

Article

Team Mindfulness in Online Academic Meetings to Reduce Burnout

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Abstract: Burnout, a negative job-related psychological state common with health professionals, results in valuable healthcare research loss. Team mindfulness, promoting work engagement, represents an aspect effective in reducing burnout. In a series of diverse-membership academic meetings intended to reduce research burnout—employing writing prompts, doodling, and continuous developmental feedback—team mindfulness was demonstrated when conducted in person. Therefore, whether team mindfulness is evident when meetings are held online is relevant. During the first eighteen months of COVID-19 limitations requiring these meetings to be online, it was previously reported that team mindfulness was diminished. Question-asking, submitted doodles, and feedback responses were analyzed for the following year of the same group, both quantitatively and qualitatively, and with respect to COR theory, to determine if the result persisted. Team mindfulness was also compromised in the second year with respect to the entire group but not regarding the individual relationship with the facilitator. For a diverse-membership group to demonstrate team mindfulness, it is suggested that creating and using avatars similar to those used in online games might be effective. To continue the successful aspect of team mindfulness found online for this group or similarly designed groups, a one-on-one meeting between participant and facilitator is recommended.

Keywords: burnout; team mindfulness; work engagement; online meetings; academic meetings; writing prompts; doodling; COVID-19; COR theory; online games



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1. Introduction

Burnout is a negative, job-related psychological state first identified in the 1970s and exhibited through physical fatigue, emotional exhaustion, and loss of motivation [1]. It arises from prolonged chronic interpersonal stressors associated with work in three key dimensions: overwhelming exhaustion, negative work-related feelings of cynicism and disassociation, and a sense of futility from perceived job-affiliated failure [2]. It has been particularly associated with health professions [3]. For health researchers and their employers, this equates to a loss of valuable research [4]. As burnout is directly associated with depression and anxiety [5,6], it is important to develop practices with health researchers to diminish their depression and anxiety by reducing burnout.

There have been various approaches taken to assess and mitigate burnout. These have been divided into [7]: (1) interpersonal approaches, including three perspectives: multidimensional [8], existential [9], and those arising from Social Comparison Theory [10]; (2) individual approaches: concerned with the nature and etiology of the phenomenon [11], developing a framework for burning out [12], and the Conservation of Resources (COR)—a general stress theory applied to burnout [13]; and (3) organizational approaches considering the role of professional self-efficacy [14], social support [15], creativity enhancement [16], and of organization healthiness [17]. With respect to COVID-19, a burnout theory that has been particularly employed is the COR theory [18,19]. Basic to COR theory is that individuals strive to obtain and maintain what they value, referred to as resources. When work-related circumstances threaten these resources, stress ensues [13]. In changing the

nature of health professionals' work, the relationships among colleagues and those they service, the hours worked, and the speed at which work has had to be performed, what health professionals are found to value with respect to their work has been significantly stressed as a result of COVID-19 [20].

One component to reduce burnout in health researchers is to encourage team mindfulness, where mindfulness itself can be defined as intentionally paying attention in the present moment and in a non-judgmental way with respect to the flow of experience [21]. Following from this is team mindfulness, a construct first developed in 2017, recognized as "a shared belief among team members that their interactions are defined by a non-judgmental awareness and an attention in processing within-team experiences" [22] (p. 326). With respect to how a meeting environment is created and maintained, team mindfulness is an important consideration in enhancing work-related personal fulfillment [23]. This is evident when the experiences of team members, as well as their objectives, tasks, roles, and structures, are collectively and regularly acknowledged non-judgmentally by team members [24]. Although studies concerning mindfulness as a personal trait have been conducted in relation to COVID-19 limitations, to date [18,25,26], there has been little research related to the value of team mindfulness in reducing burnout in health researchers. The research to be presented here continues with the previous research by the author in this regard [27,28].

Team mindfulness is an important ingredient in reducing burnout within groups [29] by promoting trust among team members. Trust has been found to have positive effects in organizations on employee well-being and performance [30], particularly during COVID-19 [18,31]. Mindfulness is not only a trait particular to certain people but also something that can be learned [25]. As it can be learned and is important to developing trust, team mindfulness represents something that can help people cope effectively with team-related stress during the COVID-19 pandemic. Team mindfulness, like mindfulness itself, can lower burnout by helping team members respond with conscious awareness to pandemic challenges as well as accept the situation and the restrictions to a greater degree. Furthermore, it promotes the belief that the pandemic can be overcome, unlike maladaptive coping strategies such as blaming [26].

In contrast to burnout, work engagement is a positive and fulfilling work-related state of mind characterized by vigor, dedication, and absorption in the task at hand [32]. An essential psychological experience of individuals, work engagement connects resources and performance [33], producing interacting results, including interpersonal trust among team members [34]. Aspects necessary for reengagement by researchers who sustain burnout to experience work engagement include the need for professional autonomy and a feeling of community based on such trust with fair and equitable treatment among members [2].

Researcher burnout worldwide has been particularly affected by COVID-19, yet it is an overlooked area with respect to improving researchers' mental health [35]. This is so despite approximately 40% of health researchers having been found to feel burnout as a result of COVID-19 and intending to leave their jobs as a consequence [36]. In meeting this global challenge, the importance of online mental health support has been noted [37], and once the pandemic is over, these types of online groups will continue to be prominent [38].

One specific series of in-person academic meetings intended to reduce burnout in health researchers was able to develop team mindfulness and work engagement through the following: prompts provided by the facilitator; questions group members asked of each other in responding to writing prompts; questions asked in relation to their doodles (both encouraged and shared at the end of each session); and feedback provided at the end of each term [39]. This series of academic meetings is the University of Toronto Health Narratives Research Group (HeNReG) facilitated by this author [40]. Two of its important features intended to promote team mindfulness are its diverse membership and the continuous developmental feedback method employed. The purpose of these academic meetings is to reenergize and sustain career-long health-related research and decrease burnout from research-related anxiety and depression.

In the years when the HeNReG was able to meet in person, two dimensions of team mindfulness were evident: receptive, open, and non-judgmental experiential processing and aware attention to present perceptions in relation to the function of the group [22]. However, during the first year and a half of lockdown as a result of COVID-19, when meetings were no longer conducted in person, the aware attention to present perceptions was lost to the group, although the receptive, open, and non-judgmental experiential processing of the group's interactions remained within the online meetings through the private Facebook group. The key component of aware attention to present perceptions that was lost in online meetings in response to the limitations of COVID-19 was active listening [41] by the participants to other group members regarding their responses to the writing prompts and to each other's in-person descriptions of their doodles.

