

Article

# Online Meeting Challenges in a Research Group Resulting from COVID-19 Limitations

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**Abstract:** The online learning necessitated by COVID-19 social distancing limitations has resulted in the utilization of hybrid online formats focused on maintaining visual contact among learners and teachers. The preferred option of video conferencing for academic meetings has become that of Zoom. The needs of one voluntary, democratic, self-reflective university research group—grounded in responses to writing prompts—differed in learning focus. Demanding a safe space to encourage and record both self-reflection and creative questioning of other participants, the private Facebook group was chosen over video conferencing to maintain the concentration on group members' written responses rather than how they saw themselves (and thought others saw them) on screen. A narrative research model initiated in 2015, the 2020/21 interaction of the group in the year's worth of Facebook entries, and the yearend feedback received from group participants, will be compared with previous years when the weekly group met in-person. The results in relation to COVID-19 limitations indicate that an important aspect of self-directed learning related to trust that comes from team mindfulness is lost when face-to-face interaction is eliminated regarding the democratic nature of these meetings. With online meetings the new standard, maintaining trust requires improvements to online virtual meeting spaces.

**Keywords:** academic meetings, video conferencing; Zoom, private Facebook group; narrative research, COVID-19, self-directed learning, team mindfulness, democratic meetings

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## 1. Introduction

The 2020-2021 academic year represented the first full year of COVID-19 restrictions to post-secondary academic meetings [1]. At one major university, where social distancing was initiated 12 March 2020 in response to the pandemic [2], the effects of COVID-19 limitations on a specific series of academic meetings now could be comprehensively interpreted. In this weekly academic offering, available yearly since 2015 through the Department of Psychiatry, the results of two consecutive terms of COVID-19 restrictions were analyzed with respect to a number of variables regarding both the ongoing meeting responses during the year and the official feedback received by participants. Given COVID-19 restrictions, these variables analyzed included, (1) overall participation level, (2) the types of participation, (3) the content of the participation, and (4) the products participants created. The purpose of the analysis was to determine the appropriateness of the online platform chosen for conducting these academic meetings during COVID-19 and to suggest changes that might be made to these online meetings to improve participant experiences in the future as COVID-19-related restrictions to in-person meetings are continuing.

### 1.1 COVID-19

COVID-19 is the ongoing global pandemic identified in 2019 as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) [3]. The World Health Organization

declared it a Public Health Emergency of International Concern on 30 January 2020 and a pandemic on 11 March 2020 [4]. As of early October 2021, almost 235 million cases had been reported throughout the world, resulting in an excess of 4.8 million deaths [5].

The genetic sequence for the virus was published on 11 January 2020, initiating an urgent response to create a vaccine [6]. By mid-December 2020, both Pfizer-BioNTech [7] and Moderna [8] had received regulatory approval for their mRNA vaccines. Late December, the Oxford-AstraZeneca [9] and ChAdOx1 nCoV-19 vaccine [10] gained approval. These vaccines required two dose administration [11]. By mid-April 2021, the one-dose Johnson & Johnson (Janssen) COVID-19 vaccine was approved for use [12]. Almost 6.3 billion people have been vaccinated worldwide at this time [5]. Nevertheless, the number of vaccine hesitant people remains significant, especially in geographical regions with a higher COVID-19 burden [13].

The virus is spread primarily through close contact with small droplets from coughing, sneezing [14], singing [15], blowing wind instruments [16], loud conversation and even from breathing [17]. Spread is possible before symptoms appear [18], and from people who do not show symptoms [19].

Common symptoms include fever, cough, fatigue, shortness of breath, headache [20], loss of sense of smell [21], as well as otoneurological symptoms [22]. Complications may include pneumonia, acute respiratory distress syndrome [23] and renal failure [24]. Yet, rather than a respiratory disease, clinical data views COVID-19 as a vascular disease [25] that results when the body stops effectively breaking down bradykinin, a chemical normally involved in regulating blood pressure [26] in combination with storms related to cytokines [27] responsible for the generation of fever [28].

Recommended preventive measures include hand washing, covering one's mouth when coughing, distancing from other people, wearing a face mask in public settings, disinfecting surfaces, increasing ventilation and air filtration indoors [29] and self-isolation for people who suspect they are infected [30]. Authorities worldwide responded by, among other measures, implementing lockdowns [31].

COVID-19 is thus a major health concern, both with respect to mortality and morbidity. As such, it was prudent and advisable for this major research university sponsoring the specific academic meeting to be analysed to cancel all academic meetings at the time it did. The advice offered by the Department of Psychiatry related to its academic meetings was to continue to conduct them via Zoom [32]. For the academic meeting to be reported on here, the facilitator proposed instead using a private Facebook group as an alternative [33].

## *1.2 Choice Between Online Platforms for One Particular Academic Meeting*

In relation to the use of a private Facebook group rather than the academic unit's recommendation of Zoom, the facilitator of one specific academic meeting considered the following. (1) general criteria for determining an effective online platform for academic meetings, (2) the academic meeting's use since 2015 of a private Facebook group for online communication, (3) the specific requirements for an online platform for this one academic meeting, and (4) a comparison of the relevant features of Zoom meetings and private Facebook groups pertaining to this particular academic meeting.

### *1.2.1. General criteria for effective online platforms for academic meetings*

Academic meetings involve sharing information. Success is defined by the quality of information shared, participant satisfaction with the process, participant confidence in the outcomes and process time [34]. Success results in in academic engagement, defined as the learner devoting physical and psychological energy to the academic experience [35]. The time and effort students dedicate to educational activities empirically linked to desired academic outcomes, including what institutions do to induce students to participate in these activities [36].

By supporting social interaction, social networking sites as platforms for holding academic meetings have been found to increase meeting success [37]. They do so by facilitating learning through presenting multiple perspectives, situated learning, and transfer from instruction to real-world settings [38].

Irrespective of the speed at which online platforms were chosen as a result of the COVID-19 lockdown, the goal of any use of online platforms for academic meetings is to be in keeping with these standards.

#### 1.2.2. Prior use of a private Facebook group

The uncommon academic meeting to be discussed has a history of offering the option of online meeting. To increase accessibility of the group and provide different opportunities for participation, it has always been important—pre COVID-19—to have an online presence so that those who were unable to attend any particular meeting in-person could participate remotely. Furthermore, the online presence has provided the opportunity for those unable to make the meeting to respond as well as have questions asked of them and to ask those of other participants in the meeting. The method of communicating online since 2015 has been contributing to a private Facebook group developed specifically for each academic year. With the private group participants can view the content [39] of each meeting both synchronously during the time of the meeting and asynchronously when most convenient for them.

#### 1.2.3. Specific requirements of an online platform

For this particular academic meeting, digital literacy begins with building a rapport [40] with participants through a dialogue, as knowledge is considered to be distributed among participants and located within the context of activity [41]. An important aspect to this academic meeting is that the facilitator participates in the process as an equal member [42]. The intent is to provide opportunities for community empowerment in addressing health inequalities [43,44]. It has become clear that using a combination of ‘tailored’ interventions can be a more effective option than using singular main-stream approaches [45]. This academic meeting is thus a tailored one seeking to empower the group members and address inequalities.

#### 1.2.4. Private Facebook groups’ and Zoom’s relevant features

A private Facebook group is a community of Facebook users who are “friends” with at least the person who has created the private Facebook group. Only those who are part of the community can see what is posted to the group and can add to the discussion. The private Facebook group belongs neither to the educational institution nor the participants. It belongs to the facilitator [46]. To become part of the private Facebook group in any particular year, group members “friend” the facilitator, who then adds them to the private Facebook group. Group members have the choice of whether to friend any of the other participants additionally. The accompanying Messenger app permits messages to be sent to Facebook friends. Neither Messenger nor Facebook set a time limit for use in online communication. These two platforms work in combination. Members unable to meet at a designated time on the private Facebook group can participate either by first replying via Messenger or then in response to postings on the private Facebook group. The private Facebook group gives members the ability to access the private Facebook group when they have time: right after the meeting, sometime during the week before the next meeting, or any time after. At a time that is convenient for them, members may scroll through the postings of the entire academic year in using the private Facebook group. As such, there are instances when members may respond to posts months after any particular posting was originally made.

The alternative to the private Facebook group for academic meetings is Zoom.

Zoom is a collaborative, cloud-based videoconferencing service offering online meetings, group messaging services and secure recording of sessions [47]. At the basic level, it is free to download and is relatively straightforward to use by group members once Zoom is downloaded and set up by each participant. The host of the meeting sends an email to each of the potential participants indicating the time when the meeting will take place and how the meeting should be accessed. Most users need to only click on the link at the appointed time to access Zoom once they have downloaded the app. After the host admits them to the meeting, the group member will then see the other meeting participants, normally in a grid pattern. Positive features of Zoom include the ability to quickly clarify problems, help decrease social isolation and improve the connection of the academic meeting's community of members. Some constraints are that meetings encourage members to (1) talk longer than they intend to, (2) multitask or become otherwise distracted and (3) become frustrated and fatigued [48]. The most important aspect of Zoom is that all members of a group have the ability to see each other and participate in real time. Zoom depends on a reliable and stable internet connection. Without this type of connection what can, and often does, happen is that participants "freeze" [49]. The benefits of using Zoom have been found by many academic institutions to significantly outweigh the challenges encountered and the use of Zoom may complement or extend research related to most academic meetings [50]. It is because of these benefits of a relatively easy, real-time video connection that permits the sharing of screens and annotations by all members to information presented [51] that academic programs delivering educational content at academic meetings consider Zoom as their preferred online platform if precautions are taken in making use of the privacy settings [52]. At the time of the lockdown, Zoom was appraised to be the preferred technology for academic meetings at the Department of Psychiatry associated with the academic meeting to be reported.

