Another Disrupted Semester:
Spring 2020 School of Social Sciences Graduating Senior Experiences

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In May 2020, 125 graduating students (80% female, 35.2% first generation, 61.9% minority ethnic background), completed an online survey about their experiences during their final semester at Sonoma State University.

Learning Context

31.9% of respondents reported having to move, 73.2% reported that COVID-19 had affected their employment (54.5%**%** lost their position, and an additional 18.7% worked fewer hours), and 70.3% reported that their post-graduation plans had changed. More change is reliably associated with more anxiety/depression ($r(103)=.21$, $p=.03$) and less resilience ($r(103)=-.23$, $p<.03$).

As shown in the table below, relatively few respondents reported using campus services.

Table 1. *University Service Use*

University Service	**Used service**	**Average Experience**
Writing Center (LARK)	0.8% (1)	100%
Campus Counseling Center (CAPS)	7.2% (9)	97.7%
Disabilities Services for Students (DSS)	2.4% (3)	97.0%
Career Services	8.0% (10)	93.2%
IT	1.6% (2)	92.0%
Advising Center	4.8% (6)	91.7%
Financial Aid	8.0% (10)	83.6%
Library / Borrow laptops	4.0% (5)	74.3%
Other: faculty advisor/admission & records	0.8% (1)	72.0%
Noma Cares	0% (0)	No rating

Note. Respondents could rate how positive their experience was from 0 to 100%. Respondents reported hearing most frequently from the SSU administration ($M=3.24$, $SD=1.03$), their department ($M=2.78$, $SD=1.06$), and then advisors ($M=2.57$, $SD=1.27$) rated on a five-point scale.

Most respondents reported access to a web camera (76.8%), microphone (75.2%) and lap or desk top computer (82.4%). Almost 20% of respondents did not have adequate access to computers – a difficulty that could continue this semester given that most students will attend class remotely (only five students borrowed laptops from the library and their assessment was not uniformly positive). In addition, 59.2% percent of students did not have a place to work without distractions, and 35.6% did not have consistent access to the internet. Most respondents reported having only 6 to 10 hours a week to spend on remote course work (28% chose less than 5 hours, 40% 6 to 10 hours, 16.3% 11 to 15 hours, 18.3% more than 15 hours a week).

[1] This analysis is the product of extensive discussion among our undergraduate research team members during the spring and summer.

Class Experiences

The tables below list students' course experiences (see Appendix for tables broken out by four majors). The relatively low effectiveness ratings for different remote learning techniques could reflect instructor and student expectations and inexperience (the highest rating of these techniques was a "C"). The relatively low scores for some of the changes might reflect students' frustration that they were not able to demonstrate what they had learned, or their worry that they would not be adequately prepared for future coursework. Therefore, it will be important to evaluate the relative effectiveness of different techniques this year when instructors and students are more prepared.

Table 2. *Remote learning techniques used by instructors*

Technique	**Percent experienced**	**Average Effectiveness**
posted lecture notes	54.5	75.4
short video or audio clips posted on CANVAS	45.5	69.0
virtual Office Hours	66.7	68.2
Zoom classes that used chat function	46.3	64.8
"face to face" Zoom classes	73.2	63.4
online based exams or quizzes	64.2	62.9
recorded lectures posted on CANVAS	65.0	62.4
required online Individual presentations	22.0	60.0
online discussion boards	65.0	58.9
required GOOGLE document collaboration	14.6	53.5
required online team presentations	21.0	50.4

N=123, effectiveness ratings ranged from 0 to 100. Respondents could check multiple categories.

Table 3. *Instructors' Changes to Courses*

Change	**Percent experienced**	**Average Helpfulness**
responded more quickly to email	34.1	94.8
extended coursework deadlines	65.0	94.0
dropped quizzes or exams	35.8	86.6
dropped written assignments	31.7	84.7
increased emails/class announcements	72.4	82.8
changed oral presentation assignments to online discussion board	24.4	81.8
dropped oral presentation assignments	34.1	76.2
dropped participation requirements	26.0	73.0
future exams would be graded as pass or an "A"	17.1	71.4
added learning activities	31.7	56.9
added reading materials	33.3	51.6
decreased face to face class time	63.4	50.0

N=123, helpfulness ratings ranged from 0 to 100. Respondents could check more than one category.

Most respondents reported feeling somewhat academically engaged, *M*=2.88, *SD*=0.86, alpha=.86 on a scale from 1 (*never*) to 5 (*very often*), and that they could stay on track with their studies (based on response categories that ranged from 1 (*very difficult*) to 5 (*very easy)*, *M* = 3.07, *SD* = 1.09). They also reported that they could pay attention to a video clip that was less than 30 minutes (based on response categories that ranged from 1 (*less than 10 minutes*) to 7 (*more than an hour)*, *M* = 3.92, *SD* =

1.63.[2] Importantly, self-reported GPAs were not closely related to whether remote tools were helpful ($r(57)=.19$, $p=.19$) or changes were effective ($r(57)=.11$, $p=.47$), indicating that all students benefited from instructors' changes and use of different remote learning tools. And although we should be careful not to assume causation, students who reported greater academic engagement also rated instructor changes to the course as more helpful ($r(103)=.62$, $p<.0001$), and instructors' use of remote learning tools as more effective ($r(103)=.30$), $p=.003$). Respondents who had more hours available to do coursework ($r(103)=.28$, $p=.003$) or felt that they were able to "stay on top of coursework requirements" ($r(103)=.46$, $p<.0001$) also reported greater academic engagement.