COVID-19 is a novel bat-originating coronavirus, SARS CoV-2 [42], first identified as infecting humans 25 November 2019 in Wuhan, China [43]. On 30 January 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a public health emergency of international concern (PHEIC), the WHO's highest level of alarm. After 41 days, on 11 March 2020, the WHO reclassified the COVID-19 outbreak as a pandemic [44]. In response to the WHO's declaration of a pandemic, as of 12 March 2020, all academic meetings at the University of Toronto were required to move online to continue [45]. The HeNReG was among the academic meetings throughout the world that made this required transition [46].

During the first full year of COVID-19 restrictions, the 2020/21 academic year, the private Facebook group aspect of the HeNReG—set up yearly for the group—was able to continue most of the pre-COVID-19 interactions of the HeNReG compared with when the group meetings were in-person [28]. Yet, in being unable to replicate the aware attention to present perceptions—one of the two dimensions of team mindfulness—question-asking of other members (regarding their responses to the prompts and their doodling behavior) was unable to support team mindfulness [22].

Given this background, the research questions of this study are as follows. Did a lack of team mindfulness in the online meetings of the HeNReG persist the second full year of COVID-19 restrictions during the 2021/2022 academic year? Based on the result, what recommendations can be made to support team mindfulness in online academic meetings intended to reduce burnout?

2. Materials and Methods

The HeNReG is associated with the Health, Arts Humanities Program of the Department of Psychiatry at the University of Toronto and has been offered since 2015. Between the beginning of October to the end of April each year, the HeNReG provides academic group meetings for researchers who self-identify as experiencing research burnout. It is designed to take each participant's story that initiated their health interest and evolve it into a narrative with a particular point of view with the help of weekly writing prompts and the questions posed by participants regarding responses to the writing prompts. The features of the group have been reported elsewhere [28].

Once the group was required to meet online as a result of COVID-19 limitations, the meetings were conducted in a yearly-created private Facebook group. While waiting for members to respond to their questions asked online over the two-hour meeting period, the participants were encouraged to doodle on their own, as they would have in person as part of a group in the years before COVID-19. However, there was no requirement to do so. Those doodles produced were sent to the facilitator at the end of the online meeting for interest (not evaluation), who then posted them to the same private Facebook group where the online meeting took place. Participants were encouraged to see doodling as a way to pass the time while waiting to pose questions online to others and respond to questions provided to them, as doodling has been noted to be helpful in decreasing depression and anxiety [28]. At the end of each term, twice a year, participants were asked to formally

provide their feedback on the group based on a feedback form common to the Health, Arts and Humanities Program.

Pre-COVID-19 restrictions to academic meetings, when the HeNReG met in person, the group was able to display team mindfulness [39], which was found effective in helping the participating researchers decrease their self-identified burnout. Yet, when the in-person aspect of the group was eliminated and moving online was the only change to the group's operation during the first year and a half of the COVID-19 pandemic, one aspect of team mindfulness—active listening—was lost. Participants generally did not choose to meet synchronously, preferring to either participate asynchronously or merely observe the participation that had taken place [39]. Some of those who did meet synchronously still chose only to answer questions put to them rather than ask others questions, as was expected in their joining the group.

The number of sessions that participants asked each other questions during each of the 28-meeting sessions of the HeNReG has been compiled and compared to discover if this effect persisted during the second full year of restrictions, both with when the group met in person the year before COVID-19 limitations were imposed and the three years when the group met only online for at least part of the year.

Regarding the doodling aspect of the group meetings, after the group met solely online, there were no longer questions posed to group members about their doodles as there had been when the group met in person. As a result, the doodling aspect of the group's meetings cannot be considered in relation to the questions asked. Instead, investigated is a comparison of the number of doodles produced online the year before the COVID-19 restrictions came into effect (when the group still met in person) with each of the three years when the group met online-only (for at least part of the year).

Whether or not team mindfulness was preserved during the second full year of online meetings for the HeNReG, it is important to note if the participants identified something lacking in meetings that might have been helpful to them in reducing their burnout. This will be determined by comparing the three narrative answers of the April feedback form responses completed by participants in four years—the first year, when the group still met in person, with the three years when the group met for at least part of the year online. As well the responses to a final fourth narrative question, asked exclusively during the last two years specific to the doodling aspect of the group's activities, will be summarized.

3. Results

3.1. Question-Asking by Participants

The question-asking by participants to others related to their response to the weekly prompts is represented in Table 1.

During the 2018/2019 academic year, the last full year before the COVID-19 lockdown, most participants attended the weekly in-person meetings. That year, there were seventeen participants. Of those, thirteen engaged in question-asking, with four stopping at some point in the year before the process was complete. Of the remainder, participation in question-asking was fairly regular. It was during this time when the group met in-person that team mindfulness was evident.

Examining the 2019/2020 academic results of question-asking, it is evident that a change in participation occurred as a result of the COVID-19 lockdown that happened after week 21. That year, there were twenty-three participants. Of these, sixteen asked others questions. However, before week 22, the question-asking that took place generally happened in person, with few participants ever asking questions only on the private Facebook group (although such online participation was always available as an option). With the group moving to online-only after 12 March 2020, seven of those who had been participating in question asking before this time stopped asking questions (for two of these participants, they had stopped asking questions before the lockdown).

Table 1. Total Question-Asking by all Participants in Each of the Most Recent Four Years (2018/2019, 2019/2020, 2020/2021, 2021/2022) of the HeNReG Over the Twenty-Eight Sessions by the Session Numbers Each Participant Asked Questions Ordered from Those Participants Who Question-Asked the Fewest Sessions to Those Who Question-Asked the Greatest Number of Sessions.