In making the comparison between private Facebook groups and Zoom as the online platform for academic meetings, perhaps the most important difference from the point of view of participants is that Zoom requires the consideration of whether or not to keep the video—the primary feature of Zoom—turned on during interactions [53]. Video conferencing has been found to present with detrimental effects on participant psyche during COVID-19 [54]. Although video online learning can create an environment similar to physical meeting space [55], and faculty struggle without visual access to participants in academic meetings [56], a norm has developed where participants opt for no video to protect their privacy and decrease their stress burden with respect to seeing themselves online [57]. With Zoom video, the focus of meeting participants tends to migrate from the topic at hand to how they and their surroundings might be evaluated in relation to others, and with respect to their own expectations of themselves [58]. Given that the major advantage of Zoom over private Facebook groups has been seen as its ability to more closely recreate the meeting environment, if the norm has become turning off the video, it is questionable whether Zoom is the appropriate choice for academic meetings when compared to private Facebook groups.

### *1.3. Features of Academic Meetings of Researchers*

The importance of "breaking down silos" in research communities with researchers from various disciplines becoming knowledgeable about the research of others in a growing concern in academe and has affected what is now considered important for holding successful academic meetings [59]. In creating an interdisciplinary environment, three factors are identified as relevant: self-directed learning [60], team mindfulness [61] and ensuring the meetings themselves are democratic [62].

#### *1.3.1. Self-Directed Learning*

Self-directed learning has been recognized as the most appropriate form of learning for adults [63] representing the core theoretical construct of the field of adult education

[64]. Self-directed learning is evident when and where learners take responsibility for organizing and managing their own learning, recognizing gaps in their knowledge, critically appraising information they seek out [65], diagnosing their requirements, perceiving their goals, selecting strategies, and designing their evaluations for performances and outcomes [66]. This experience depends on learners demonstrating intrinsic motivation, integrity, agency, diligence, perseverance and grit towards their learning [67] through being continuously engaged in acquiring, applying and creating knowledge and skills in the context of their unique needs [68]. Adults are found to have a deep need to self-direct [69]. This indispensable need for learners to self-direct grew exponentially overnight as a result of the imposed COVID-19 lockdown [70]. In accordance with this deep need, the academic meeting the focus of this discussion is one that depends on and supports self-directed learning in its participants. This is because a key dimension to self-directedness is a critical awareness of meaning and self-knowledge [71], important to the process of this particular academic meeting. What is to be determined with whether the limitations posed by COVID-19 restrictions posed a challenge in the engagement of the participants in the academic meeting to embrace self-directed learning.

### 1.3.2. Team Mindfulness

Team mindfulness with respect to how a meeting environment is constructed and maintained has evolved to become an important consideration with respect to enhancing personal fulfilment related to work [72] where team mindfulness is defined 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 [73]. This is to be done by collectively and regularly attending to the team members experiences and their underlying objectives, tasks, roles and structures in a non-judgmental way [74]. Two of the important features of the academic meeting to be examined are its diverse membership and the continuous developmental feedback method employed. The intention is to reenergize and sustain career-long research and decrease burnout from research-related anxiety and depression. Aspects necessary for reengagement by researchers who experience burnout include the need for professional autonomy and a feeling of community based on trust with fair and equitable treatment among members [75]—all features of the team mindfulness expected of this particular academic meeting.

### 1.3.3. Democratic Meetings

Academic communities consisting of researchers focused on maximizing their individual success metrics have been recognized as ill functioning [76]. Collegiality among researchers is seen as most likely to reflect a creative and productive research environment [77], yet the depression and anxiety common among researchers as a result of competition and lack of sufficient support by mentors can reduce this important collegiality [78]. Depression includes a feeling of hopelessness, helplessness, or worthlessness with respect to research endeavours [79] while anxiety in the research endeavour is characterized by caution, complaints, rumination, nervousness, and worry engaging in research tasks [80]. In contrast, those researchers found to be the most productive are those who develop a certain style of thinking that includes a capacity to remain intellectually open, to play with ideas, make fine distinctions, recombine concepts and tolerate ambiguity and abstractions [81]. It is these researchers who look to colleagues as equal participants in forwarding their research pursuits rather than as competitors, with those who are most productive and fulfilled as researchers considered as the most egalitarian in their relationships with other researchers [82]. It is with the aim of reducing depression and anxiety among researchers and promoting research

collegiality to aid research productivity that the type of academic meeting to be discussed was intentionally created as democratic in its aim and function.

### *1.6. Contribution of this Research*

Digital literacy is the aim in choosing an online platform. Much recent work has been done to compare Zoom with other online video conference platforms during COVID-19 for use in academic meetings [83,84,85,86]—there has been limited research investigating the private Facebook groups for academic meetings at any time [87,88,89,90]. The lack of research on private Facebook groups is unexpected, as written work—fundamental to the private Facebook group—is the mainstay of successful academic meetings and most closely aligned with their intention [91]. This report will reduce this research gap by adding to the literature on private Facebook groups.

However, it should be noted, a report was written by this author a year ago on the effect of switching to the online platform of a private Facebook group mid-year for the 2019-2020 academic meetings [58]. At the time this report was written, an investigation into previous peer reviewed studies on the use of private Facebook groups for academic meetings did not reveal any that had been conducted. Two articles have since have been identified [56,57] that were published pre-COVID-19. Following the publication of the report of last year, only one additional paper on this topic has been become available [59]. As a result, this account of the effect of COVID-19 lockdown on a full academic year for one particular academic meeting retains its importance to fill the research gap currently evident with respect to the use of private Facebook groups for academic meetings.

As COVID-19 restrictions will remain in effect in the Department of Psychiatry at this university during the 2021-2022 academic year, requiring the continuation of online meetings [92], the results of this research maintain their relevance for this university and to others preserving online teaching [93], especially in regards to self-directed learning, team mindfulness and democratic meetings.

## **2. Materials and Methods**

### *2.1. Private Facebook Group Platform*

A private Facebook group has been selected since 2015 for the online communication of this specific academic meeting. Since 12 March 2020, it has been the sole method of communication among group members. Private Facebook groups for these two consecutive years have been created and used during this time of COVID-19 restrictions.

The private Facebook group is a hybrid model of online platform, including both asynchronous and synchronous features [94]. In conjunction with the Messenger texting app owned by Facebook [95], the private Facebook group combines the ability to send messages to the facilitator of the group, either during the online meeting or at any time outside the appointed time to meet. In this regard, it resembles asynchronous meetings conducted through email. In addition, participants can meet together online within the private Facebook group at a designated time, adding to the group through typing, or by posting pictures, videos, documents or links—representing the synchronous feature of private Facebook groups.

It is because of the variety of options available for participation, both during the online meeting and before or after, that Facebook groups have been found engaging as a hybrid model [96]. Users of Facebook private groups are presented with multiple communication channels, including: private messages, “wall” postings, status updates, instant messaging, and applications. Furthermore, Facebook may facilitate collaboration because of its popularity [97]. In supporting this type of collaboration, private Facebook groups have the ability to enhance digital literacy.

Privacy can be an issue with inexperienced users of the Facebook platform [98,99]; yet an important feature of Facebook accounts with respect to privacy is that they can be created to protect user identity [100,101]. Privacy can also be enhanced through adjusting the privacy settings on Facebook in various ways [102]. To combat concerns related to data protection and privacy, Facebook released a set of privacy principles in 2018 that explain to users how to take more control of their data. Subsequently, Facebook provided additional protection to users [103]. To maintain privacy Facebook groups created for an academic meeting should be private as opposed to public [104].

## 2.2. Health Narratives Research Group Method

The specific academic meeting that is the focus of this inquiry is the Health Narratives Research Group (HeNReG). It is a weekly, two-hour opportunity for university researchers ranging from undergraduates to full professors to take the personally relevant stories that initiated their commitment to health care and develop them into narratives with a particular point of view. The process includes both personal reflection and the willingness to share one's story and gain additional insights from the rest of the group. Although the level of experience differs among the researchers, for the purposes of this health narratives research group, members are asked to treat each other as equals. This is a continuing, voluntary, non-credit group that meets throughout the academic year, open to any member of the university community interested in health care. Diversity of membership is sought and encouraged.

