

Real-World Skills in a Virtual World: An Innovative Activity for Teaching Developmental Psychopathology



Teaching of Psychology
2023, Vol. 50(4) 427–432
© The Author(s) 2021
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/00986283211042309
journals.sagepub.com/home/top



Mary Kate Koch¹ and Jane Mendle¹

Abstract

Background: Incorporating professional development into undergraduate psychology coursework is an ongoing area of improvement for educators.

Objective: We present a novel activity encouraging students to explore various professional skills and roles for which their psychology major prepares them through application to real-world issues.

Method: Students participated in one of two virtual mental health summits and formed working groups to present from different perspectives (e.g., public health, epidemiology, etc.). Students collectively voted on resolutions at the end of each summit (e.g., budgetary recommendations for a county health department).

Results: We examined student perceptions of confidence in their professional skills and content knowledge before and after summits. Students indicated that they wanted more applied assignments like the mental health summit in other psychology classes and preferred the activity to exams or papers in a virtual course.

Teaching Implications: The mental health summit represented a real-world application activity that students indicated wanting in their courses. Recommendations for how to adapt the presented activity for non-clinical psychology courses are discussed.

Conclusion: The mental health summit activity supported the real-world application that students desire. Future iterations of the activity can build on the model we describe to support greater skill improvement.

Keywords

mental health, professional development, virtual learning, developmental psychopathology

Psychology is consistently ranked among the five most popular undergraduate majors (National Center for Education Statistics, 2018). However, this popularity does not necessarily mean that psychology and non-psychology alike have a clear understanding of how the discipline translates to the professional world. As Vespia and colleagues noted (2020), politicians have made recent comments questioning the employability of psychology majors and psychology majors themselves struggle to recognize how skills from their degrees translate to their post-college lives. These are misperceptions given that psychology majors are highly successful in pursuing graduate school or employment after graduation (American Psychological Association [APA], 2018). However, these misperceptions are notable given that professional development is one of the five learning goals for undergraduate psychology majors as outlined by the American Psychological Association (2013). Including innovative activities in coursework that promote professional skills, such as critical thinking, communication, teamwork, and to prompt students to recognize these skills may reduce these misperceptions. Further, these

skills align with core competencies of career-readiness outlined by the National Association of Colleges and Employers (2021), which may further signal to students and employers how psychology coursework prepares students for careers.

Virtual courses may provide additional challenges to clear and creative activities that incorporate professional development. Compared to in-person courses, students may feel less comfortable with learning in an online format and, in particular, less satisfied with group work activities (Faux & Black-Hughes, 2000; Garratt-Reed et al., 2016). However, student performance in online courses is positively associated with quality of interactions with course instructors and peers (Jaggars & Xu, 2016). Given the growing number of students

¹Department of Human Development, Cornell University, Ithaca, NY, USA

Corresponding Author:

Mary Kate Koch, Department of Human Development, Cornell University, Martha Van Rensselaer Hall, 116 Reservoir Ave, Ithaca, NY 14853, USA.
Email: mck85@cornell.edu

enrolled in online courses and the further acceleration of online course enrollment driven by the COVID-19 pandemic, designing course activities that facilitate quality interactions in a virtual classroom may be beneficial for student outcomes.

The present article outlines a class activity, mental health summits, designed to (1) demonstrate a range of professional skills and roles to students and (2) provide an alternate assessment method for a virtual classroom that promotes synchronous engagement and group work. Specifically, the [APA \(2013\)](#) emphasized “application of psychology-specific content and skills, effective self-reflection, project-management skills, teamwork skills, and career preparation” in its professional development goal for undergraduate psychology majors (p. 16). The mental health summit was designed to target project-management skills and teamwork skills through group presentations, effective self-reflection through a post-summit reflection paper, and career preparation through introduction to roles and jobs students might pursue with their psychology education. The mental health summits were created for an upper-level course on developmental psychopathology and, accordingly, had a clinical flavor to the application of psychology-specific content and skills in order to also assess course content knowledge. In the remainder of the article, we describe the summit activity, present pilot data from undergraduates about their perceptions of the summit activity to evidence assignment efficacy, and discuss ways to adapt the summit activity to other kinds of courses, including non-clinical courses.