2018/2019		2019/2020		2020/2021		2021/2022	
Participant Number	Session #s Participating	Participant Number	Session #s Participating	Participant Number	Session #s Participating	Participant Number	Session #s Participating
1	-	1	-	1	-	1	-
2	-	2	-	2	-	2	-
3	-	3	-	3	-	3	-
4	-	4	-	4	-	4	-
5	15	5	-	5	7	5	-
6	1, 2	6	-	6	7	6	-
7	1, 3	7	-	7	6, 12	7	-
8	2, 11, 13, 15, 26, 28	8	16	8	6, 26	8	-
9	4, 5, 7, 10, 11, 26, 27	9	16	9	3, 7, 12	9	-
10	4, 5, 8–10, 26, 27	10	5, 6, 11, 13, 18	10	11–14	10	8
11	2, 3, 5, 7, 14, 17, 26	11	7, 10, 15, 22, 23	11	1–3, 7–9	11	13
12	1, 2, 5–8, 10, 12, 13	12	4, 5, 8, 9, 16, 17, 21	12	2–4, 7, 12, 16–18	12	16
13	1, 2, 4, 7, 13, 14, 16, 21, 23, 26–28	13	3, 4, 11, 14, 17, 18, 20, 21	13	2, 5, 9, 10, 13, 18, 25	13	5, 15
14	1, 3–5, 8, 11–13, 15, 19, 22–25, 28	14	1–4, 6, 7, 9, 11	14	1–4, 7, 8, 12–14	14	8, 13
15	1, 3, 4, 8, 12, 15, 17, 18–23, 26–28	15	1, 3, 5, 9, 12, 21–23	15	1–7, 9–11	15	1, 2, 6
16	2, 3, 6, 9, 10, 13–25, 27, 28	16	5, 6, 11, 13, 18	16	1, 3, 4, 6–8, 10, 13, 14, 18, 20, 21	16	1–3, 5, 6
17	1–28	17	7, 10, 15, 22, 23	17	1–10, 13–15, 17, 19, 20, 22, 25	17	1–4, 6–8, 10
		18	4, 5, 8, 9, 16, 17, 21	18	5, 8, 10, 12, 13, 15–18, 20, 21, 23, 25, 27, 28	18	1–3, 7–19, 21, 23–26, 28
		19	1–5, 7–10, 14, 17–20	19	1–4, 6–11, 14–23, 25–28	19	1–28
		20	1, 2–11, 14, 16, 18, 21–23, 25	20	1–28		
		21	1, 3, 4, 8–12, 14–16, 18, 19, 22, 25–27				
		22	2, 4, 7–14, 16–19, 23, 24, 27, 28				
		23	1–28				

This low rate of question-asking after the lockdown began can be compared with the results from the 2020/2021 academic year, the first full year of online meetings only of the HeNReG as a result of COVID-19 limitations. That year, with twenty participants, sixteen participants asked questions of others at some point throughout the year. However, although this represents a greater percentage of participants than the 2021/2022 academic year, ten of those participants were engaged in question-asking for ten weeks or less, with seven of those ten for fewer than five weeks.

In the most recent academic year, 2021/2022, of the nineteen researchers who were part of the HeNReG, only ten asked questions of the other participants throughout the period. Furthermore, of those ten, after week 16, only two participants continued their question-asking.

3.2. Doodles Submitted

Although there was a marked reduction in the question-asking of participants as a result of COVID-19 restrictions causing the HeNReG to move to online meetings only, especially in the second full year of these meetings, the effect of the online meetings on doodles submitted was even more pronounced (see Table 2).

Table 2. Doodles Provided Over the Twenty-Eight Sessions of HeNReG Meetings during the Most Recent Four Years of the Meeting.

Session Number	2018/2019	2019/2020	2020/2021	2021/2022
1	13	12	2	2
2	4	6	4	2
3	8	11	4	3
4	12	11	6	1
5	4	10	7	2
6	5	5	5	3
7	6	11	2	1
8	8	13	6	2
9	2	9	2	2
10	9	5	2	2
11	7	12	1	1
12	7	4	5	1
13	9	6	5	1
14	6	17	4	2
15	5	8	5	1
16	5	18	2	1
17	7	7	5	1
18	5	13	2	1
19	10	5	1	1
20	4	0*	2	1
21	8	8	2	11
22	6	2†	2	1
23	10	3	4	1
24	10	4	1	1
25	4	2	5	1
26	4	2	2	2
27	9	3	2	2
28	8	4	4	1
Total	195	211	94	40

* No doodles produced as a result of a fire alarm ending the meeting early. † Doodles produced from this session onwards created online as a result of COVID-19 limitations.

When the group met in person during the 2018/2019 academic year, the average number of doodles produced per person over the 28 weeks was eleven. In 2019/2020—until 12 March 2020, representing 21 weeks—the average number of doodles produced per person was eight. This was reduced to fewer than one doodle per person during the last seven weeks of 2020, just after the lockdown was introduced. In the first full year of the COVID-19 restrictions, the number of doodles submitted was fewer than five per person—less than half the number submitted during a full year of in-person meetings. While for the 2021/2022 year, the second full year of meeting only online, the number of doodles per person over the academic year was diminished to two. More specifically, the facilitator submitted doodles weekly; for seventeen of the twenty-eight weeks, no other participant submitted doodles.

With respect to team mindfulness, once the doodles were no longer produced in person, participants did not receive questions about their doodles from the others. With no question-asking taking place with respect to the doodles, doodling was no longer an activity that promoted team mindfulness.

3.3. Feedback Provided

Feedback regarding the HeNReG is formally provided twice an academic year at the end of each term in response to feedback forms that are common to offerings in the Health, Arts and Humanities Program of the Department of Psychiatry at the University of Toronto. Until the 2020/2021 academic year, there were seven different questions. That year, an eighth question, unique to the HeNReG, was added pertaining to the doodling aspect of the group. The purpose was to gather information on participants' insights related to doodling. Of the questions, four were multiple choice and four required short answers from participants (three in the years prior to 2020/2021). The short-answer responses to those four questions will be examined here.

Table 3 compares the last four years of themes in response to the question, "How was the group valuable to you as a researcher?" The themes in 2018/2019 were regarding the group when it met in person throughout the year. Those provided in 2019/2020 were given after the HeNReG met in person most of the year, but they were online-only after 12 March 2020, when the COVID-19 lockdown began. For both the 2020/2021 and the 2021/2022 academic years, the themes provided in the April responses were with respect to online meetings, as the lockdown for COVID-19 persisted during these years.

What is interesting to note when comparing the four years is that, regardless of the limitations imposed by COVID-19, the value the HeNReG was considered to provide was, to a large extent, similar in each of the four years. There were five themes that were common to all five years regarding the group: "Encouraged self-reflection on research", "Provided the perspectives of other researchers", "Sharpened thinking about research", "Gave a safe space to verbalize ideas about research", and "Challenged my thinking about research". One additional theme was mentioned in three of the four years: "Helped in greater understanding of one's research". Furthermore, of those themes that were unique, none of them were common between the two full years of COVID-19 restrictions. Consequently, regarding in what way the group was valuable to the participants as researchers, the limitations brought on by COVID-19 had no obviously discernable effect. As the value of the group to participants did not change throughout the years, it was independent of the lack of team mindfulness found when the group moved online only.