The group is facilitated by a narrative researcher trained as a philosopher of education holding the position of a scholar in the history of medicine. The facilitator's role is similar to that of a health coach [105] or health trainer [106] for university researchers experiencing depression and/or anxiety with respect to their research careers. The group has been supported by the Department of Psychiatry at a major research university since 2015, permitting the group to meet weekly at a university hospital over the academic year pre-COVID-19.

For the 2020/21 year, the first full year online meeting as a result of the COVID-19 pandemic, there were 20 participants in the group ranging from across the university at various stages of their academic careers, including two who resided internationally. The disciplines represented by these researchers included the following: Marketing, Pediatrics, Narrative Research (three participants), Statistical Science, Behavioural Economics, Bioinformatics, English (two participants), Social Work (two participants), Human/Computer Interaction, Neuroscience, Family Medicine (two participants), Education, Health Studies, Medicine, East Asian Studies. These disciplines represented are compared with the representation of disciplines in each of the previous years from 2015/16 in Table 1.

Table 1. HeNReG Participants by Discipline and by Academic Year for All Six Years the Academic Meeting Has Been Sponsored by the Department of Psychiatry.

Discipline	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Humanities						
Bioethics	1	1				
Comparative literature	1	1				
Creative writing	3	1	2			
Critical theory			1			
East Asian studies						1
English			1	1	1	2
Fine art	1					

History of Medicine	1	2	1	1	3	
Narrative research			1	1	2	3
Socially engaged art			1	1	1	
Life Sciences						
Adolescent medicine			1			
Bioinformatics				1	1	1
Biostatistics	1					
Community health			1		1	
Counselling					1	
Disability studies	1			1	1	
Exercise health		1				
Family Medicine						2
Global health					2	
Health and safety			1	1		
Health studies						1
Immunology					1	
Medical information			1	1		
Medicine			2			1
Neuroscience	1		2	2	1	1
Nursing				1		
Palliative Care			1			
Pediatrics						1
Pharmacy		1				
Psychotherapy			1	1		
Social Sciences						
Behavioural economics						1
Diaspora studies			1	1		
Economics			1	1	1	
Education			1	1	2	1
Marketing		1			1	1
Psychology		1			1	
Social work	1	2			3	2
Student services			1			
Physical Sciences						
Chemical engineering			1			
Computer Science				1		
Engineering				1		
Environmental engineering	1					
Human/computer interaction						1
Statistical sciences						1
Total of participants	12	12	22	17	23	20

Among these disciplines in the 202/21 academic year, there was one undergraduate student, six graduate students, nine fulltime researchers and four professors. This representation of types of researchers is compared with that of the academic years since 2015/16 in Table 2.

Table 2. HeNReG Participants by Type of Researcher in Relation to Academic Year.

Type of Researcher	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Undergraduate	3	4	7	6	9	1
Graduate	1	1	1	3	2	6
Researcher*	6	5	12	7	10	9
Faculty	2	2	2	1	2	4
Total	12	12	22	17	23	20

\* Includes research associates and amateur researchers with university affiliations

The philosophy of the group is unique and depends on a particular interpretation of truth developed by the philosopher of education who facilitates the group. With the foundational philosophy for the group (reflected with empirical research [107]) there are two avenues to truth through research. These may be analogized to two methods of approaching a landscape with barriers.

One avenue is disciplinary [108] and sees obstacles in the landscape as barriers to eliminate by climbing higher. In disciplinary research, higher views supersede lower ones because this type of research is necessarily hierarchical. In this analogy, the purpose of discipline-based research is to create the most accurate aerial view of the landscape by overcoming and rising above the obstacles in the landscape.

In contrast, narrative research [109] describes the second method of traversing the landscape of truth. This type of research views obstacles in the landscape as landmarks to use in developing routes around these features. In narrative research, each person's point of view is considered equal and the routes created from one point of view to another are added together to complete the map of the landscape. The reason for deeming them equal is all points of view are considered necessary to view the landscape in its entirety. The purpose of narrative research in the group then is to create as many routes as possible from one point of view to another; which is why diversity is encouraged in group membership. This can be visualized as similar to how a "street view" is constructed in something like Google Maps [110].

From a philosophical standpoint, disciplinary research is concerned with the propositional aspect of the landscape of truth and narrative research with the ontic form of this landscape [111]. It is the collective cross-fertilization that comes from the concentration on narrative research that has been particularly fruitful for this group.

As a narrative research group based on a non-hierarchical structure, the group is also non-competitive. As a form of peer mentorship, a non-hierarchical structure has been recognized as most effective [112]. Furthermore, it is important to the group's operation that it be non-competitive as this has been shown to increase empathy towards those who are not part of the same in-group [113], a necessary component to the successful functioning of the group.

Before the lockdown, during the years when the group met at the hospital, at the beginning of each meeting the facilitator provided a pre-planned prompt for members of the group to write in response to for five minutes, without stopping or lifting their pen from the paper. The value of prompts in memory integration and self-derivation has been continually recognized and is the justification for using these prompts [114,115]. This type of stream of consciousness writing is a form of autoethnography [116] that has been found particularly relevant and useful in self-reflection [117]. The initial prompt provided at the first meeting of the academic year asks each person to describe themselves with respect to their research related to health. In the weeks to follow, the order of the prompts asked group members to first consider what is most objective with respect to their research related to health, then, as the weeks progressed, the prompt questions were intended to elicit answers that were increasingly subjective.

Once the lockdown was initiated, the prompts were provided the day before the online meeting via Messenger. Although the individual prompt questions have changed

each year, the order of the type of questions asked remains the same: when, where, who, what, how, why. More than one session is devoted to each type of question—four weeks for the more objective questions (when, where, who and what questions) and six weeks for those questions evoking more subjective answers (how and why questions). The need for both objective and subjective questions in assessing participant’s perceived relationship to their community of inquiry has been recognized by social scientists and mental health scholars [118]. The order of the questions and the number of weeks they are posed is found in Table 3.

**Table 3.** Order of Each Type of Question Posed From the Most Objective to Most Subjective Over the Weeks During the Academic Year and the Number of Weeks Each Type of Question Is the Focus.

Rank of Question Objectivity	Order of Questions Posed	Number of Weeks Posed
1	when	4
2	where	4
3	who	4
4	what	4
5	how	6
6	why	6

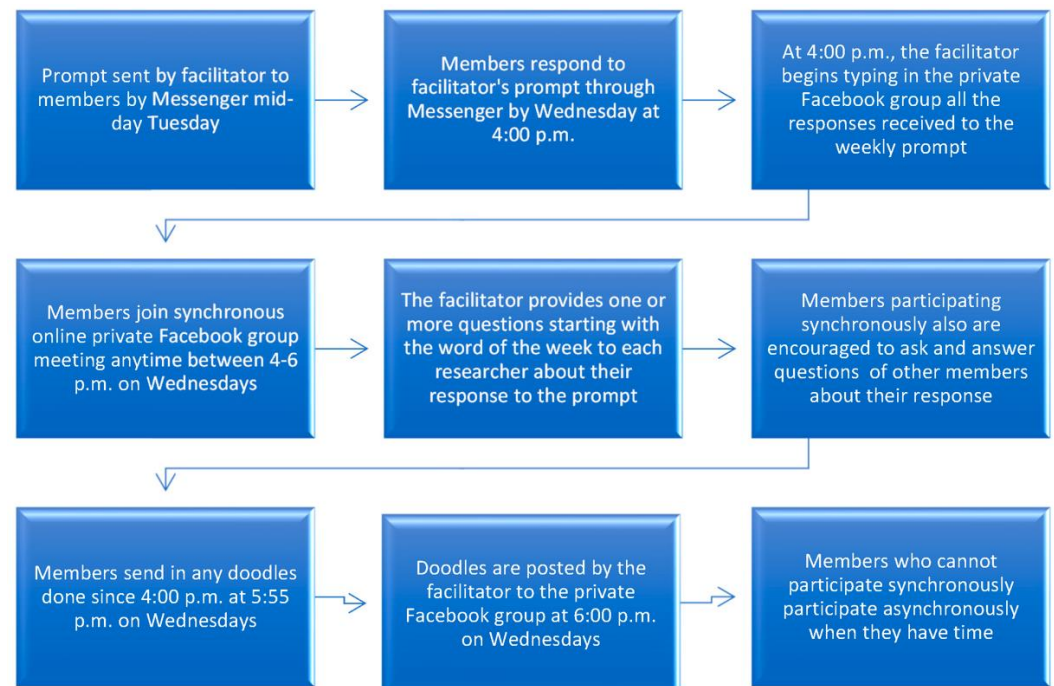
This structure of question asking has been developed specifically for the group by the facilitator to help participants take the initial story of how they describe themselves related to their research and develop this story through a non-threatening and ever psychologically deepening way into a larger narrative with a particular point of view that will help to sustain their research throughout their career. The self-examination of personal stories to construct identity narratives has been recognized as giving sustainable meaning to life [119]. In using this method, the meetings support critical thought and collegiality.