Mental Health Summit Activity

Assignment Description

The mental health summits were designed to examine a real-world application of developmental psychopathology knowledge in greater detail. Developmental psychopathology takes a biopsychosocial perspective to understanding the emergence and change in psychological disorders over time. Accordingly, we wanted students to appreciate the diverse institutions, professions, and processes that may influence individual developmental trajectories. In addition, we tailored our selection of the overarching summit themes to align with general student interests in our class, which were medical and mental health care. The two overarching summit themes that were selected were: (1) a budgetary hearing of the local county health department and (2) an evaluation of the diagnostic status of non-suicidal self-injury (NSSI) in the DSM-6. These themes allowed students to apply course material while exploring broader questions about how institutional forces may affect whether youth receive a diagnosis or services. Summit teaching materials, including instructions, grading rubrics, thematic PowerPoint slides, and examples of student-selected articles, are freely available via OSF ([Koch & Mendle, 2021](#)).

The first summit was framed as though the local county health department was having a summit on the budget for community mental health services. In this fictional scenario,

the health department of the county in which the university is located asked students to prepare presentations on child and adolescent externalizing disorders (e.g., conduct disorder and oppositional defiance disorder) with a primary focus on helping the county decide how to allocate funding for services to treat or reduce risk for these disorders in a way that would most benefit the community. The local health department was specified so that students could access public health statistics, provide recommendations for a particular community, and consider “big picture” questions for a familiar place. In the broader context of developmental psychopathology, the goal of this summit was to encourage students to consider how the budgetary priorities of a community can affect which services get funded, which in turn can affect a child’s access to appropriate interventions and treatments. Students participated in one of five working groups, which included educators, Child and Family Services, the juvenile justice system, the medical community, and therapists in a free community clinic. Students were asked to consider how someone in their assigned working group role would approach the topic. For instance, the working group representing educators might explain how externalizing disorders manifest in and impact the educational system. After all working groups presented, students voted on the final budgetary recommendations to be submitted to the local health department (e.g., should Child and Family Services receive a greater percentage of the budget than the community clinic?).

The second summit was framed as if the American Psychiatric Association was having a summit on evaluating the diagnostic status of NSSI in the DSM-6. Students were asked to prepare presentations on NSSI and how it should be represented, if at all, in the next publication of the DSM. This topic was drawn from the decades-long debate as to whether NSSI should be treated as an independent disorder versus a symptom or subtype of other diagnoses ([Zetterqvist, 2015](#)). In the broader context of developmental psychopathology, the goal of this summit was to encourage students to consider the many factors that shape empirical decisions by diagnostic authorities. Students participated in one of five working groups, representing biology, psychiatry, epidemiology, public health, and developmental psychology experts. Students were asked to review the evidence for or against the inclusion of NSSI disorder in a new version of the DSM in the way they thought their assigned working group would approach the topic. For example, members of the psychiatry working group could review the comorbidity of NSSI with other disorders and consider if there are enough diagnostic criteria to differentiate it from those disorders. After all working groups presented, students voted on the final recommendations to be submitted to the American Psychiatric Association on the diagnostic status of NSSI for the next DSM edition.

Role of Students

Each student participated in one of the two summits as part of a working group invited to present at that summit. Students self-selected the summit and working group of their choice via an

editable sign-up sheet on the online course homepage that described the theme of each summit and role of each working group. Each working group had an even number of spots available for sign-up to ensure that group size and workload was similar.

Preparation for summits included reviewing lecture material, course readings, and relevant empirical articles. Rather than restating material presented in lectures, students were encouraged to think critically and creatively about this information, and to synthesize the many things we know and do not know about the summit issues. Each person within the working group was asked to identify at least one relevant empirical article through an independent literature review to support the presentation. Each working group developed a joint presentation (approximately 10–12 minutes in length) to share at the summit. After each presentation, students in other groups were encouraged to ask questions in their summit character to facilitate immersion (e.g., students in the medical community working group asked questions as if they were medical doctors). After all working groups presented, summit participants voted on the final recommendations to be submitted according to the summit topic.

Finally, students were asked to submit a one-page reflection on the summit that centered on their thoughts and experiences. The assignment prompted several questions for reflection including: What arguments from the different working groups surprised or seemed sensible to you? Would you re-write your original position in any way? Why or why not? What was the article you brought to your working group's attention? Why did you select this article and how did it support your working group's perspective?

Role of Course Instructors

The course's instructional team comprised a professor and two graduate teaching assistants. The professor served as the lead facilitator during each summit, pretending to be the department director during the health department summit and the chair of the APA committee during the NSSI summit. All members of the teaching team asked questions in character of the setting to facilitate immersion. In addition, the instructional team intentionally created materials to introduce the summits, including custom Zoom backgrounds to simulate summit settings and PowerPoint slides with the local county health department and American Psychiatric Association logos. The professor and teaching assistants graded presentations on content, clarity, organization, visuals, delivery, and Q&A. While this course was fortunate to have a teaching team, this activity could also be utilized by an individual instructor assuming the central facilitator role during the summit.