Table 3. Themes Mentioned in Responses Provided on the April Feedback Forms to “How Was the Group Valuable to You as a Researcher?” For Each of the Four Most Recent Academic Years in Order of Receipt of Feedback Forms from HeNReG Members.

Themes Mentioned in Feedback Forms	2018	2019	2020	2021
	2019	2020	2021	2022
Encouraged self-reflection on research	4	4	5	2
Provided the perspectives of other researchers	4	3	4	4
Helped in greater understanding of one’s research	2	1		3
Sharpened thinking about research	2	2	1	1
Invited a broader view of research	3			
Gave a safe space to verbalize ideas about research	1	4	4	1
Challenged my thinking about research	1	1	2	2
Restfully cleared my thoughts regarding my research		2		1
Determined the direction I should go in my research		1		
Presented a useful and easily employed structure for asking questions		2	1	
Reoriented my priorities regarding my research		1		1
Engaged my curiosity and focus		2		
Offered a way to access my drives and motivations related to research		1		
Allowed for a comparison of ideas with previous years of this group			1	
Sorted out my problems with my research		1	1	
Decreased barriers in research			1	
Tailored the understanding of research to the researcher			2	
Shared valuable resources			1	
Reminded me of what is important and valuable in my research			1	
Provided community and accountability in research			1	
Motivated and inspired me with respect to my research			1	
Learned more about self-expression			1	
Helped me work through my fears related to research				1

With the results of Table 4 concerned with how the HeNReG might be of help to the researchers in the future, there was less consistency regarding the themes mentioned. In fact, there was only one theme that was found common in each of the four years: “Using the structure of weekly prompts to guide my self-reflection”. What is useful with respect to the aims of the HeNReG is that this one theme common over all four years was the most important with respect to the theoretical intentions of the HeNReG. Two themes were mentioned in only the first three years: “Offering different points of view” and “Decreasing my confusion as I decide what should be my focus of research”. Given that few participants actually engaged in question-asking of others during the 2021/2022 academic year, it is reasonable that “Offering different points of view” was not a theme mentioned during this year. It remains unclear why participants did not refer to “Decreasing my confusion as I decide what should be my focus of research” in 2021/2022. This could have been either because their confusion was not decreased or merely that other matters were considered more important to the participant to mention than this aspect.

Table 4. Themes Mentioned in Responses Provided on the April Feedback Forms to “How Might the HeNReG be of Help to You in the Future?” for Each of the Four Most Recent Academic Years in Order of Receipt of Feedback Forms from Group.

Themes Mentioned in Feedback Forms	2018	2019	2020	2021
	2019	2020	2021	2022
Offering different points of view	1	1	1	
Opening up discussion	1			
Meeting additional interesting participants	1		2	
Using the structure of weekly prompts to guide my self-reflection	1	4	5	2
Decreasing my confusion as I decide what should be my focus in my research	1	2	1	
Sharing resources	1		1	1
Making me more open-minded	1	1		1
Permitting me to grow as a researcher	1		1	1
Listening to others and giving feedback	1			
Keeping me updated on interesting topics in various fields	1	1	1	
Encouraging more collaborative artistic creation in my research	1		1	
Understanding and respecting different points of view	1		1	
Continuing with creative reflection	1			1
Helping me plan my research	1		1	
Expanding my research to other fields		2	1	1
Increasing my confidence as a researcher		1		
Learning more about various ways of expressing oneself creatively		1		
Practicing writing		1		1
Going on with my research		1	3	
Continuing as part of the group in future years		1		
Coping with life challenges regarding my research		1		
Reminding me to construct a narrative that drives my work		1		
Acting as a sounding board		1	1	
Supporting network connections			2	1
Clarifying what I value regarding my research			2	
Providing a comparison of results of the group over a number of years			1	
Including Zoom meetings			1	
Being a supportive community in a safe space			2	
These are questions I will return to in the future				1
This will help me with my counseling business				1
Increasing my sense of safety				1
Continuing to challenge me as a researcher				1
Having a community of researchers who think the person researching is important				1
Clarifying my research interest confidently in knowing how to work with others				1
Allow me to verbalize various ideas in laymen’s terms				1
By being in-person				1

Two responses, “Sharing resources” and “Permitting me to grow as a researcher”, were provided in the first and last two years, indicating that these were perceived as possible

when the HeNReG met in person and in meeting only online. One theme, “Keeping me updated on interesting topics in various fields”, was mentioned in the first three years alone. This is to be expected, as in the most recent year, the participants did not communicate with each other, so they would not have been updated by others on interesting topics. Still, it is notable that the additional theme common to the most recent three years was “Expanding my research to other fields”, as this implies that participants were learning from each other, something that did not happen with respect to question-asking in the final year. On the other hand, participants who mentioned this theme may have expanded their research to other fields in the years when the group met only online entirely as a result of responding to the weekly prompts. As there was no clarification of the responses that produced this theme, the reason it was given is not known. What does seem clear is that, regarding how the HeNReG might help researchers in the future, there was a change in the variety of themes noted away from meeting with, listening to, and learning from others once the HeNReG met online only.

The focus of Table 5 is the themes provided to “Do you have other thoughts/comments on your experience as a participant in the HeNReG this term (especially as a result of COVID-19)?” It was only after the COVID-19 lockdown was initiated that the bracketed phrase of this question was added to the feedback form question. Of the various themes mentioned, one alone was provided in each of the four years, “I liked the option of participating remotely, I didn’t have to travel”. The importance of the HeNReG being available online even before the COVID-19 limitations left in-person meetings impossible seems to indicate that regardless of the reason for participating online, this was an additional common thought about the experience of the HeNReG.

There were three themes that were common to each of the last three years of the HeNReG meetings: “Thank you!”, “Maybe we could include video chatting”, and “I miss the personal interaction now that everything is online”. The first comment gives reason to suppose that HeNReG participants were especially appreciative of being able to participate in the HeNReG while COVID-19 limited so many other types of meetings, while the second and third agreed that additional personal interaction would have been welcomed.

Differentiating the final year, when there was little question-asking of others, was that two group members were aware that they did not participate fully, and this was mentioned uniquely in the final year with the comment, “I was disappointed in myself for not participating as much as I wanted”. Yet, the theme that was most numerous during the 2021/2022 academic year was “No other thoughts”. This response was specific to the final year. As such, the additional reason was provided to suppose that, generally, the year’s participants felt less engaged as group members than in years before.