Pre-COVID-19, once participants had completed their written response to the weekly prompt, each person was asked to read their response, one by one. After a participant had read their response to the prompt, each other member was given the opportunity to provide one question to the person who has just read their response to further clarify what has been read. The only requirement of the question asked was that it must begin with the same word of the week, i.e., if a “who” question was asked, each person then asked a clarifying “who” question of the reader. If a group member did not have a question, that person could choose to pass. If a group member couldn’t think of a question right away, after each of the other members one at a time has provided a question, the person who had passed was given an additional opportunity to pose a question. The purpose of this was to permit those who ask the questions to see the landscape from the point of view of the reader. For the reader, the objective was to get them to revisit their point of view and picture it in greater detail. In each exchange, the development of communication was promoted.

Keeping with the non-competitive nature of the group, people participating in-person pre-COVID-19 waited their turn to speak and did not put up their hands. Who was to speak at any time was determined by where they sat in the circle. Participants aimed to make their questions as short as possible so everyone had the chance to speak. After each question asked, the person who had read their reply to the prompt answered the questions asked of them. When each person had asked a question of the reader, the person who had read gave a summary of how these questions may have helped them clarify their research. The facilitator noted down all the questions that people asked, and the replies, after which it was the next person’s turn to read sitting to the left of the previous reader (that is, unless the group decides at the beginning of the meeting to go

around counterclockwise that particular session). Who was to be the first person to read to start this process was chosen by the facilitator. This person who started was generally someone who had not been able to attend the previous meeting or a member who had indicated that they couldn't stay for the entire meeting. Sometimes members asked to go first as well. Depending on each member to wait their turn and listen carefully to others required the cooperation of all. This process of weekly activities after COVID-19, including doodling, was modified to correspond with the online platform and can be visualized with the help of Figure 1.

**Figure 1.** Weekly activities created and administered by the facilitator of the HeNReG for participants post-COVID-19 when group participation was entirely online.



To help put members at ease, pre-COVID-19, the facilitator provided the group with artists materials and paper, encouraging participants to draw or doodle during the meeting, offering an additional outlet to express their creativity. Sometimes drawing prompts were provided alongside the writing prompts. Unlike the writing prompts, which were to be completed in five minutes, participants could respond to the drawing prompts over the entire two-hour meeting, or choose not respond to them at all. No one was required to draw. When there is no drawing prompt, members were encouraged to doodle instead. At the end of the meeting, members described their drawings or doodles one at a time going around the circle. The facilitator then noted down all the descriptions. After this, whatever was drawn, plus the written responses to the writing prompt, were collected by the facilitator to be posted to the private Facebook group to which all group members belonged from the first meeting onwards. The purpose of encouraging group members to draw or doodle is that it has been found within the group to reduce the anxiety and/or depression of those who find this situation to be a novel experience in an academic setting, helping them to concentrate more deeply on questions to ask the current reader [120]. Once the COVID-19 limitations were imposed, participants were encouraged to doodle during the two-hour weekly meeting and to send in their doodles plus a description of the doodle to the facilitator over Messenger for posting to the private Facebook group.

One important aspect to this health-related group is that the facilitator participates in the process as an equal member [121]. As such, the facilitator both responds to the five-minute writing prompt and doodles when not recording the questions and answers of

other members (in person, pre-COVID-19, and online during the pandemic). In effect, those who are part of the group see the facilitator as an additional, and equal, participant in the landscape of truth rather than as an instructor. The aim is to decrease barriers to behavioral change by having these barriers reconsidered as features in the landscape defining a path to reduce anxiety and depression (known to co-occur [122,123]) in the group members as much as possible.

### 3. Results

#### 3.1. *HeNReG Activities Considered by Year*

Although the philosophy of the HeNReG has been maintained since the group became part of the Department of Psychiatry in the fall of 2015, how the group operates has changed over the years.

During the formative year of 2015/16, the group was referred to as the History of Medicine Research Interest Group and did not involve a particular method of taking participants' stories regarding what initiated their interest in health and developing them into narratives with particular points of view. The structure was more fluid and depended on the research writing that the participants brought to the group for discussion. This method was modified the following year, as the sessions during the first year were often dominated by those people who had done research over the week in contrast to those who had not. This, in effect, set up a hierarchy amongst the researchers and was seen to be the cause of increased depression and/or anxiety in those researchers who were not producing, as well as increasing the anxiety of those who were bringing research to the group to be the ones carrying the discussion. During that year, participants at times brought drawings they had done to the group, but not as a regularly invited part of the HeNReG's procedures. The private Facebook group was used primarily to post the following: these drawings, links to information participants thought interesting, and written work completed by those researchers who wanted to post their work.

By the 2016/17 academic year, the HeNReG was structured in relation to its current method of asking questions in the order of those that were most objective and least likely to be anxiety provoking to those that were increasingly subjective and had a greater possibility of invoking anxiety as a result of answering the question as a response required trust in the group members and group process for anxiety to be mitigated. For those researchers who had been part of the group previously, and had a particular idea of how they thought the group should be organized, this new method of responding to question prompts by writing for 5 minutes stream of consciousness as well as only asking questions beginning with the word of the week, was to them unusual. The new method was resisted by some of the previous members and, in each of the two terms' feedback forms, was mentioned as a limitation to the group by those who resisted its use. The process was continued despite this view by a few researchers that it constrained the group because, it was evident by the equality of participation that was gained, there was a more relaxed nature to the group now that it was longer focused on expecting participants to complete work on their health-related research each week. As such, the goals of the group—to be inclusive and to reduce anxiety and depression in researchers—was better served by this change. On the year's private Facebook group, the replies that people provided to their prompts and the questions they received were listed by the person's first name and then the date. This was also the first year that drawing become an invited part of the group's process. The idea was initiated by one of the group's participants who took responsibility for providing a drawing prompt to participants each week. This aspect of the group was greatly enjoyed by those participants who were artistically inclined, as many of them were. However, the drawing prompts gave those members who did not consider themselves able to draw increased anxiety with respect to being invited to draw to a prompt. Comparing what they saw as their lack of ability with that of other members who were extremely proficient increased the anxiety of some members to the

point that they didn't feel comfortable attending the group once drawing prompts were a feature.

During the 2017/18 academic year, the question-asking method originated the previous year was continued with different questions asked for each of the six type of prompts than used the previous year. The questions were changed from those asked the year before so that continuing participants from the previous year would still consider the group valuable to their development as a health researcher in mitigating their depression and/or anxiety about their research. The year's private Facebook group listed all the responses to prompts that were received by date, meaning that the number of entries for any particular date would depend on the number of participants that week. This method was chosen over using people's names as participants the year before had mentioned that it was too difficult to find the date they might be looking for as all the entries merely began with people's names in the previous year. The participant who had initiated drawing to the group continued with the drawing prompts when present; however, after this participant's research required an international residency, the researcher was less inclined to provide these prompts. Nevertheless, it was clear from the results of the previous year that drawing could have a relaxing effect on participants, but only if they thought they were up to the ability level they themselves anticipated [124]. It was for this reason, when there was no drawing prompt, doodling was encouraged. Thus, regardless of whether there was a drawing prompt provided by the group member, everyone could participate in drawing and, if they chose to doodle there would be no judgement of what they produced as it was accepted as a doodle rather than a drawing per se. As the year progressed, there were fewer drawing prompts and more of the drawings were doodles. However—as mentioned in the twice yearly feedback forms—in not having drawing prompts, the more proficient artists felt as if they had lost something important to what they valued in coming to the group.

The 2018/19 academic year brought new order to the private Facebook group as part way through the year the different entries each week were numbered with respect to how many participants attended in any week before the mention of the date. This change was made because people had often missed their particular entry when they checked on the private Facebook group because all entries had started with the date, meaning that if fifteen people participated in any particular week the date would appear as a heading fifteen times on the private Facebook group. One new feature of the private Facebook group was that the postings now included the names of all those who attended any particular meeting, including whether their attendance was synchronous or asynchronous. This year can be seen as a transition from an interest in drawing prompts to an acceptance of doodles as being the primary form of figurative expression in the group. Throughout the year, those who enjoyed drawing prompts either were disappointed when the group member who had initiated the idea of drawing prompts—still a member of the group—did not provide one as a result of personal absence or of not preparing one in advance. In these situations, others members volunteered to create a drawing prompt. What differed from the year before is that at the beginning of the year, all members were encouraged to doodle and the drawing prompt was now considered something additional to the group that might or might occur in any given session; but, the invitation to doodle was always available.

2019/20 not only was the academic year that was interrupted by the COVID-19 lockdown, requiring that what was previously conceived as an in-person academic meeting become one that was entirely online, it also was the year that the HeNReG adopted its continuing method in all respects. Regarding the private Facebook group, although numbering the entries for any particular date had differentiated them the previous year, participants still had trouble locating their specific entry when viewing the private Facebook entries because they didn't relate their entry to the number provided to them in the entries. As a result, the entries now began with the first name of the participant as a heading and, on the line below, the date was listed. What followed was the names of the people who participated that particular day, the person's response to the prompt and any

questions they received. Drawing prompts were no longer a feature of the group; on the other hand, similar to the previous year, the encouragement was given to people at the beginning of the meeting to doodle and, once their doodles were collected, they were posted to the private Facebook group. The major change of group was moving from in-person meetings in the hospital's occupational therapy room to online meetings, with both a synchronous and asynchronous component on the private Facebook group, as a result of the COVID-19 lockdown mid-March. Now, any doodles initiated by group members on their own were dependent on the participant already having their personally sought-after materials with which to doodle.

