excuse not to do well. As if I am trying to get a good grade without doing any of the work."	Student 1004, has not revealed depression: "Professors may think I am using my depression as an excuse for extensions or poor grades."
Feel personally embarrassed and vulnerable	Student describes worrying that they will feel ashamed,	6.6 (72)	Student 946, has revealed depression: "I wouldn't want [my instructor] to tell	Student 1089, has not revealed depression: "Personal embarrassment? It's

	embarrassed, exposed, or too vulnerable if they chose to reveal. Student does not feel comfortable sharing their mental health information with the instructors, or not wanting anybody to know about it.		anyone."	difficult to reveal personal struggles, [such as my depression] to people you have no connection with."
Worry about lack of discretion	Student describes worrying that the instructor may tell other people including other students, instructors, or family.	4.2 (46)	Student 986, has not revealed depression: "The instructor sharing information [about my depression] to counseling or notifying others."	Student 140, has revealed depression: "They can easily report it to the health people."
Anticipate unsolicited help or referral	Student describes the instructor will suggest that they meet with counselors, the school's disability resource center, or other people who might help them manage their depression. Student describes instructor will be overly concerned about their depression and do daily check-ups.	2.9 (32)	Student 2114, has not revealed depression: "[A cost of revealing my depression is] being sent to a counselor or given a hotline. I don't want or need that."	Student 2154, has not revealed depression: "Being referred to someone else that you don't feel comfortable [talking with about your depression]."
Fear burdening the professor	Student describes being worried that they will be putting a burden on the professor.	2.3 (25)	Student 2044, has not revealed depression: "[A cost would be] putting more pressure on my professors. I do not want to complicate their work any further."	Student 838, has not revealed depression: "I don't know. A weight going on [my instructor's] shoulders too. The quarantine is stressful on everyone right now."
Worry about ruining professional relationship	Student describes that they worry that they would no longer be taken seriously within the	1.6 (17)	Student 926, has revealed depression: "[If I revealed my depression] it could	Student 350, has not revealed depression: "Potentially hurting your chances for getting

	academic field of science or could not ask for letters of recommendation or future partnerships.		negatively impact [my instructor's] opinion of me/prevent them from offering me opportunities they might otherwise have offered."	into their labs or getting letters of recommendation, whether nefariously or otherwise, [due to revealing your depression]."
Student perceives no cost or is unsure of costs	Students describes that there are no costs or they are unsure of any costs of revealing their depression to their online college science instructor.	13.7 (150)	Student 549, has revealed depression: "I don't know of any [costs]."	Student 952, has not revealed depression: "I'm not sure if there are any [costs of revealing depression]."

Of the 1,179 students who were asked this question, 83 did not respond (7.0%). Of the 1,096 students who provided responses, 135 (12.3%) provided a response that could not be categorized into one of the above costs described.

Table S7. Summary of logistic regression results of demographic differences in which benefits students described from revealing depression to online college science course instructors. B represents unstandardized coefficients, whereas β represents standardized coefficients. OR represents the odds ratio (calculated as e^B). Focus categories are provided in the second column and reference groups are men, white, non-LGBTQ+, continuing generation, financially stable, non-STEM major, upper division, little to mild depression, and have not told instructor about depression.