Table 6 represents the themes provided to the question posed during the last two years of the HeNReG meetings alone, “What are your thoughts on doodling aspect of the HeNReG experience?” The response most common in both years was, “I do not doodle”. Nevertheless, although it was most common and represented the reality of the number of doodles shared, particularly in the last year, in examining all the responses, a better understanding is provided as to why there were so few doodles provided. Participants noted that they either did not have the time to doodle, found it a struggle, forgot to do so or did not know why they did not doodle. Nevertheless, for those who did not mention their lack of participation in doodling, the focus was on the helpful nature of doodling, most particularly in providing relief. Doodling was variously found to be enjoyable, useful, fun, thought-provoking, and helpful. What is interesting is that participants in the 2021/2022 academic year had these positive opinions related to doodling during the HeNReG, regardless of actually participating in doodling. This may mean that group members did not believe they had to participate in doodling themselves to obtain a benefit from doodling—that merely seeing the doodles of others was helpful.

Table 5. Themes Mentioned in Responses Provided on the April Feedback Forms to “Do You Have Other Thoughts/Comments on Your Experience as a Participant in the HeNReG this Term (Especially as a Result of COVID-19)?” for Each of the Four Most Recent Academic Years in Order of Receipt of Feedback Forms from Group Members.

Themes Mentioned in Feedback Forms	2018	2019	2020	2021
	2019	2020	2021	2022
This is a good program	1			
A wonderful experience	1			1
I love this group!	1		1	
I liked the option of participating remotely, I didn't have to travel	1	2	3	1
I would like to try to not use prompts	1			
It would be good to have some exercises related to writing and art	1			
Drawing during the group is so helpful to get my mind thinking differently	1			
I wish I could come to the meetings more, but the group is in the workday	1		2	
Moving online was a smooth transition		2		
I am thankful to be able to express myself in a non-judgemental environment		1		
The people brought together in this group are amazing		1		
I love learning about other fields of research		1		
The group is easily accessible for people with scheduling problems		1		
Thank you!		3	1	1
I love the doodling aspect and seeing people's doodles		2		
Maybe we could include video chatting		1	1	2
Having a designated meeting time makes me take time to self-reflect		1		
I miss the personal interaction now that everything is online		1	2	2
I had expected the group to be more about creative writing, but I easily shifted focus		1		
I hope COVID-19 ends soon			2	
I was surprised that switching to online decreased the amount that people doodled			1	
Only a few people responded to questions-asked when we were entirely online			1	
I like the flexibility and structure of the group			2	
The year has been very isolating, this group was a great way to network			2	
COVID-19 affected my ability to participate			1	
I'm glad we did not use the videoconferencing format as it is too exhausting			1	
It got me engaged with research during the lockdown			1	
It would be nice to get tips for navigating the online platform			1	
No other thoughts				4
The pandemic hit me really hard, self-reflection helped me out				1
Valuable and instrumental for my growth as a somatic grief practitioner and artist				1
I was disappointed in myself for not participating as much as I wanted				2
The online sessions were really well done—very organized and well constructed.				1
I wish more people could have participated during the scheduled time				1

Table 6. Themes Mentioned in Responses Provided on the April Feedback Forms to “What Are Your Thoughts on Doodling Aspect of the HeNReG Experience?” the Two Most Recent Academic Years in Order of Receipt of Feedback Forms from Group Members.

Themes Mentioned in Feedback Forms	2020	2021
	2021	2022
Sometimes I went to doodle and I froze because I wasn't really sure what to draw	1	
I think it helps, but it helps even more when we are doodling alongside others in the same room	2	
It is a great way to gage my mood and thoughts that I am bringing to the session	1	
I love doodling, its one of the best parts of the HeNReG	1	
It gave me something to do while waiting for people to participate online	1	
Love it, doodling has always helped me feel calmer and more present in group discussions	2	
Great aspect—I would like to take advantage of this more in the future	1	
Gives me some time to think a while and sketch messy ideas in my mind	1	
I get carried away with doodling sometimes	1	
I like it, it's nice when I get to do it	1	
It improves one's thinking capability.	1	
I did not doodle	2	3
Some of them look super amazing	1	
Relieving	1	2
Good	1	
I enjoyed this idea in theory however was never able to participate		1
Doodles and movement help me to process through emotions		1
I prefer to keep my doodles private mainly because it's often connected to work I am doing		1
It was a struggle for me to try to doodle and I felt guilty that I wasn't that into it		1
I always forget to doodle		1
I love it and wish I had more time to participate		1
Hard to participate online		1
It's fun to think of new things		1
I have incorporated doodling into my own time		1
I don't know why I haven't doodled		1
Thought provoking and creative		1
Helpful		1

4. Discussion

Whether the group was held in person or forced online as a result of COVID-19, participants appreciated the structure of the HeNReG and the opportunities that it provided, as is evident from the themes of responses to the feedback forms. Nevertheless, possibly as a result of two and a half years of being unable to meet in person, researchers involved with the HeNReG were less inclined to participate fully as the group was intended—both with respect to questing-asking and the creation of doodles—when COVID-19 limitations continued. Most specifically, this resulted in a lack of team mindfulness, of which, from their responses provided to the feedback forms, the participants were not directly aware. However, some were able to self-reflect that they did not participate to the extent that they had expected of themselves. As such, it is possible that this identification of their lack of participation came from an unrecognized need for the importance of team mindfulness to

the success of the group. However, this is merely speculation and was not investigated, representing a limitation of this study.

For an online group to be effective at reducing burnout, it has been found relevant to create team mindfulness; as such, it is important to identify an effective way to demonstrate team mindfulness in such groups. In finding a lack of team mindfulness not only persistent but increased during the second full year when the HeNReG met online rather than in person, the two special features of the group conceptualized with the intent to increase team mindfulness need to be examined for their limitations in promoting team mindfulness. These special features were mentioned previously in the Introduction: the group's diverse membership and the continuous developmental feedback method employed. Assumptions were made about team mindfulness in originating the HeNReG when promoting these special features. The relevance of these assumptions to success in eliciting team mindfulness online needs examination to see if the lack of team mindfulness emanates from them. Following this examination, the type of online activity found to result in team mindfulness and thus possibly provide positive results in reducing burnout will be considered.

4.1. Two Special Features of the HeNReG Intended to Increase Team Mindfulness

The two special features on which the HeNReG was founded are the diversity of group membership and the continuous feedback model. Determining the validity of assuming these special features support online team mindfulness will be examined.