The organization of the 2020/21 academic year in all regards followed that of the 2019/20 year once the group moved online to the private Facebook group as a result of the COVID-19 pandemic.

The various features of the HeNReG over each of the six year of its operation are outlined in Table 4 with respect to whether or not any year had a particular feature.

Table 4. Features of the HeNReG Over its Six Years of Operation.

Feature of the HeNReG	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Called the Health Narratives Research Group	No	Yes	Yes	Yes	Yes	Yes
Used method of question asking	No	Yes	Yes	Yes	Yes	Yes
Posts on private Facebook group ordered by date	No	Yes	Yes	Yes	Yes	Yes
Posts on private Facebook group ordered by participant name	Yes	Yes	No	No	Yes	Yes
Posts on private Facebook group ordered by number	No	No	No	Yes	No	No
List of attendees posted on private Facebook group	No	No	No	Some	Yes	Yes
Drawing prompts provided	No	Yes	Some	Some	No	No
Doodling encouraged from the beginning of the year	No	No	No	Yes	Yes	Yes
Meetings entirely online using the private Facebook group	No	No	No	No	A few	Yes

### 3.2. Participation During the Most Recent Three Years of the HeNReG

Participation in the HeNReG was in a number of forms. That which most group members responded to was participating in answering the weekly prompts provided the day before the meeting via Messenger. The second form of participation was attending the weekly two hour meeting. At the meeting, group members each participated in answering questions asked of them in relation to their response to the writing prompt. Members could decide whether or not they wanted to ask a question of another participant, representing another level of participation. Group members could also decide whether or not to doodle while at the meeting. An additional form of participation was responding to questions asked during the meeting asynchronously if the group member had not attended the meeting. Asking questions online of others was then a further form of participation. The last form of participation was merely looking at what was posted online without making any comment. How many members actually visited the private Facebook group to just look at what had been posted was information visible only to the facilitator, the private Facebook group account holder. Table 5 outlines each of these different forms of participation in the order they could take place each week.

Table 5. Forms of Participation in the Health Narratives Research Group by Order in Which They Would Take Place Weekly During the Academic Year

Order	Form of Participation
1	Responding to the weekly writing prompts sent via Messenger
2	Answering questions at the synchronous weekly meeting
3	Asking questions of others at the synchronous weekly meeting
4	Creating and describing doodles at the synchronous weekly meeting
5	Answering one's questions on the private Facebook group asynchronously
6	Asking others questions on the private Facebook group asynchronously
7	Looking at postings on the private Facebook group asynchronously

Given that the organization and delivery of the HeNReG has not remained static since 2015, and because some of the changes entail that the year by year results are not truly comparable, the outcome of the full year of the lockdown, 2020/21, will be compared in detail with only the two years that preceded it—2018/19 and 2019/20—after the group obtained its present form. The comparison will be by week, total number of participants, synchronous participation, asynchronous participation and the number of drawings received to be posted. Table 5 provides this comparison with respect to total participation, the participation broken into synchronous and asynchronous and the drawings that were received from participants for the full academic year. For a member to be counted as participating, the member at the very least responded to the weekly writing prompt. Merely looking at the postings on the private Facebook group is not counted as participating if this were the only method of participation as such participation was visible only to the facilitator, not to the group as a whole.

Table 6. Response to the Weekly Writing Prompts in Total Participation, Synchronous Participation and Asynchronous Participation Plus Response to the Weekly Requests for Doodles in Drawings Created During the Health Narratives Research Group, both In-Person and Online (Through the Private Facebook Group), Over the Three Most Recent Academic Years.

Week of Meeting	Total Participation			Synchronous			Asynchronous			Drawings Created		
	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
1	12	12	16	8	7	10	4	5	6	12	11	3
2	7	15	17	5	5	10	2	10	7	4	5	4
3	13	16	15	6	8	7	7	8	8	7	10	3
4	11	14	15	6	9	6	5	5	9	11	10	5
5	14	15	16	5	7	5	9	8	11	7	9	6
6	11	14	16	3	4	9	8	9	7	4	5	4
7	12	15	17	5	7	7	7	8	10	5	10	2
8	12	16	15	4	6	6	8	10	9	7	12	5
9	12	14	16	2	7	4	10	7	12	2	9	2
10	13	14	14	5	4	6	6	10	8	8	4	2
11	12	11	16	5	7	4	7	4	12	6	11	1
12	10	11	13	4	3	10	6	8	3	6	3	4
13	12	11	15	6	3	9	6	8	6	8	5	4
14	12	16	13	4	6	8	8	10	5	5	16	3
15	14	14	15	7	4	9	7	10	6	4	6	4
16	12	16	17	3	7	8	9	9	9	4	17	2
17	12	13	15	3	3	10	9	10	5	6	6	4
18	13	14	12	4	8	7	9	6	5	4	12	2
19	11	12	13	4	2	5	7	10	8	9	4	1
20	12	15	11	3	5	6	9	11	5	3	6	2
21	12	13	13	5	5	6	7	8	7	7	7	2
22	12	12*	12	4	5*	8	8	7*	4	5	2*	2
23	11	17	12	4	6	6	7	11	8	9	3	3
24	10	13	12	5	4	5	5	9	7	9	4	1
25	10	13	12	3	4	8	7	9	4	3	2	4
26	12	12	11	7	4	6	5	8	5	9	2	2
27	11	11	13	6	6	7	5	5	6	8	3	2
28	12	12	13	6	4	8	6	8	5	7	5	3
Average	11.68	12.36	14.11	4.71	5.36	7.14	6.68	7.96	7.04	6.39	7.11	2.93
Percent	68.71	53.74	70.55	27.70	23.30	36	39.29	34.61	35.20	37.59	30.91	14.65

\* From week 22, 2020, and throughout 2021, all meetings (both synchronous and asynchronous) conducted online rather than in-person as a result of COVID-19 limitations.

In examining the average participation of group members throughout the year in each of the three years, it appears on the surface that the average number of participants in total increased each year. Yet, recalling Table 1 and Table 2, the total number of participants in 2018/19 was 17, for 2019/20 it was 23 and, in relation to 2020/21, the participants numbered 20. This means that in actuality the total participation, although greatest in the most recent year, actually went down in the second year when the group had the largest number of participants. The reason for this was likely that more group members joined that year part way through the second term and a greater number took advantage of the lack of a requirement to attend each week. In each case, total participation began to drop off slightly near the end of the second term. This might be for a number of reasons. One is that the HeNReG extends its meeting schedule beyond that of other academic meetings at the university by ending the last week in April. During April, both students and faculty are busy with final papers and exams. Another reason might be that

the second term is a number of weeks longer than the first term for the HeNReG and a general fatigue may set in as the term extends beyond the length of the first term. An additional reason could be that the final six weeks are concerned with “why” questions about the participant’s research. As these questions are the most subjective and vague, it could also be that some participants didn’t feel as comfortable answering these questions and chose not to answer. The final reason that may have produced this result in the last two years is that, as a number of participants were healthcare providers directly affected by the pandemic, COVID-19 itself likely made it more difficult for them to participate in the group as the pandemic wore on. Still, each of these potential reasons is merely speculations as the reason for this lessening of participation towards the end of the second term was not investigated.

Regarding the synchronous participation, it is clear from Table 6 that, at the very most, only half of the group members ever attended the group synchronously—either in-person or online once the group met on the private Facebook group. Often the number who met synchronously was a quarter of the group participants. It is notable that the number who met synchronously was not greatly affected by the fact of moving the group online after 12 March 2020.

Before the pandemic, group participants preferred meeting asynchronously rather than synchronously. This is likely for one of two reasons: the group met in-person at a downtown hospital—and for many participants meeting at the hospital was prohibitive, both in time and distance; furthermore, the group met from 4:00 p.m.-6:00 p.m. when a number of the group participants were still at their place of employment and unable to attend. Yet, once the group only met online, some group members who had claimed they wanted to meet synchronously (but because the time and distance to travel did not) still preferred to meet asynchronously. These group members then demonstrated feeling most comfortable with meeting asynchronously. For those group members in healthcare who were directly involved with COVID-19, once the pandemic began, the primary reason regarding why they did not attend synchronously could be they did not have the opportunity because of the unpredictable nature of their responsibilities regarding COVID-19. Still, regardless of the limitations to meeting synchronously, slightly more people during the pandemic year participated synchronously than asynchronously.