Method

Participants

Participants were $N = 50$ students enrolled in an upper-level developmental psychopathology course. The sample consisted

of predominantly White ($n = 28$; 56%), women ($n = 41$; 82%), upper level (junior or senior class status; $n = 46$; 92%), and psychology or human development majors ($n = 30$; 60%), from a private university in the northeastern United States. Other significantly represented majors included biology ($n = 10$; 20%) and computer science ($n = 5$; 10%).

Procedure

Students signed up for the mental health summit and working group of their choice. A pre-summit learning questionnaire was administered online to students approximately 1 week before the corresponding summit. A post-summit questionnaire was administered online immediately following the summit. The study was approved by the Institutional Review Board at Cornell University, Protocol # 2010009884.

Measures

Perceived Confidence and Understanding. We developed a 7-item measure of students' self-reported confidence in their skills related to the mental health summits (i.e., organize research material, form and support an opinion on the basis of research, and present prepared material) and in their self-reported understanding of the real-world application and implications of developmental psychopathology material (see Table 1 for complete item wording). Items corresponded with the foundational learning goals for undergraduate psychology majors of scientific inquiry and critical thinking, communication, and professional development as outlined by the APA (2013). Students rated these seven items on a Likert scale from 1 = *strongly disagree* to 7 = *strongly agree*.

Student Perceptions of Mental Health Summit

During the post-summit survey, students also reported on six statements intended to capture how much students enjoyed and desired applied assignments, and, in light of COVID, if they preferred applied assignments like the summit to exams or essays during the virtual semester (see Table 2 for complete item wording). Students rated these six items on a Likert scale from 1 = *strongly disagree* to 7 = *strongly agree*.

Results

Perceived Confidence and Understanding

Prior to the mental health summits, students generally indicated a favorable rating of their confidence in applied skills and understanding of the real-world applications of developmental psychopathology. Post-summit survey results suggest that students generally maintained these favorable perceptions of their skills and understanding. For students in the health department summit, there was a statistically significant difference between pre- ($M = 5.70$, $SD = 0.85$) and

post-summit ($M = 6.14$, $SD = 0.74$) ratings of confidence in organizing a large amount of research material as determined by a one-way ANOVA $F(1, 33) = 4.69$, $p = .0344$, $d = 0.55$, indicating a medium effect of the summit (Cohen, 1988). Results did not indicate significant differences in pre- and post-summit ratings for any other items across either the health department or DSM-6 summit.

Student Perceptions of Mental Health Summit

Students reported generally favorable perceptions of the mental health summit assignment for both the health department and DSM-6 summits (see Table 2). Notably, 100% of students reported that they agreed with the statement that they valued assignments that have real-world application components to them ($M = 6.50$, $SD = 0.61$). A majority of students

reported wanting more assignments with real-world application components in their psychology courses ($M = 6.06$, $SD = 0.91$). Further, 96% of students reported that they agreed that the mental health summit represented the real-world application components that they wanted in assignments ($M = 6.08$, $SD = 0.76$). Finally, items assessing how students viewed class assignments in the context of how COVID has affected classes indicated that students generally favored assignments like the mental health summit as compared to both a multiple-choice exam ($M = 5.94$, $SD = 1.17$) and an essay on the same material ($M = 6.04$, $SD = 1.14$).

Student Feedback

As noted above, students overwhelmingly indicated that they would like more applied components in their psychology

Table 1. Pre- and Post-Summit Rating of Perceived Confidence and Understanding in Applied Course Skills

Item	Health Department Summit			DSM-6 Summit		
	Pre Mean (SD)	Post Mean (SD)	$F(1, 33)$	Pre Mean (SD)	Post Mean (SD)	$F(1, 17)$
I am confident in my ability to organize a large amount of research material	5.70 (0.85)	6.14 (0.74)	4.69*	5.88 (0.78)	5.86 (0.91)	0.01
I am confident in my ability to form and support an opinion on the basis of research	6.12 (0.60)	6.24 (0.79)	0.46	5.88 (0.70)	6.05 (0.74)	0.49
I am confident in my ability to present prepared material in public	5.76 (1.15)	5.89 (0.96)	0.25	5.59 (1.12)	5.48 (1.21)	0.09
I am confident in my ability to field questions while presenting	5.09 (0.95)	5.41 (1.05)	1.62	5.00 (0.94)	5.00 (1.14)	0.00
I understand the real world application of developmental psychopathology	6.36 (0.55)	6.38 (0.56)	0.01	6.59 (0.51)	6.33 (0.73)	1.49
I understand how knowledge of developmental psychopathology may contribute to policy implications	6.21 (0.74)	6.41 (0.57)	1.42	6.59 (0.51)	6.43 (0.68)	0.65
I understand how the content I learn in this course may be applied in jobs I will have after graduation	6.24 (0.83)	6.31 (0.66)	0.13	6.24 (1.09)	6.05 (1.00)	0.29