4.1.1. Diversity of Group Membership

Whether it was prudent to consider that team mindfulness would be supported by a diversity of group membership to the HeNReG when the group met online is important. This is especially so since it has been recognized that the diversity of cognitive styles of team members can promote group conflict and threaten group cohesion and viability [47]. Recent research [48] on the effect of diversity on team mindfulness confirmed that differences in cognitive styles may reveal differences in interests and values, hampering interpersonal relationships. However, the extent of conflict among members also was found to be dependent on the quality of exchanges between the group members and the group leader [48]. If high-quality relationships were developed between the individual members and the group leader, this was identified to decrease the likelihood of group conflict, permitting the promotion of team mindfulness [23]. Yet, it has also been recognized that external threats and mixed messages result in a reduction of team mindfulness [49]. As the external threat of the pandemic was the reason for the HeNReG moving online, limitations imposed by COVID-19 may be a cause of a decrease in team mindfulness when the group met online only.

The diversity of group membership has recently been analyzed as divisible into four categories with different effects [50]. (1) Social diversity decreases conflict and increases affective commitment, (2) informational diversity has no statistically significant impact on conflict and affective commitment; in contrast, (3) value diversity increases conflict and decreases affective commitment, and (4) with increased conflict a mediating effect is found in the relationship between value diversity and affective commitment. In this regard, as a socially diverse group, it was reasonable to assume that diversity of membership would increase team mindfulness in the HeNReG. Concerning the value diversity demonstrated by the group members, it was only during the time that the group met in person that the facilitator was able to demonstrate how the disparate points of view voiced by the members could be added together to create a cohesiveness to the group that encouraged the affective commitment necessary for team mindfulness. Meeting online, as a result of COVID-19 limitations, this demonstration by the facilitator was not possible; as such, it reduced the likelihood of team mindfulness being observable.

What this means is that when the group—initially designed primarily for in-person meetings—met in person, the assumption that diversity of group membership was supportive of team mindfulness was warranted. However, once the group moved entirely online

as a result of COVID-19 restrictions, the diversity of group membership was not able to create cohesiveness in the group to encourage the affective commitment necessary for team mindfulness. It seems that the in-between question-asking dialogue during the meetings that the facilitator had with the group members, lost once the group moved entirely online, was a necessary component unrecognized by the facilitator in thinking that meeting online could continue the team mindfulness of the HeNReG.

4.1.2. Continuous Feedback Model

A second important feature of the HeNReG is that it uses a continuous feedback model (separate from the twice-yearly formal feedback) to encourage creativity with respect to responses to the writing prompts and regarding doodling. Although the creativity associated with replies to the written prompts was consistent when comparing the in-person contributions with the online ones, the creativity of team members in relation to asking questions of one another and concerning the production of doodles was significantly reduced once the HeNReG moved online, and even more so the second full year of restrictions. Research has found that a reason for this missing creativity may be a result of a lack of humbleness displayed by the group leader [51]. Although the use of a deliberate process, such as the one engaged during the HeNReG, was found beneficial for improving creativity in a team context, if the team leader was perceived to be deficient in humility, this was identified as detrimental to the process. Successful ways to promote the required type of humility of leadership have been identified as acknowledging the strengths of team members and actively seeking their ideas from them [52].

Self-analysis by the group facilitator and in relation to the comments provided by the group members in the year-end feedback forms did not indicate the facilitator was wanting in humility with respect to group leadership. This is especially so as the foundation of the group was that the facilitator was considered an equal member of the group and participated as such [39].

Nevertheless, there was a structural difference between the facilitator and the other group members that remained and was more evident once the group moved online. It was the facilitator who posed the questions in the form of writing prompts each week. Therefore, although the ideas of team members were actively sought by the facilitator, all members were aware—especially online—that the one integral member of the group was the facilitator. Without the participation of the facilitator, there was no group. Although other members were necessary to the group, no one group member in particular needed to participate for the group to continue.

Regarding participation in the private Facebook group, there were a number of levels open to group members of the HeNReG weekly: (1) responding to the writing prompt; (2) attending the online meeting; (3) asking questions of the group members in relation to their response to the writing prompt; (4) answering questions that were posed; (5) submitting doodles and their descriptions for posting; and (6) observing the discussion without making a comment. There was only one level of participation that had the full engagement of all group members: (1) responding to the weekly writing prompt. Given that all other levels of participation were promoted by the facilitator as being equally important to the function of the online group, yet they were not treated as such by the group members, this provides evidence in support of group members considering participation with the facilitator in responding to the writing prompt of greater relevance to the function of the group than any of the other levels of participation available. Thus, regardless of the facilitator expressing humility of leadership, the very structure of the group seemed to indicate to participants that the facilitator was not to be perceived as an equal.

This problem of the facilitator being perceived as different from other group members was further exacerbated concerning the doodling aspect of the group. When the group met in person, all group members had the same length of time and the same artist materials to create doodles [28]. The time period was a two-hour in-person meeting, and the artist materials were supplied by the facilitator for use by the entire group. Once the group

moved online, few of the participants attended the weekly meeting for the entire two-hour duration. If group members did attend, often it was only to answer the questions posed to them directly. This might mean they spent merely 10 min at the meeting. The facilitator, in contrast, was online the entire two-hour period, producing and refining a doodle over this time. Therefore, if participants produced doodles, they were ones performed in relation to the time they spent online. Often, these were created hastily with whatever art materials they had on hand, usually a pencil. In contrast, the doodles of the facilitator, created over a two-hour period, used bold colors and may have appeared more competent than others because of the length of time taken to produce them. As a result, this may have dissuaded other participants from bothering to doodle. The importance of attractive artist materials in creating doodles during this academic meeting has been noted previously [28].

This difference between the facilitator and the other participants in the complexity of the doodles produced was evident immediately after the first meeting in 2021/2022. The doodles submitted at the end of that meeting are seen in Figure 1, with only the facilitator and one participant providing a doodle. As such, rather than being seen as a supplementary way to help reduce research-related stress (as the doodling was intended), participants may have seen doodling as promoting additional stress. The reason is the participants could have self-judged their doodles as substandard, in comparison with those of the facilitator. This hypothesis is supported by the number of doodles produced by members decreasing during the academic year to the point that only the facilitator was creating doodles over most meetings. However, as the participants were never asked if they felt self-conscious about doodling, this remains conjecture and is a limitation of this study.



Figure 1. Doodle Provided by Facilitator (**Left**) and Participant (**Right**) After the First HeNReG Meeting of the 2021/2022 Academic Year Representing the Only Doodles Provided that Session.