Where the biggest change was evident in comparing the three academic years is with respect to drawings submitted. When the group met in person, the facilitator provided participants with paper and drawing materials to doodle. In other words, not only were the group members verbally encouraged to doodle, they were also given the means to do so. As well, many of the art materials that were presented by the facilitator to the group were considered by them to be attractive. While doodling in person pre-COVID-19, participants would often mention they were doodling because they wanted to try various artist’s materials [124]. In contrast, when they participated online from home, some group members may not have had artist’s materials and, thus, one of the reasons for them for creating the doodle was lost. It is most likely because they lacked artist’s materials that a number of them no longer felt as inclined to doodle. Another reason is that they some saw doodling as a cooperative effort that was not available to them when they doodled on their own.

What Table 6 does not reveal is the amount of participation that was generated with respect to asking questions of other members and participants answering these questions. This is evident from Table 7.

**Table 7.** Total Number of Questions Asked and the Number of People Posing Questions, Those Doing So Synchronously, and Those Asking Asynchronously During the Health Narratives Research Group, both In-Person and Online (Through the Private Facebook Group), Over the Three Most Recent Academic Years with Italics Representing Meetings that were Entirely Online as a Result of COVID-19

Week of meeting	Total Questions Asked and Number of People Asking						Synchronous Questions Asked and Answered						Asynchronous Questions Asked and Answered					
	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21			
1	37	7	74	7	54	8	33	29	62	37	54	33	4	0	12	19	0	0
2	33	7	71	5	74	8	26	16	71	21	74	47	7	6	0	20	0	2
3	62	6	112	8	61	9	61	26	102	49	53	32	1	10	10	25	8	0
4	59	6	118	9	61	7	59	29	115	64	61	21	0	22	3	6	0	0
5	72	6	115	7	44	4	71	19	95	36	44	8	1	14	20	33	0	7
6	37	3	49	5	57	7	35	11	48	12	57	30	2	3	1	21	0	7
7	54	5	96	8	85	11	53	18	86	46	83	33	1	20	10	23	2	1
8	44	4	100	8	53	5	34	11	84	31	53	21	10	15	16	18	0	3
9	43	3	89	8	70	6	36	5	79	38	70	24	7	10	10	12	0	2
10	43	5	75	7	59	7	42	18	53	12	59	23	1	7	22	10	0	6
11	50	5	73	9	48	4	43	15	65	37	48	12	7	15	8	21	0	0
12	36	4	39	4	63	7	35	12	36	10	32	25	1	0	3	1	31	4
13	57	6	37	4	75	7	55	23	33	11	62	32	2	5	4	8	13	3
14	47	4	86	7	50	6	46	12	78	22	50	17	1	9	8	7	0	0
15	71	7	49	4	44	4	65	37	49	15	42	14	6	12	0	6	2	0
16	30	3	70	8	39	4	30	6	63	35	39	15	0	6	7	1	0	0
17	33	3	58	5	51	5	33	6	45	11	51	23	0	3	13	4	0	0
18	49	4	100	10	55	5	49	13	92	50	52	30	0	4	8	1	3	0
19	37	4	37	4	46	3	37	12	26	6	46	26	0	9	11	3	0	0
20	37	3	72	5	45	5	37	6	72	21	44	23	0	3	0	11	1	0
21	54	5	63	5	39	4	54	16	63	26	39	18	0	3	0	5	0	0
22	40	4	36*	4‡	29	3	40	12	33*	6‡	28	10	0	3	3*	7‡	1	0
23	40	4	53	5	36	3	40	12	53	19	36	20	0	7	0	0	0	0
24	35	5	24	4	13	1	35	17	24	8	13	3	0	3	0	0	0	0
25	30	3	31	4	53	5	27	8	31	6	50	33	3	2	0	0	3	8
26	66	7	28	3	34	3	65	34	28	7	30	15	1	7	0	0	4	0
27	68	6	23	4	38	3	68	32	23	13	38	19	0	0	0	0	0	2
28	65	6	20	2	38	3	65	26	20	4	38	21	0	0	0	0	0	2
§Ave/week	47	5	64	6	51	5	46	17	58	23	48	22	2	7	6	9	2	2
†Ave/Part.	2.8	<b>28</b>	2.8	<b>25</b>	2.5	<b>26</b>	2.7	1.0	2.5	1.0	2.4	1.1	0.1	0.4	0.3	0.4	0.1	0.1

\* From week 22, 2020, and throughout 2021, all questions asked online (both synchronously and asynchronously) rather than in-person as a result of COVID-19 limitations.

‡ From week 22, 2020, and throughout 2021, all questions answered online (both synchronously and asynchronously) rather than in-person as a result of COVID-19 limitations.

§Average per week calculated in whole numbers. Average per participant calculated to one decimal place.

†The three numbers in bold on the Average per participant line, under number of people asking, represent the percentage of participants who asked questions in any week for the three years represented, not the average.

During the time the HeNReG met in person, before mid-March 2020, everyone at the meeting was asked by the facilitator to provide a question to all participants in relation to each person's five-minute stream of consciousness writing in response to the weekly

prompt. Although some people might pass—and this was an acceptable practice—it was unusual for any group member not to ask another participant a question. In other words, every group member of those present asked every other one a question with respect to their response to the prompt. When the group met online, this changed. Online, group members would ask questions of only a few of the participants. As well, some people's responses to the prompt would elicit very few questions while other responses would get many more. It is quite possible that fewer people began to attend synchronously in 2021 after the first few weeks because they were not getting questions from many participants. However, whether this was actually the case was not tested. What is interesting is that although question-asking changed once the group went entirely online, the average number of questions per each participant remained constant over the three years with the average percentage of group members asking questions any particular week being 28% the first year, 25% the second and 26% the third. The most notable change once the pandemic marshalled the group online is in those questions asked and answered asynchronously. Very few participants who would go to the group asynchronously would either ask a question of others or answer the questions that others had posed to them. Yet this lack of asking or answering questions did not decrease their weekly participation in responding to the writing prompt (as seen by the total participation from Table 6). It is quite possible that the reason for this diminished participation was COVID-19 related—researchers wanted to continue with the group but felt they had a limited amount of energy to invest. Yet, there might have been a number of reasons why participants didn't choose to attend synchronously any particular week as there was no requirement that members attend and there was no financial loss to not attending. This type of information was not evident in assessing the number of questions asked and the number of people posing questions. How the group members did assess their participation is apparent with an examination of the written responses to the yearend feedback forms, next to be highlighted.

### *3.3. Feedback During the Most Recent Three Years of the HeNReG*

Feedback forms were provided to participants of the HeNReG online twice yearly: at the end of the calendar year in December and at the end of the academic year in April. The form that was provided for feedback is one common to all offerings of the Health, Arts and Humanities program through the Department of Psychiatry of which the HeNReG is among. The primary purpose of the form is to give participants the opportunity to reflect on the experience of undergoing the process of narrative research encouraged by the group. Three of the questions asked on the form allow for extended written responses. It is these detailed responses that provide direct insight into the experience participants had with respect to the group. What is to be presented for comparison is the April feedback responses for each of the 2018/19, 2019/20 and 2020/21 academic years regarding these three questions—How was the group valuable to you as a researcher? How might the HeNReG be of help to you in the future? Do you have other thoughts/comments on your experience as a participant in the HeNReG this term, especially as a result of COVID-19? The results will be provided consecutively in each of Table 8, Table 9 and Table 10. In these tables, the responses are listed as they were received by the facilitator when the forms were returned. In certain cases, though, the response offered by one participant included mention of more than one theme. When this occurred, each theme mentioned was recorded. Therefore, the listing of the theme in these cases took precedent over indicating the order in which the form was returned.

With respect to Table 8, the responses provided to "How was the group valuable to you as a researcher?" were quite similar in each of the three years, although 2018/19 had in-person meetings throughout the year, 2019/20 was interrupted by the COVID-19 lockdown mid-March 2020, and 2020/21 was entirely online. In these three years, the primary responses were that the HeNReG (1) encouraged self-reflection on research, (2) provided the perspectives of other researchers and (3) gave a safe place to verbalize ideas about research. Secondarily, participants from all three years thought the HeNReG challenged

their thinking about research. Since the same questioning structure was used in every one of these years and only participants from the two most recent years mentioned the HeNReG presenting a useful and easily employed structure for asking questions, it is possible that the response by two members in the first year—that they HeNReG invited a broader view of research—pertains to the question-asking structure. This is possible as, similarly, no participant in either of the most recent two years mentioned the importance of a broader view of research per se. These responses provided by the participants were found to be to the same degree that would have been anticipated by the facilitator in participants providing feedback about the group.