Note. $N = 33$ students for the Health Department Summit; $N = 17$ students for the DSM-Summit. * $p < .05$.

Table 2. Student Ratings of Real World Application Assignments

Item	Mean (SD)	Percentage of Responses at 5 or More
I value assignments that have a real world application component to them	6.50 (0.61)	100%
I want more assignments with real world application components in my HD or PSYCH courses	6.06 (0.91)	94%
I think that the mental health assignment had real world application parameters that I value or want in applied assignments	6.08 (0.76)	96%
The mental health summit was an enjoyable way to learn about the material	5.68 (0.96)	90%
COVID has changed the way class assignments are conducted this semester. With that in mind, would you describe your experience of this assignment as preferable compared to a multiple choice exam on the same material?	5.94 (1.17)	84%
COVID has changed the way class assignments are conducted this semester. With that in mind, would you describe your experience of this assignment as preferable compared to an essay on the same material?	6.04 (1.14)	86%

Note. $N = 50$ students across summits.

courses, and they rated the mental health summits extremely positively. These high rates of student enjoyment are notable since a significant challenge of virtual courses is the experience of group work (Garratt-Reed et al., 2016). One reason students may have preferred the mental health summit to exams or papers is that this activity offered distinct opportunities for engagement with peers and immersion in the material during a time other courses lacked synchronous interaction (Bozkurt & Sharma, 2020).

Discussion

The mental health summits were designed to expose students to a range of professional skills and roles in real-world settings, as well as target the professional development goal as described the APA (2013). Many students in the course informally expressed interest in pursuing medical or mental health careers but may not have considered that their psychology education could be applied to a diversity of futures roles, such as within public health or the juvenile justice system, as highlighted by this activity. Further, these summits engaged students in teamwork, project management synthesizing research, and public speaking, which are skills commonly needed for success in real-world jobs.

The original intention of students' pre- and post-assessment of their skills was to evaluate the efficacy of the activity. Instructors may want to consider continuing to include such self-assessment with the summit in future implementations. Self-efficacy and self-regulation are core components of the professional development goals for psychology majors (APA, 2013). Further, the APA (2013) considers it an advanced indicator of self-efficacy and self-regulation if students are capable of self-assessing how they meet external standards, like assignment rubrics, and their own performance. By asking self-assessment questions as part of the summit, students had an opportunity to practice reflecting on how their skills and confidence may align with assignment expectations. Another possibility that future iterations of summits could consider is adding a prompt to the post-summit reflection asking students to reflect on the skills needed and/or used in this activity. Asking students to formally reflect on the skills they used may make them more aware of what they have learned (e.g., Mok et al., 2006), as well as highlight for instructors any skills in which students are not perceiving growth.

Adapting the Summit Activity

We presented versions of the summit activity in the context of a clinically oriented psychology course, but the general premise of the summit can be widely adapted to other kinds of psychology courses and topics. For non-clinical courses, we recommend instructors consider summit premises that are broadly applicable. Some possibilities include (1) an organization receives a large grant and invites working groups to

present on a topic of interest in order to receive funding allocation (e.g., human subject researchers, artificial intelligence researchers, and animal subject researchers could compete for funding from a school board who received a grant to improve learning environments in a cognition course), (2) a business wants to improve a human factor of interest and invites working groups of experts to present training (e.g., personality researchers, creativity researchers, and management researchers could debate how to improve employee performance in an organizational behavior course), and (3) a consulting firm tasked with educating lawyers on jury issues (e.g., memory biases, social conformity, prejudice, and stereotyping in a psychology and law class). Likewise, the health department and DSM premises of these summits can be easily adapted to address other clinically oriented questions. For example, a clinical psychology course might adapt the health department premise to debate in-person versus telemental health for different disorders. Of course, these suggestions represent only a potential subset of practical applications of the summit activity. Any premise that encourages students to apply course material creatively and critically to a real-world situation would fit this format.