Thus, although the continuous feedback model employed was useful in supporting team mindfulness during the in-person meetings of the HeNReG pre-COVID-19, it was not once the group moved online. One persistent difficulty after the group moved online was that the participants did not treat their relationship with other group members as equal to that of their relationship with the facilitator. Secondly, group members, for the most part, did not engage in doodling; thus, this method of continuous feedback was not part of their experience with the group. As such, although a continuous feedback

model may be advantageous for supporting team mindfulness during in-person meetings, in transplanting the structure of the HeNReG online, the particular continuous feedback model was unable to establish team mindfulness.

4.2. Online Groups Practices Resulting in an Increase in Team Mindfulness

The group practices of the HeNReG, intended to support team mindfulness, have been found unable to do so once the group moved online entirely. Yet, from the general themes of feedback provided, this lack of team mindfulness in itself did not seem to be missed by HeNReG participants; rather, if mentioned, participants' personal inability to participate created regret over their perceived limitations as group members. When conducted online, team mindfulness is not a feature of the HeNReG. However, as team mindfulness is supportive of a reduction in burnout by enabling the conditions for work engagement [34], it remains important to understand what type of online practices might support team mindfulness. This is especially so since, without equal participation, the function of the group might depend on a false consensus [53]. This develops when participants act as if they are in support of the group's interactions and objectives and may even believe themselves to be supportive when members actually disagree with aspects of the group.

Online meetings that appear best able to create the type of team mindfulness supportive of work engagement and having the ability to reduce burnout are not, as might be assumed, those which concentrate on developing mindfulness on an individual basis. In this regard, online groups that support individual mindfulness can alleviate high levels of personal stress and anxiety [54], especially during times of crisis, such as during COVID-19 [55]; however, these online groups are unable to create the type of team mindfulness that leads to work engagement focused on others in successfully meeting the group's objectives [56].

In contrast, the online meetings that have been found successful are those created by online gaming communities. With respect to gaming, online interactions have created communities that are not bound by physical and social relationships [57] and, in teens foremost, have been identified to increase the type of feelings of social connectedness necessary for team mindfulness [58]. The COVID-19 lockdowns provided the opportunity for people to develop new social connections through online gaming [59] and to see online gaming as a legitimate activity [57], aiding in the development of the conditions for team mindfulness. Unlike academic meetings, which were seen to suffer in their effectiveness as a result of quickly moving online during COVID-19 [60], online gaming flourished. Gaming is one of the few industries that experienced a higher growth rate during the COVID-19 pandemic than pre-pandemic, with a worldwide increase in both money and time spent on gaming and a transition towards multiplayer games [61].

It is important to consider how online gaming compares with the activities of the HeNReG in that online gaming can result in team mindfulness, whereas it is not found when the HeNReG meets online. The ways in which the HeNReG—when meeting only in a private Facebook group—is similar to online games are the following: (1) the rules on how to participate are clear, (2) an interest in participating is all that is needed to join, (3) there are consistently new activities in which to engage, (4) the activities of each participant can be viewed by all, (5) there is an obvious structure in which to engage, (6) participation can happen at any time, and (7) there is an end goal for participation—for the HeNReG, decreasing burnout; for online games, winning the game. As such, the HeNReG online meeting has many similarities to online gaming. Structurally, how the two types of activities differ is (1) there is no leveling-up with the HeNReG as there is with online games, and (2) there is no avatar with which to participate for the HeNReG.

In examining the aspect of leveling up with online games, it can be considered that this is a required feature for games given that, as a game, they do not necessarily correspond to the player's life in reality. Similar to schooling—which is only abstractly related to the interests of students and thus requires grades and advancement as extrinsic motivation [62] to focus the attention of students—games have points, badges, and leaderboards [63] to

keep the interest of the player. The HeNReG, on the other hand, is intrinsically interesting to participants [64] as it is set up to reduce burnout, and members join because they are experiencing burnout with respect to their research work which they would like diminished. As a result, a lack of extrinsic rewards for participating is not likely the reason team mindfulness was not displayed online with the HeNReG.

In contrast, the lack of an avatar (defined as a virtual character [65]) for online use with the HeNReG might be an important reason team mindfulness was not evident in the HeNReG once it moved online. The HeNReG was successful at promoting team mindfulness when the group met in person. The most obvious difference between an in-person meeting and a meeting online is that participants cannot witness each other engaging in space/time. Online games promote the use of avatars to move through virtual space/time as one of their most attractive features [66]. Avatar physical attractiveness and avatar ability to achieve have been found to be positively related to avatar identification and to online gamer loyalty [67]. It has been found that gamers adapt their behavior to the characteristics of their respective avatars and design avatars to balance self-enhancement and self-verification [68] and, thus, without an avatar, it may be difficult for participants in the online HeNReG to feel they can represent their point of view effectively online, as avatars permit visual perspective-taking [69].

The point might be made that if the concern is seeing the participants in virtual space/time, video conferencing might have produced the required team mindfulness that a private Facebook group was unable to realize. Using video chatting was the advice that a few of the participants in the HeNReG mentioned in their feedback: “Do you have other thoughts/comments on your experience as a participant in the HeNReG this term (especially as a result of COVID-19)?” For this reason, it might not be an avatar that is needed but just video-linking all participants.

A previous publication outlined why the HeNReG did not use video conferencing [40] with respect to one video conferencing platform—Zoom. Positive features of Zoom were stated to include the ability to quickly clarify problems, help decrease social isolation and improve the connection of the academic meeting’s community of members. Constraints noted were that participants (1) talk longer than they intend to, (2) multitask or become otherwise distracted and (3) become frustrated and fatigued [46]. Zoom also requires a reliable and stable internet, as participants’ videos can freeze, and at times, the participants disappear completely; when they reappear, they may show up on the screen in a different location than previously, leading to temporary confusion [70] with “Zoom gloom” and “Zoom fatigue” [71] the result. Furthermore, with the video on, members of groups using Zoom for meetings are forced to look at themselves during the meeting, and this facing of oneself can be unwanted by participants, as might the concern that they feel they are performers on the screen [72]. Most importantly, though, the HeNReG depends on thoughtful written responses to prompts and doodle creation during a two-hour online meeting, neither of which is best undertaken using video [40]. It is for these reasons that using videoconferencing would not be effective in creating team mindfulness for the HeNReG and that, if they were available, using avatars online might, in a way similar to online gaming.

4.3. Theoretical Contributions with Respect to Burnout

Concerning burnout, the results of the HeNReG online experience during the second year of COVID-19 can be considered from the perspective of COR theory, a model related to interpreting burnout that has been successfully applied to other experiences of workplace burnout during the pandemic [18,19]. Why COR theory may be particularly effective with respect to examining the results of the HeNReG is that, although it has been classified as an individual model related to burnout [7], this theory is quite different than other theories focused on the individual. Unlike these other theories that imply perceptions should be seen as products of personality differences, suggesting that people view reality with different cameras, individual differences in perception are not underscored in COR theory.