Table 8. 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 three most recent academic years in order of receipt of feedback forms from group members

Themes Mentioned in Feedback Forms	2018	2019	2020
	2019	2020	2021
Enhanced my work as a narrative researcher	1		
Encouraged self-reflection on research	4	4	5
Provided the perspectives of other researchers	4	3	4
Helped in greater understanding of one's research	2	1	
Sharpened thinking about research	2	2	1
Invited a broader view of research	3		
Gave a safe space to verbalize ideas about research	1	4	4
Challenged my thinking about research	1	1	2
Restfully cleared my thoughts regarding my research		2	
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	
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

Table 9 provides the responses participants gave to the question How might the HeNReG be of help to you in the future? The most frequent reply was it helped by using the structure of the weekly prompts to guide their self-reflection. Since the most unique aspect of the group differing it from other health-humanities offerings was the structure created for question asking, it is important to note that this structure was mentioned in all three years as potentially helpful by the greatest number of people. Three other comments regarding how the HeNReG might be helpful in the future were made by at least one participant each year: (1) Offering different points of view, (2) Decreasing my confusion about what should be my focus in my research, and (3) Keeping me updated on interesting topics in various fields. Given that it was considered important to the success of the group for it to include members from diverse backgrounds and have the ability to

help reduce depression and anxiety with respect to their research, that participants would mention these aspects of the HeNReG might help the participants in the future was in line with the intention of the program.

Table 9. 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 three most recent academic years in order of receipt of feedback forms from group members

Themes Mentioned in Feedback Forms	2018	2019	2020
	2019	2020	2021
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
Decreasing my confusion about what should be my focus in my research	1	2	1
Sharing resources	1		1
Making me more open minded	1	1	
Permitting me to grow as a researcher	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		
Helping me plan my research	1		1
Expanding my research to other fields		2	1
Increasing my confidence as a researcher		1	
Learning more about various ways of expressing oneself creatively		1	
Practicing writing		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
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

Table 10 concerns answers to the question Do you have other thoughts/comments on your experience as a participant in the HeNReG this term? In the most recent two years, after COVID-19 moved the group entirely online, “(especially as a result of COVID-19)” was added to the question. There was only one response that was common to all three years: I liked the option of participating remotely, I didn’t have to travel. This response corresponds to what was found regarding the use made of online participation by group members evident in Table 6. It is remarkable that even when participants were specifically prompted to give their opinions related to the how COVID-19 affected their participation in the group, there were only three references to COVID-19—two expressing they hoped COVID-19 ended soon and only one indicating that COVID-19 had directly affected their ability to participate. One group member mentioned that the HeNReG got

them engaged during the lockdown. In that there were more group members whose participation was affected by COVID-19, it is worth noting that thoughts of the pandemic were not foremost in their mind when providing their additional comments.

Once the group's meetings were entirely online in the second year and throughout the most recent year, some group members were aware that the participation in the group changed. Participants either noted their own decrease in attending or that the group as a whole had less participation (even though, in actuality, the participation was comparable to when the group met in person). Exhaustion and/or isolation, both problems mentioned, might be reasons why participants felt that there was less participation in the HeNReG than they anticipated.

Table 10. 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 three most recent academic years in order of receipt of feedback forms from group members

Themes Mentioned in Feedback Forms	2018	2019	2020
	2019	2020	2021
This is a good program	1		
A wonderful experience	1		
I love this group!	1		1
I liked the option of participating remotely, I didn't have to travel	1	2	3
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 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 express myself in a non-judgmental 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
I love the doodling aspect and seeing people's doodles		2	
Maybe we could include video chatting		1	1
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
I had expected this was a creative writing group, but I easily shifted focus		1	
I hope COVID-19 ends soon			2
Switching to online decreased the amount that people doodled			1
Fewer 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; it's 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

There were four comments in Table 10 over the three years that mentioned either drawing or doodling. In order to capture participants' thoughts on doodling more directly, regarding the most recent year of the HeNReG meetings, an additional question was added to the feedback form: What are your thoughts on doodling aspect of the

HeNReG experience? The two most common responses that participants provided were (1) It helps me, and (2) I loving doodling. There were only two people who mentioned they did not doodle. This very positive response to doodling was unexpected as, in reality, only a few people doodled during the 2020/21 year. Yet, regardless of whether they themselves contributed their doodles, they felt that the doodling was valuable, either in helping them directly in some way or because of a love they had for doodling. These responses provided support for continuing to included doodling as part of the group's activities in the years to follow, but were curious given the low-level of participation in doodling during the pandemic.

Table 11. Themes in responses provided on the April feedback forms of the academic year in answer to What are your thoughts on doodling aspect of the HeNReG experience? for the academic year when the question was included on the feedback form in order of receipt from participants

Number*	2020/21 Themes in Responses to Question About Doodling
2	I do not doodle
2	Gives me something to do
1	I get carried away with doodling sometimes
6	It helps me
5	I love doodling
1	Some of them look super amazing!
2	Great aspect

\* Feedback is provided by 19 rather than 20 participants as one group member had left the group to concentrate on his research by the time feedback was requested in the second term.

#### 4. Discussion

The results comparing the three most recent years of the HeNReG meetings have demonstrated that in a group that is free to participants, voluntary, egalitarian—and both geographically and by discipline—diverse, there was little change in participant behaviour with respect to responding to writing prompts and the number of questions and responses provided by participants when the COVID-19 limitations were imposed and the group was moved entirely online. What did change was a decrease in participants' response to everyone in the group in comparison with when response to everyone was a practice maintained and encouraged at the in-person meetings before COVID-19. An even more significant change was the decrease in number of doodles created and posted to the private Facebook group. Interesting to note is that, in the feedback provided by group members in each year, the group as a whole was either unaware of these changes to how the group functioned or did not consider the changes important to mention as feedback. Still to be considered is in what way these decreases in participation actually mattered to the function of this specific form of academic meeting as a result of the pandemic.

##### 4.1. COVID-19

From the time of the lockdown on 12 March 2020 to the end of the current year of the HeNReG meetings, 28 April 2021, there was significant change regarding information about the dire conditions with respect to COVID-19 regarding morbidity and mortality. The information pertaining to the pandemic could be very concerning, this is especially so for those working in healthcare who were members of the HeNReG. Until vaccines were able to be administered to the public in the spring of 2021, there was a high level of uncertainty regarding the continued health of any one individual and of society as a whole.

It is for this reason it was unexpected that the group behaviour would be affected so minimally with respect to COVID-19. If not for a few group members having to stop attending as the weeks went on as a result of their responsibilities as healthcare providers, and others mentioning their interest in the pandemic ending when asked directly, there would have been no way to tell from behaviour or responses that a pandemic was influencing the lives of participants so greatly.

#### *4.2. Choice of Online Platform*

Based on the last three years' worth of data regarding participation in the HeNReG, it is evident the preference for group members in participation is asynchronous. As such, it calls into question the view that synchronous meetings are the gold standard, giving additional reason why a videoconferencing platform, like the popular Zoom, may not be the optimal choice for a meeting such as the HeNReG, that focuses on both written and drawn replies.

Why synchronous meetings are not preferred appears to have little relationship to the limitations imposed by COVID-19. Although group members who had attended the in-person meetings in the past missed the collegiality offered, when given the choice to attend the private Facebook meetings synchronously, most opted regularly to access the private Facebook group on their own time. This result was observed in each of the three years.

However, in making this choice to attend asynchronously, group members were not provided with similar resources in their participation. The result of this was most evident in the majority of group members choosing not to doodle.

The private Facebook group retained the advantage of providing an online space where all questions, responses and drawings could be posted in a permanent chronological order by the name of the person posting. When members prefer to join the discussion asynchronously, these are important features.

#### *4.3. Academic Meeting Features*

The results of this specific academic meeting directly pertain to the particular structure upheld for the HeNReG. It is a group based on self-directed learning, team mindfulness and democratically run meetings. How this overarching structure affected the outcome of each of the three years and, most specifically, whether the design of the group was altered as a result of COVID-19 is to be considered.

##### *4.3.1. Self-Directed Learning*

COVID-19 limitations had an effect on the self-directed learning of group members. Agency and activity are required in an autonomous learning environment, but when the meetings of the HeNReG went entirely online participants directed their learning less often to the each of the various ways of participating. Although there was no difference between responses to the prompts in comparison to pre-COVID-19, fewer participants chose to ask questions of others or to answer the questions others asked of them. The type of participation that decreased most obviously was the creation of drawings. Far fewer group members chose to submit doodles at the end of the meeting, yet their responses on the feedback form do not indicate any change in their interest in creating doodles. In this respect, group members seemed unaware that their self-directed learning had decreased significantly in this regard.

It is unclear whether this reduction in certain types of self-directed learning endeavours is a result of moving the group's activities entirely online, the restrictions brought on by COVID-19, or both. However, one study of self-directed learning after learning moved to online networks also found that under these conditions more participants watch what others do rather than participate directly, calling these silent participants "lurkers"

[125]. In a further study of 846 participants regarding self-directed online learning, the decrease in synchronous participation evident with the HeNReG was also found with a decrease of more than half of the original number of synchronous participants by the end of the 40 sessions of weekly meetings [126]. In other words, moving the group online may have been sufficient reason for these changes in synchronous participation and COVID-19 was merely the catalyst to this change in the meetings' platform.

#### 4.3.2. Team Mindfulness

Team mindfulness, as a flexible manner of interacting with team members where group participants are actively engaged in the present, notice new things and are sensitive to the context in which new information comes to the attention of the group [127], was a prominent feature of the HeNReG in-person meetings during the time when the group met synchronously in person. Then, each participant would listen to others read their response to the prompt and provide them with a question the reader answered to further enrich what they had written. During this time, as people waited to answer questions, they were able to make use of the art resources available and doodled. Once the group moved entirely online, there was little meaning to team mindfulness—participants, even when engaging with others, did so as individuals rather than as a mindful team.