Benefit	Variable	B	SE B	p	β	OR
Develop instructor understanding of student mental health	Intercept	0.2493	0.1264	0.0489	0.2546	1.2831
	Woman	0.0792	0.0336	0.0184	0.0344	1.0825
	Asian	0.0556	0.0444	0.2110	0.0186	1.0571
	Black	-0.1167	0.0655	0.0751	-0.0263	0.8898
	Latinx	0.0300	0.0374	0.4232	0.0127	1.0304
	LGBTQ+	-0.0314	0.0341	0.3573	-0.0134	0.9691
	First-gen	-0.0596	0.0320	0.0630	-0.0292	0.9421
	Financially unstable	0.0657	0.0301	0.0294	0.0329	1.0679
	STEM major	-0.1063	0.0368	0.0039	-0.0428	0.8992
	GPA	0.0068	0.0317	0.8311	0.0033	1.0068
	Lower division	-0.0231	0.0299	0.4393	-0.0115	0.9771
	Moderate depression	0.0185	0.0319	0.5624	0.0087	1.0187
	Severe depression	-0.0389	0.0517	0.4525	-0.0113	0.9619
	Told instructor	0.1420	0.0612	0.0205	0.0343	1.1526
Increase instructor flexibility	Intercept	-0.0133	0.1205	0.9123	0.2153	0.9868
	Woman	0.0147	0.0320	0.6470	0.0064	1.0148
	Asian	-0.0157	0.0423	0.7104	-0.0053	0.9844
	Black	-0.0393	0.0625	0.5290	-0.0089	0.9614
	Latinx	0.0418	0.0357	0.2411	0.0178	1.0427
	LGBTQ+	0.0095	0.0325	0.7707	0.0041	1.0095
	First-gen	-0.0183	0.0305	0.5494	-0.0090	0.9819
	Financially unstable	0.0168	0.0287	0.5586	0.0084	1.0170
	STEM major	-0.0141	0.0351	0.6873	-0.0057	0.9860
	GPA	0.0588	0.0303	0.0524	0.0283	1.0605
	Lower division	-0.0106	0.0285	0.7093	-0.0053	0.9894
	Moderate depression	0.0279	0.0304	0.3602	0.0131	1.0283
	Severe depression	0.0932	0.0493	0.0590	0.0272	1.0977
	Told instructor	0.0413	0.0583	0.4796	0.0100	1.0421
Increase student-instructor	Intercept	0.1691	0.1315	0.1989	0.2820	1.1842
	Woman	0.0155	0.0349	0.6570	0.0067	1.0156
	Asian	0.1296	0.0462	0.0051	0.0433	1.1383

communication	Black	0.0526	0.0681	0.4408	0.0118	1.0540
	Latinx	0.0582	0.0389	0.1352	0.0247	1.0599
	LGBTQ+	0.0082	0.0355	0.8183	0.0035	1.0082
	First-gen	-0.0189	0.0333	0.5714	-0.0092	0.9813
	Financially unstable	0.0022	0.0313	0.9439	0.0011	1.0022
	STEM major	0.0508	0.0383	0.1843	0.0205	1.0521
	GPA	0.0071	0.0330	0.8308	0.0034	1.0071
	Lower division	0.0067	0.0311	0.8296	0.0033	1.0067
	Moderate depression	0.0058	0.0332	0.8608	0.0027	1.0058
	Severe depression	-0.0717	0.0538	0.1831	-0.0209	0.9308
	Told instructor	0.1392	0.0637	0.0290	0.0337	1.1494
Student perceives no benefit or unsure of benefits	Intercept	-0.4805	0.7150	0.5015	-1.3237	0.6185
	Woman	-0.0821	0.1887	0.6636	-0.0356	0.9212
	Asian	-0.2365	0.2617	0.3661	-0.0790	0.7894
	Black	-0.2113	0.3782	0.5763	-0.0476	0.8095
	Latinx	-0.2001	0.2135	0.3486	-0.0850	0.8187
	LGBTQ+	-0.1632	0.1994	0.4130	-0.0698	0.8494
	First-gen	0.0878	0.1809	0.6272	0.0430	1.0918
	Financially unstable	-0.1360	0.1722	0.4294	-0.0680	0.8728
	STEM major	0.0508	0.2109	0.8095	0.0205	1.0521
	GPA	-0.1595	0.1796	0.3746	-0.0769	0.8526
	Lower division	-0.2562	0.1686	0.1287	-0.1277	0.7740
	Moderate depression	0.2057	0.1802	0.2537	0.0964	1.2284
	Severe depression	0.4969	0.2814	0.0774	0.1451	1.6437
	Told instructor	-1.2832	0.4863	0.0083	-0.3103	0.2771

Table S8. Summary of logistic regression results of demographic differences in which costs students described from revealing depression to online college science course instructors. B represents unstandardized coefficients, whereas β represents standardized coefficients. OR represents the odds ratio (calculated as e^B). Focus categories are provided in the second column and reference groups are men, white, non-LGBTQ+, continuing generation, financially stable, non-STEM major, upper division, little to mild depression, and have not told instructor about depression.