Experiences Outside Class

Nineteen respondents reported research internships and 31 respondents reported community internships. Given the importance of these experiences for students' future plans, it is striking that 26.3% of research and 42% of community internships simply ended. Community internships are required for some departments, so the loss of these experiences is especially concerning.

Future plans

The table below summarizes respondents' ratings as they think about their future plans (note that 70.3% reported that their plans had changed due to the pandemic). Career Services might offer important opportunities for students that could be vital if internships become more difficult to complete. However, only 10 respondents mentioned using career services (on average, they rated their experiences as quite positive), and just two respondents spontaneously mentioned career services as a service that reached out to students.

Table 4. *Future Expectations*

To what extent do you feel [rated from 1 (*not at all*) to 5 (*absolutely*)]	Mean	Standard deviation
… prepared for graduate programs?	3.03	1.23
… able to find jobs after graduation?	2.90	1.35
… able to achieve financial stability?	2.89	1.07
… able to apply for government assistance?	2.85	1.14

Respondents who felt more prepared for graduate programs ($r(103)=.41$, $p<.0001$) or to find jobs ($r(103)=.28$, $p<.0001$) also felt more academically engaged. Relatively few respondents reported contact with advisors (those who worked with professional advisors report very positive experiences). It might be worthwhile to consider how to provide more intensive advising support during the next year.

Mental Health and Resilience

Nine respondents mentioned contacting the Campus Counseling Center (on average, they rated their experiences as quite positive, 97.7%). Respondents rated their stress level as quite high (M=7.31 on a ten point scale, SD = 1.98), but their mental health as average (M=3.14, SD = 0. 67, alpha=.86 on a five point scale). They also reported feeling somewhat resilient (M = 2.82, SD = 0.52 rated from 1 (*not at all true*) to 4 (*true nearly all the time*), alpha = .86). Importantly, those who felt more resilient reported less anxiety/depression ($r(103)=.39$, $p<.0001$), more academic engagement ($r(103)=.41$, $p<.0001$) and more confident about the future (*r*s ranging from .20 to .27).

The table below lists the frequency with which respondents used different coping strategies.

[2] The recommended length for onine videos is six minutes (Guo, 2013, https://blog.edx.org/optimal-video-length-student-engagement/).

Table 5. *Coping Strategies*

Strategy [rated from 1 (never) to 5 (all the time)]	**Mean**	**Standard deviation**
Time with friends/family	3.58	0.98
Changed sleeping habits	3.29	1.34
Exercise	3.28	1.22
Pursuing a hobby or craft (e.g. baking, sewing)	3.14	1.09
Changed eating habits	3.08	1.01
Set goals	3.03	1.07
Established routine or schedule	2.82	1.15
Substance use increased/decreased	2.46	1.28
Meditation	2.16	1.07

Those who reported exercising ($r(103)=.29$, $p=.003$) and establishing a routine ($r(103)=.24$, $p<.0001$) more frequently also reported less stress. Similarly, those who reported exercising ($r(103)=.30$, $p=.003$)), meditating ($r(103)=.20$, $p=.03$) , pursuing a hobby ($r(103)=.26$, $p=.006$) , establishing a routine ($r(103)=.28$, $p<.0001$) and setting goals ($r(103)=.24$, $p<.0001$) reported less anxiety and depression. And finally, those who reported spending more time with family and friends ($r(103)=.21$, $p=.03$). establishing a routine ($r(103)=.34$, $p=.003$) and setting goals ($r(103)=.41$, $p<.0001$) reported greater resilience.[3]

We want to highlight the strong relationship between establishing a routine, setting goals, stress and resilience. It might be worth sharing with students explicit recommendations about how much time completing course materials each week might take, and the benefits of these two strategies. In addition, students might benefit from regular "synchronous" class meetings or opportunities (which could include clubs, research teams or other opportunities outside class). Although best practices for internet-based courses emphasize asynchronous courses, this advice is based on previous self-selected student cohorts.

Finally, it is important to recognize the difficulties faced by Spring 2020 graduates. As shown in the next table, many of these students also coped with fires and earlier black-outs.

[3] Psychology majors reported that meditation was more helpful (M =2.33, SD = 1.11) in comparison to other majors (M = 1.78, SD = 0.87), $t(103) = 2.48$, $p = .02$, and that hobbies were more helpful (M = 3.30, SD = 1.00) in comparison to other majors, (M = 2.78, SD = 1.21), $t(103) = 2.28$, $p = .03$.

Table 6. *Previous disaster related experiences*

To what extent…	did the November 2017 Santa Rosa Fire and Campus Closure affect you?	did the November 2018 Camp Fire affect you?	did the October 2019 Kincade/PG& E power blackouts affect you?
Severely (lost home/job/family, suffered medical issues, extreme stress)	8.6%	19.0%	1.0%
Moderately (friends and family lost home, employment, suffered medical issues)	24.8%	17.1%	14.3%
Mild (I and those who I know did not experience physical loss, but experienced stress)	45.7%	62.9%	74.3%
Not at all (I did not feel physically or psychologically affected by the experience)	21.0%	18.1%	10.5%

Remarkably, previous experiences did not predict increased anxiety/depression ($r(103)=.06$, $p=.52$), decreased resilience ($r(103)=.10$, $p=.32$) or decreased academic engagement ($r(103)=.07$, $p=.49$). However, those who reported prior experiences also reported higher levels of stress ($r(103)=.23$, $p<.0001$); suggesting to us that these respondents knew how difficult these disruptions could be, but remained confident in their ability to cope.