The mental health summit activity presented above was implemented in an online course as an alternate assessment method for a virtual classroom. While the summit activity successfully promoted synchronous engagement, group work, and virtual classroom immersion through factors like custom Zoom backgrounds and slides, we believe that the summit activity would also easily translate to an in-person course. An in-person iteration of this activity may, in fact, create more opportunities for immersion in the activity as students could be encouraged to dress in character of the summit setting, appropriate props can be incorporated into a physical classroom, and final voting procedures may feel more collegial as students can more easily view and discuss how others in their working group are voting in an in-person format.

A notable limitation of the present student perception data is that the course in which these mental health summits were implemented was an upper-level, clinical course. It is possible that undergraduates may not yet have the content knowledge needed to critically engage in higher level summits. Future iterations of the summit activity should consider how this may affect implementation. Lower-level courses, for example, may require more involvement from the instructors in the preparation phase. Further, these data were self-reported and capture perceptions of skills and understanding in the scope of a semester. More research is needed to understand if summits can facilitate long-term benefits for real-world skills and if students broaden the horizons of their job interests due to exposure of diverse professional roles during the summits.

Conclusion

The mental health summit is a novel activity for incorporating professional development and real-world application into psychology coursework while also providing students with

engaging virtual group work. Pilot data of student self-perceptions did not demonstrate significant changes in confidence in skills or understanding as a result of the summit activity, but did indicate that students strongly favored applied activities like the mental health summit and wanted more applied components in their psychology courses. Future iterations and adaptations of the summit activity should explore additional ways that this activity can help students more readily realize how their psychology coursework is contributing to their professional development.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Open Practices



This article has received badge for Open Materials. More information about the Open Practices badges can be found at <http://www.psychologicalscience.org/publications/badges>

ORCID iD

Mary Kate Koch  <https://orcid.org/0000-0003-3003-8715>

References

- American Psychological Association. (2013). APA guidelines for the undergraduate psychology major (Version 2.0). <https://www.apa.org/ed/precollege/about/psymajor-guidelines.pdf>
- American Psychological Association. (2018). Degree pathways in psychology [Interactive data tool]. <https://www.apa.org/workforce/data-tools/careers-psychology>
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education*, 15(1), 1-6. <http://www.asianjde.org/ojs/index.php/AsianJDE/article/view/447>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum.
- Faux, T. L., & Black-Hughes, C. (2000). A comparison of using the internet versus lectures to teach social work history. *Research on Social Work Practice*, 10(4), 454-466. <https://doi.org/10.1177/104973150001000406>
- Garratt-Reed, D., Roberts, L. D., & Heritage, B. (2016). Grades, student satisfaction and retention in online and face-to-face introductory psychology units: A test of equivalency theory. *Frontiers in Psychology*, 7, 673. <https://doi.org/10.3389/fpsyg.2016.00673>
- Jaggars, S. S., & Xu, D. (2016). How do online course design features influence student performance? *Computers & Education*, 95, 270-284. <https://doi.org/10.1016/j.compedu.2016.01.014>
- Koch, M. K., & Mendle, J. (2021, August 4). *Mental health summit teaching materials*. Retrieved from osf.io/47mkh
- Mok, M. M. C., Lung, C. L., Cheng, D. P. W., Cheung, R. H. P., & Ng, M. L. (2006). Self assessment in higher education: Experience in using a metacognitive approach in five case studies. *Assessment & Evaluation in Higher Education*, 31(4), 415-433. <https://doi.org/10.1080/02602930600679100>
- National Association of Colleges and Employers. (2021). *Competencies for a career-ready workforce*. <https://www.nacweb.org/uploadedfiles/files/2021/resources/nace-career-readiness-competencies-revised-apr-2021.pdf>
- U.S. Department of Education, National Center for Education Statistics. (2018). *Digest of education statistics*. <https://nces.ed.gov/programs/digest/d18/>
- Vespia, K. M., Naufel, K. Z., Rudmann, J., Van Kirk, J. F., Brihl, D., & Young, J. (2020). Yes, you can get a job with that major! Goal 5 strategies for facilitating, assessing, and demonstrating psychology students' professional development. *Teaching of Psychology*, 47(4), 305-315. <https://doi.org/10.1177/0098628320945122>
- Zetterqvist, M. (2015). The DSM-5 diagnosis of nonsuicidal self-injury disorder: A review of the empirical literature. *Child and Adolescent Psychiatry and Mental Health*, 9(1), 1-13. <https://doi.org/10.1186/s13034-015-0062-7>