Code	Variable	B	SE B	p	β	OR
Cause student to be treated differently in a negative way	Intercept	0.3051	0.1316	0.0207	0.2874	1.3567
	Woman	0.0828	0.0349	0.0181	0.0359	1.0863
	Asian	-0.0714	0.0462	0.1226	-0.0239	0.9310
	Black	-0.1268	0.0682	0.0634	-0.0286	0.8809
	Latinx	-0.0344	0.0390	0.3772	-0.0146	0.9662
	LGBTQ+	-0.0626	0.0355	0.0785	-0.0268	0.9393
	First-gen	-0.0049	0.0334	0.8831	-0.0024	0.9951
	Financially unstable	0.0031	0.0314	0.9216	0.0015	1.0031
	STEM major	0.0324	0.0383	0.3985	0.0130	1.0329
	GPA	-0.0171	0.0330	0.6051	-0.0082	0.9831
	Lower division	-0.0553	0.0311	0.0761	-0.0275	0.9462
	Moderate depression	0.0720	0.0332	0.0305	0.0338	1.0747
	Severe depression	0.0570	0.0538	0.2899	0.0166	1.0587
	Told instructor	-0.0768	0.0637	0.2285	-0.0186	0.9261
Be viewed as making an excuse	Intercept	0.1173	0.0876	0.1807	0.0995	1.1245
	Woman	0.0115	0.0232	0.6197	0.0050	1.0116
	Asian	-0.0199	0.0308	0.5169	-0.0067	0.9803
	Black	-0.0018	0.0454	0.9682	-0.0004	0.9982
	Latinx	-0.0050	0.0259	0.8474	-0.0021	0.9950
	LGBTQ+	0.0028	0.0236	0.9057	0.0012	1.0028
	First-gen	0.0209	0.0222	0.3472	0.0102	1.0211
	Financially unstable	0.0005	0.0209	0.9793	0.0003	1.0005
	STEM major	0.0008	0.0255	0.9752	0.0003	1.0008
	GPA	-0.0092	0.0220	0.6746	-0.0044	0.9908
	Lower division	-0.0418	0.0207	0.0441	-0.0208	0.9591
	Moderate depression	0.0609	0.0221	0.0060	0.0286	1.0628
	Severe depression	0.0261	0.0358	0.4673	0.0076	1.0264
	Told instructor	0.0026	0.0424	0.9507	0.0006	1.0026
Cause student or depression to not be taken	Intercept	0.1551	0.1305	0.2350	0.2962	1.1678
	Woman	0.0648	0.0346	0.0617	0.0281	1.0670
	Asian	-0.0050	0.0458	0.9127	-0.0017	0.9950

seriously	Black	-0.0183	0.0676	0.7872	-0.0041	0.9819
	Latinx	-0.0166	0.0386	0.6666	-0.0071	0.9835
	LGBTQ+	0.1354	0.0352	0.0001	0.0579	1.1450
	First-gen	-0.0515	0.0331	0.1198	-0.0252	0.9498
	Financially unstable	0.0311	0.0311	0.3173	0.0156	1.0316
	STEM major	0.0053	0.0380	0.8881	0.0022	1.0054
	GPA	0.0113	0.0328	0.7303	0.0054	1.0114
	Lower division	-0.0424	0.0309	0.1693	-0.0211	0.9584
	Moderate depression	0.0738	0.0330	0.0254	0.0346	1.0765
	Severe depression	0.2027	0.0534	0.0002	0.0592	1.2247
	Told instructor	0.1178	0.0632	0.0625	0.0285	1.1250
Student perceives no costs or is unsure of costs	Intercept	-1.6622	0.8602	0.0533	-1.9600	0.1897
	Woman	-0.5175	0.2137	0.0154	-0.2246	0.5960
	Asian	-0.3639	0.3373	0.2806	-0.1216	0.6949
	Black	0.2912	0.4203	0.4884	0.0656	1.3381
	Latinx	0.1292	0.2550	0.6125	0.0549	1.1379
	LGBTQ+	-0.5451	0.2705	0.0439	-0.2331	0.5798
	First-gen	-0.1766	0.2261	0.4348	-0.0865	0.8381
	Financially unstable	0.0742	0.2081	0.7215	0.0371	1.0770
	STEM major	0.0121	0.2506	0.9615	0.0049	1.0122
	GPA	0.0968	0.2176	0.6563	0.0467	1.1017
	Lower division	0.0915	0.2076	0.6593	0.0456	1.0958
	Moderate depression	-0.4116	0.2315	0.0754	-0.1930	0.6626
	Severe depression	-0.5866	0.4046	0.1471	-0.1713	0.5562
	Told instructor	0.7529	0.3856	0.0509	0.1821	2.1231