Instead, COR theory argues that people's cameras are comparable, with similar lenses—it is only the focus that is individualized [13] (p. 125). In this respect, greater emphasis is placed on objective factors in COR theory than other theories, such as the underlying events and circumstances that shape perceptions [13] (p. 125). Understanding burnout in relation to COR theory with respect to a study of HeNReG results is then particularly well suited for the following reasons fundamental to COR theory: (1) the different points of view related to members of the HeNReG are interpreted as distinct perspectives on the same reality; (2) what individuals value in determining their point of view in the responses to prompts and their doodles is of prime importance; and (3) the emphasis on initially establishing what is objective, regarding a point of view, that acts as a structure for later insights into each individual's subjective view.

To date, there have been studies of the role of trait mindfulness with respect to COR theory in reducing burnout during COVID-19 [26,27], a study of the relationship between trust and burnout regarding COR theory, pre-COVID-19 [73], and a study on the importance of mindfulness with respect to COR theory in the university setting [74]. However, there have been no studies examining the role of trust in team mindfulness in health researchers expressed using the variables considered fundamental to COR theory.

Although this study does not claim to have been conducted in relation to COR theory per se, interpreting the results in relation to that theory can produce insights. COR theory postulates that individuals strive to obtain, retain, foster, and protect those things they centrally value [75]. In this regard, stress occurs (1) when valued resources are threatened with loss, (2) when these valued resources are lost, or (3) when the gain of valued resources is unsuccessful following significant effort [73]. When many decisions are demanded, physiological over-arousal is then likely to result concurrently with increasing doubts about one's ability to make correct judgments when required—doubts that are realistic because overload decreases the time available to consider the necessary range of options and to mobilize resources. Additionally, the complexity of interconnected problems may be beyond both personal and organizational resources [13]. Such a situation is correctly viewed as threatening from the perspective of COR theory, promoting losses to occur.

In this regard, it can be conjectured that why team mindfulness was not displayed by HeNReG members during the second year of online meeting during COVID-19 may be for the following reasons: (1) the stresses from COVID-19 itself were mounting and participants felt overloaded with respect to intellectual and time commitments; (2) the anticipated team participation of group members was not forthcoming and when participants put in the effort to engage other members their efforts were not returned, (3) members who may have wanted to participate in the doodling aspect of the program felt their contributions were unsuccessful when compared with those of the facilitator, increasing their level of stress, (4) the continuous feedback model employed may have been too taxing on the resources of participants given each of the other stresses mentioned, and (5) the promised equality of all group members was not evident in the private Facebook group as the facilitator, in providing the prompts, was witnessed to be the only integral member of the group. These aspects may have created doubts in the members regarding both their ability to participate and the value of their continued participation resulting in a lack of trust in team members and significantly decreasing team mindfulness.

Theoretical Limitations Regarding Burnout Theory

Although COR theory has been proposed as relevant and appropriate for providing theoretical contributions to burnout theory with respect to the experience of the HeNReG during its second year online as a result of COVID-19, as indicated in the Introduction, there are a number of theories related to burnout and any number of them might have been used to interpret the results pertaining to team mindfulness and trust. Yet, it is because the tenets of COR theory correspond well with those of the HeNReG that it was judged particularly suitable. Nevertheless, the fact that other theories were not used in the analysis is a limitation.

5. Conclusions

Investigating whether a lack of team mindfulness was consistent with previous years, once a research group intended to reduce burnout moved from in-person meetings to those held online, it was found that the deficiency increased. This was noted to result from the group being unable to replicate aware attention to present perceptions, a necessary ingredient for team mindfulness. The reason for this inability was identified as limitations to two important assumptions of the research group after it moved online—that diversity of group membership and a continuous feedback model was supportive of online team mindfulness. Both assumptions were found flawed in an online environment. Although social diversity can increase team mindfulness, value diversity—which is not mitigated in the online group—is seen to be detrimental to its support. Furthermore, the equality of the group's facilitator to the other group members is called into question once the group moved online because of the special structural status groups members recognized the facilitator to hold, decreasing participation without group members' necessary awareness of this in the feedback provided by participants.

As a result, the team mindfulness that was demonstrated for this research group (the HeNReG) when the group met in person, has been found unable to be maintained once the group moved online as a result of COVID-19 restrictions. This result was increasingly so the second full year of these restrictions. Why this might be so was considered from the perspective of COR theory resulting in the view that stresses were legitimate regarding team mindfulness in the online group, primarily because the investment that group members made in participation may not have yielded their expected results based on the perceived deficiency of their own ability to participate.

When considering what type of online groups have the ability to support team mindfulness, online games were identified. The aspect of these games that promoted team mindfulness was considered to be the inclusion of an avatar for moving in virtual space/time—something that was not a feature that could be incorporated in the HeNReG because the technology does not currently exist for this option. Given that team mindfulness is one component in helping to reduce burnout in researchers by promoting work engagement, the success of a research group aiming to mitigate burnout in health researchers would seem to depend on the creation of an online group that includes the use of avatars to navigate the online space/time.

It is because an online avatar does not exist for the HeNReG that the facilitator of the HeNReG took note of the group's online limitations and initiated a responsive change for the 2022/2023 academic year based on the results that have been presented here. The feature of the HeNReG that successfully continued once the group moved online was the trusting relationship each group member had individually with the facilitator. Therefore, in continuing this offering intended to help reduce burnout in health researchers, the HeNReG has evolved for the 2022/2023 academic year to a one-on-one online meeting between a health researcher and the facilitator and has been renamed the Health Narratives Research Process (HeNReP).

Team mindfulness has been recognized as an important feature in lessening burnout in online groups intended to reduce burnout in health researchers. In this regard, it will be important to determine at the end of the 2022/2023 academic year if the HeNReP, as a group of two, is sufficient to support team mindfulness. If so, the advice for similar online academic groups intended to reduce burnout through developing team mindfulness is to institute one-on-one online groups based on similar principles to the HeNReP. Otherwise, it is recommended such groups find ways and means to develop avatars for use online so that their success in creating team mindfulness as one aspect of decreasing burnout is able to correspond with that of online games.

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Data Availability Statement: The data presented in this study are available upon request from the corresponding author. The data are not publicly available due to privacy restrictions expected by participants when they agree to join the Health Narratives Research Group.

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