Whether the limitations imposed by COVID-19 are a cause of these more individually-focused results of group members is at issue. Research into the effect on team mindfulness resulting from a move to online meetings indicates that the virtual quality of the meeting in itself is sufficient to demonstrate this outcome [128]. In this regard, communication among virtual team members is seen to resemble multiple monologues where team members concentrate on providing what they know rather than dialogues where they share information in relation to considering the contributions of others.

This loss of team mindfulness in relation to moving to an online platform is particularly troubling with respect to the function of the HeNReG. The aim of the HeNReG is to reduce researchers' depression and/or anxiety with respect to their role as researchers, yet it is team mindfulness which has been recognized as a necessary ingredient to positive psychological, physiological and performance changes in work-related teams [129].

#### 4.3.3. Democratic Meetings

The collegiality necessary to reduce depression and anxiety in researchers has been identified as best served by democratic meetings. Action research is the umbrella term for activities intended to foster change through recurring cycles of action and reflection [130]. In this regard, how the HeNReG meetings are constructed represents a form of action research. This type of research demands collaborative interaction among various perspectives with the democratic meeting at the heart of the effort.

Although the composition of HeNReG members retained its diversity once the group no longer met in person, the democratic nature of the meetings was reduced. Those who were directly involved with healthcare delivery were greatly affected by their duties related to COVID-19. The group lost more than one member during the year as a result of their lack of time to devote to anything but their job related to COVID-19. As such, the diversity of the group was reduced directly as a result of COVID-19.

Once the group moved entirely online, another consequence was that group members no longer had access to common art resources available to doodle—likely an important reason why doodling dropped off significantly under this condition. Democracy in meetings, in this regard, not only involves the diversity of participation. It also includes equal access to resources. When access is not equal, it has been found that group trust and cooperation is diminished [131]. A lack of trust causes problems as group members are less likely to participate when their expectation of social exchange is not met [132]. It may be that a lack of trust developed among the researchers once they could no longer expect to receive questions from all participants and they no longer answered every

question they received. Mutual trust is recognized as necessary for equality of relationships [133]. Without equality of relationships, the meeting loses its claim to being democratic.

## 5. Conclusions

The purpose of this study was to determine to what extent the results of the years that the Health Narratives Research Group met in-person could be compared with changes in how the group functioned once the meetings were required to be online as a result of limitations to academic meetings imposed from the COVID-19 pandemic. Given that the manner in which the group functions has evolved since the group (as sponsored by the Department of Psychiatry) began in 2015, it was determined that the only years comparable were the three most recent—2018/19, 2019/20 and 2020/21. Of these, the synchronous meetings of the first year were conducted entirely in-person. During the next year, the meetings were in-person until after 12 March 2021 when all academic meetings were required to be online. For the final year, all meetings were online. In comparing the number of participants—synchronous, asynchronous and in total—it was found that there was little change in participation moving the group online during COVID-19. The change in participation that was found concerned the number of doodles produced. Synchronous meetings online coincided with significantly fewer doodles produced. Similarly, the number of questions asked and answered in each of the three years was comparable although fewer people were involved in asking more questions. These changes with respect to doodles and the number of different participants asking and answering questions were, for the most part, not recognized by participants as reported in the feedback forms. In examining the written responses on the feedback forms, the comments from one year differed very little from those of another. The success of the group in participant satisfaction was both constant and high.

Nevertheless, regardless of its obviousness to participants, there were substantial differences in how the group operated once its synchronous meetings moved online. These changes were with respect to three aspects: self-directed learning, team mindfulness and democratic meetings. Once the synchronous meetings were online, fewer group members asked and answered questions, affecting both the self-direction of participants and their team mindfulness. As the equality among members with respect to their type of attendance changed, so too did the democratic nature of the HeNReG meetings. In relation to the philosophy of the HeNReG, there is a landscape of truth in which participants situate themselves and how participants related in the landscape had been modified.

The point of the HeNReG in holding meetings is for each participant to create routes from where they are in the landscape to where others reside with respect to their research related to health. Analogously, what changed when the group was required to meet only online was a reduction in routes participants created to other researchers. In other words, participants retained their ability (and perhaps even enhanced it) to describe where they were located in this theoretical landscape. However, what they didn't do as much as when the group met in person was venture out into the landscape to meet up with others. Interestingly, what happened with respect to sheltering at home in the physical sense as a result of COVID-19 lockdowns also was seen to happen figuratively in the landscape of truth. Participants were less trusting than they were during in-person meetings of venturing into the landscape and finding connections between their research at that of others.

Whether COVID-19, with respect to feelings of isolation and worry about the mortality and morbidity of the pandemic, is the reason for this reluctance to develop research-related routes to others in the landscape of truth or it is just the fact of moving all synchronous meetings online is the question. The major limitation of this study is that both the quantitative and qualitative analysis provided were unable to identify COVID-19 and online participation as independent variables. On the other hand, the research that has been conducted on moving synchronous meetings online has found that this self-direction

as a monologue rather than a dialog occurs regardless of other limitations. In this regard, it would seem that if a decision had been made to move the group online pre-COVID a similar result would have been noted. Nevertheless, it is unclear in what way the extent of reluctance to include others' perspectives with respect to self-reflection on research related to health was affected by the COVID-19 pandemic.

One of the reasons for the difficulties in continuing with the aim of the HeNReG—participants developing routes to other researchers regarding these researchers' understanding of their work—is that to enrich self-reflection on one's own research is in the nascence of online platforms. Although, for the purpose of the HeNReG, private Facebook groups were judged to be more effective than Zoom, these private Facebook groups have limitations in three main areas.

The first limitation is the search function on these private Facebook groups for specific entries is imprecise—a search for an exact phrase often produces results that include other entries that have similar information and misses some preferred entries. This disadvantage was evident when the data were being gathered for this study. This is a problem because it means that, although the private Facebook group is searchable by person entries, it is not reliably so and this hinders the ability of researchers to use the private Facebook group to ask questions of particular researchers asynchronously.

A second constraint is that the private Facebook group does not include a tool for creating surveys of group participants. In order to create and analyze the feedback forms for the HeNReG twice a year, Google forms [134] was used. Once the form was designed and ready to be completed, the facilitator attached the form to a message sent by Messenger to each of the HeNReG participants. If Facebook included the creation of feedback forms for its private groups and automatically sent these forms to all group members, this would make the private Facebook group not only a method of archiving academic meetings it would expand the idea of a meeting to include methods of group evaluation—a necessary ingredient of in what makes a meeting academic and could permit group members to conduct their own research on the group for developing these routes in the landscape of truth.

The third limitation is that whatever physical resources were provided to participants in-person are lost when academic meetings move online to a private Facebook group. Although Zoom, beyond private Facebook groups, is able to provide the ability to share screens during meetings, in a group like the HeNReG that depends on the sharing of art resources, there is currently no online program available that permits synchronous meetings where art materials can be shared and only an avatar of the participant created by the participant is visible onscreen. In this respect, what is needed to be developed for online platforms for synchronous meetings to provide a similar experience to that of in-person meetings is for a virtual meeting space to be created into which a personally relevant avatar can move around naturally and be seen by all participants to make use of resources provided in the space.

An online platform similar to Kumospace [135], in which small real-time videos of participants act as avatars to meet and explore in a designed space while clicking on items to attach to their video, is a promising direction. A similar platform using non-personally invasive avatars is currently being developed by the Harvard Graduate School of Design [136]. However, problems still to be overcome are the ability to create a preferred avatar (rather than depending on a program selected one or a video revealing self and work space) and actually using the virtual resources to create the type of results with which participants would be satisfied in a way similar to in-person meetings are both still to be solved. In the regard, the concern is to make online-meetings more like a video game in which participants can interact and create (similar to Animal Crossing [137] or Minecraft [138]) with respect to a way that is relevant to the research interest of the participant rather than the game, somewhat similar to the gamification of ChemDraw, a molecule speed-drawing tournament [139]. Furthermore, including the capacities available from a private Facebook group to permit participation to be stored through writing by group members, rather than clicking on pre-determined questions and answers, is still to be solved.

One result of COVID-19 that would not have occurred, with respect to moving a group like the HeNReG online, had the pandemic not necessitated a lockdown, is that potential participants have as a result all learned how to attend academic meetings online and online meetings have become the standard. As such, the need to make synchronous online academic meetings more user friendly, less personally invasive, visually attractive and resource providing is the direction that online platforms should evolve if online academic meetings are to provide a similar type of experience to the one previously provided by in-person meetings. For academic meetings intended to be self-directed, team mindful and conducted democratically, the future development of these types of online platforms is imperative if the landscape of truth that is to be of use to health researchers in decreasing their depression and anxiety while providing a structure for continuing their health-related research throughout their academic careers.

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