Table S9. Instructor behaviors that would increase students' likelihood of revealing their depression to their online college science instructors (N = 994).

Code	Description	% (n)	Example quote #1	Example quote #2
Is a nice or understanding person	Student describes that they would be more likely to reveal their depression if they perceive their instructor as being kind, understanding, enthusiastic, open, or sympathetic or if they outwardly express support, care, or concern for students.	33.0 (328)	Student 1306, has revealed depression: "[I am more likely to tell the instructor about my depression if they exhibit] kindness, sympathy, grace, encouragement, words of encouragement, approachable demeanor, considerate responses to questions, and tangibility (more than just a face on a screen)."	Student 43, has not revealed depression: "Perhaps if [the instructor] addressed the inherent difficulty of this online format, I'd be more willing to speak with them. I've had instructors periodically encourage our class to stay positive and maintain focus on the material; a little empathy goes a long way."
Tries to develop relationships with students	Student describes that they would be more likely to reveal their depression if the professor was actively trying to develop relationship, build a connection with, bond with, or get to know students (e.g., talking to them, having a conversation with them) or was reaching out to students to check on them, being easily accessible (through chat, discord, slack). This also includes the instructor revealing general personal information (aside from mental health) to students and inviting students to	31.0 (308)	Student 886, has revealed depression: "[I am more likely to reveal my depression when my instructor is] being open and [building] personal relations with students. Getting to know them [would also make me more likely to reveal]."	Student 1776, has not revealed depression: "If the instructor showed more willingness to get to know and understand their students."

	reach out for support.			
Addresses mental health in any way	Student describes that they would be more likely to reveal their depression if they heard their professors talking about or addressing mental health in any way. For example, expressing sympathy about mental health, acknowledging the importance of mental health, encouraging students to reach out about mental health, talking about their own mental health, or providing mental health resources.	30.0 (298)	Student 124, has revealed depression: "If I'm always seeing [the instructor] post announcements about mental health awareness/events."	Student 2053, has not revealed depression: "Openly talk about mental health and the importance of it."
Indicates they would provide accommodations	Student describes that they would be more likely to reveal their depression if they perceive the instructor as willing to be flexible and accommodating about course expectations, or would be likely to provide extensions and extra time for the student. This category is specific to how revealing depression would change an aspect of the course (e.g., deadline).	14.7 (146)	Student 129, has revealed depression: "Something I appreciate about my [science] instructors is that every course starts with, 'We are completely aware and understanding of the difficulty of current times. Please know that we're here to help and if you need extensions, you can have them at any point in time.'"	Student 1356, has not revealed depression: "If [instructors] explain that they can accommodate for those things and if they want to make sure that they address you correctly with experiences and words."
Unsure what would increase their willingness	Student describes that they are not sure what an instructor could do to increase their likelihood	3.7 (37)	Student 1820, has not revealed depression: "I'm not sure; I don't like bringing these things up in general."	Student 746, has not revealed depression: "I haven't given this enough thought to answer appropriately."

	of revealing their depression.			
Student would never reveal depression, given the option	Student describes that nothing the instructor does would increase the student's likelihood of revealing their depression, because they never would, or they would only reveal their depression if forced (e.g., depressive episode while with their instructor).	3.3 (33)	Student 691, has not revealed depression: "Nothing, I would never reveal my depression to them."	Student 788, has not revealed depression: "I don't know that it is their business to know unless it is affecting my work."
Of the 1,179 students who were asked this question, 185 did not respond (15.7%). Of the 994 students who provided responses, 44 (4.4%) provided responses that could not be categorized into one of the above behaviors.				

Table S10. Instructor behaviors that would decrease students' likelihood of revealing their depression to their online college science instructors (N = 1,002).

Behavior	Description	% (n)	Example quote from student who has revealed depression	Example quote from student who has not revealed depression
Is rude or not caring	Student describes they would be less likely to reveal their depression if they perceive the instructor as critical, rude, disrespectful, sarcastic, mean, stuck up, judgmental, harsh, or angry. In addition, the professor may be described as NOT caring, sympathetic, empathetic, engaging, or understanding. This category also includes specific teaching styles including being strict or monotone.	41.0 (411)	Student 101, has revealed depression: "Appearing cold or standoffish, not answering questions in a timely way, treating this like any other semester/not acknowledging current difficulties."	Student 546, has not revealed depression: "If [instructors] are quick to be judgmental and harsh when someone asks a question in class."
Discourages or avoids communication or student-instructor relationships	Student describes they would be less likely to reveal their depression if the professor discourages or avoids communication or student-instructor relationships. Student describes that the instructor is closed off or cold, does not have or encourage conversations with students, is unapproachable, and does not respond to email or allow students to share	27.7 (278)	Student 886, has revealed depression: "If [instructors] are not friendly or [do not] manage more personal relations with students."	Student 1006, has not revealed depression: "Showing no concern for students well-being; ineffective communication."

	personal information.			
Makes no exceptions for assignments	Student describes they would be less likely to reveal their depression if the professor makes no exceptions, indicates that revealing mental health will not change anything or help, or does not accept excuses. This category is specific to how revealing mental health would change an aspect of the course (e.g., deadline).	18.4 (184)	Student 886, has revealed depression: "If [instructors] are strict in grading [and] they seem to be more reluctant to follow accommodations."	Student 978, has not revealed depression: "Rigid deadlines that do not excuse late coursework (except exams) for any reason."
Exhibits a poor or indifferent attitude about mental health	Student describes they would be less likely to reveal their depression if the professor does not take students seriously, is dismissive of or indifferent to mental health issues.	9.9 (99)	Student 302, has revealed depression: "[Instructors that] don't care. They don't believe in mental illness."	Student 1114, has not revealed depression: "If [instructors] show a disinterest in mental health and don't really believe in how it may affect students and their academic performance."
Avoids mentioning mental health	Student describes they would be less likely to reveal their depression if the professor does not mention mental health.	4.7 (47)	Student 51, has revealed depression: "If [the instructors] don't ask [about mental health]."	Student 756, has not revealed depression: "Not discussing [depression] at all. When the environment is kept so professional and super formal, I wouldn't be willing to discuss depression."
Student would never reveal depression, unless forced	Student describes that nothing the instructor did would decrease the student's likelihood of revealing their depression, because they never would, or never would unless	4.3 (43)	Student 1193, has revealed depression: "Nothing could decrease it. I probably would not do it again. I have other people to reach out to that I know personally and would feel more	Student 2153, has not revealed depression: "Nothing, I wouldn't do it in any context."

	they were forced to given a situation.		comfortable reaching out."	
Unsure what would decrease their willingness	Student describes that they are not sure what an instructor could do to decrease their likelihood of revealing their depression.	1.8 (18)	Student 259, has not revealed depression: "I'm not sure."	Student 746, has not revealed depression: "I don't know, it's such an impersonal environment."
Of the 1,179 students who were asked this question, 177 did not respond (15.0%). Of the 1,002 that responded, 13 (1.3%) provided a response that could not be categorized into one of the above behaviors.				