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The Experience of Mentoring Students Online: An Evaluation of the Transition from Face-to-face to Online peer mentoring

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Peer mentoring has long been employed as a method of facilitating the learning process with peer mentors or learning facilitators as also described in this paper, serving as an alternative to faculty teachers. However, there is dearth of qualitative studies exploring the experiences of learning facilitators teaching or mentoring (the two terms will be used interchangeably) in an online environment. The aim of this study is to examine how undergraduate students at the largest college in Greece experienced and evaluated their roles as learning facilitators and to what extent their role was hindered or enhanced in a virtual setting. I conducted semi-structured interviews with learning facilitators who have experienced both online and face-to-face peer mentoring. Upon the transcription of the interviews verbatim, I performed qualitative thematic analysis. The results revealed that all peer mentors prefer face-to-face mentoring to e-mentoring and unanimously believe that online mentoring cannot replicate the practices of face-to-face peer mentoring.

Keywords: mentoring, online, higher education, impact

Introduction

Although the popularity of peer mentoring has increased in higher education in the United Kingdom, good quality, evaluative research on peer mentoring remains scarce (Collings et al. 2014). The findings of the bulk of research focus on the positive effects peer mentoring exerts on academic achievement and retention (Drew et al. 2000; Budney et al. 2006; Crisp 2010). However, the growth of mentoring programmes in a technology-mediated environment and their potential to raise student engagement warrant further research on processes and the factors enabling or even constraining successful online mentoring. This study aims to contribute to existing research on the effects of peer mentoring by studying such effects in the underexplored area of online peer mentoring. In particular, this study has shed light on online peer mentoring with a specific focus on the mentor's perspective and experience. While the mentor's perspective is more likely to be overlooked with emphasis being placed on the mentee's perspective and how the latter would evaluate the method, it is worth examining the mentor's perspective while delivering their mentoring online. That is to say that the feelings of the service provider need to be examined prior to examining the service itself. The purpose of this paper is to examine the effects of

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technological mediation on the mentoring process such as on mentor-mentee relationships and learning. In other words, the paper seeks to shed light on the effectiveness of online peer mentoring compared to face-to-face peer mentoring. As Zuhari et al. (2019) concluded, further research is worth conducting, specifically in the area of student support provided online, in line with the changing needs of students and recent advances in new technology. The objective of this paper is to illuminate the contributing factors for successful online peer mentoring and help us gain insight into the kind of support that is necessary for mentors in order to engage in effective online peer mentoring relationships. Therefore, the study has been carried out as a qualitative study with the following underlying questions:

1) What factors enable successful online peer mentoring?
2) What factors constrain successful online peer mentoring?

First, the key components of effective mentoring relationships are presented. Then, the way in which a virtual environment impacts peer mentoring is examined. Finally, factors that could moderate the effects of technological mediation on interaction with the student are discussed. It was found that online peer mentoring cannot replicate face-to-face mentoring; possible reasons are examined and discussed.

Literature Review

Defining Peer Mentoring

One of the main challenges regarding the definition of peer mentoring is the fact that across the literature there are various terminologies used to describe mentoring such as guiding, tutoring and assisted learning (Kram 1985; Topping 1996; Dioso-Henson 2012). As a result of this wide-ranging terminology, the terms are frequently mixed-up or used interchangeably. Making things clearer, Collier (2017) differentiates between *hierarchical mentoring* and *peer mentoring*. *Hierarchical mentoring* occurs when two people from two different social positions such as a counselor and student or an academic advisor and student or even a faculty member and student are involved, whereas *peer mentoring*, which is the focus of this paper, is described as a relationship involving a more experienced student providing assistance, knowledge and advice to a less experienced student. Shifting away from hierarchical mentoring, which I myself practise as an academic advisor, my aim is to examine the strengths and weaknesses of peer mentoring which take place not in the typical face-to-face form, but in an online environment which became the norm in the COVID-era and might continue in the high-tech modern era. Since the environment in which a service takes place is of paramount importance, the concept of the mentoring environment is analysed next.

The Mentoring Environment

Davis and Nakamura (2010, p. 1060) characterise the mentoring environment as a *"function of a relationship that rests upon a set of interactional foundations that allow a protégé to capitalize on the strengths of the mentor thus facilitating behaviours that will enable the protégé to develop and internalize the requisite knowledge, skills, and attitudes (KSAs) as fully as possible".* However, Sng's et al. (2017) description of the impact the role of the mentor and the host organization can exert on the mentoring relationships has challenged its applicability in the modern practice of mentoring. Given the dearth of studies on mentoring environments, Kalen, Ponzer and Silen (2012) argue that learning environments could be used to provide understanding of mentoring environments. To clarify, the learning environment structure consists of five sub-themes including the host organisation, the formal curriculum, the tutor, the learner and the relationship between them (Hee et al., 2019), which is the focus of this study and specifically how this is experienced in an online setting. Accordingly, a collaborative relationship based on mutual *commitment*, *cooperation* and *authenticity* fosters the relationship between the tutor and the learner, enhancing the creation of personalised ties while preventing the isolation of the learner (Hee et al., 2019). Extrapolating learning environment data to the mentoring environment setting is possible considering the commonalities in both settings and as a result mentoring environments can be defined as *"shaped by the nature, culture and structure of evolving mentoring relationships between the mentor, the mentee, the host organization and the curriculum (henceforth quartet of stakeholders). Mentoring environments evolve to support and nurture mentoring relationships in dynamic conditions and as particular relationships amongst the quartet of stakeholders change."* (Hee et al., 2019, p.2196). The key components of effective mentor-mentee relationships in this quartet are analysed next.

The Key Components of Effective Mentoring Relationships

Researchers on youth mentoring define the quality of mentoring relationships as based on the *frequency of contact* between the mentor and the mentee, *emotional closeness* and *durability* of the relationship (DuBuois et al. 2011). Rhodes et al. (2005) also acknowledge mentor-mentee *closeness* and *empathy* as two crucial contributing factors to high quality mentoring relationships.

Emotional Closeness

As Latino and Unite (2012) argue, students can share concerns with their peer educators more freely than with their professors as the former can be less intimidating. Supplemental Instruction as mentioned in their study fosters a nonthreatening environment since learning is facilitated by peers. As a result, the approachability of peers can be crucial for first-year students who may feel home-sick and find it difficult to develop a sense of belonging. Indeed, a mentor who has already experienced or currently faces similar challenges is in a better position to relate to their coevals. As Griffin and Romm (2008) pinpoint, peer educators can bridge the

gap between the faculty and the student body, guide students to campus resources and constitute role models for academic and co-curricular behaviours.

Empathy

Student tutors and student learners having similar social roles are thought to be *socially congruent* (Schmidt, 1995). In other words, interpersonal qualities shared between mentors and mentees not only enhance informal and empathic communication, but also establish a learning environment which promotes an open exchange of students' personal concerns and ideas. Equally important is the role of *cognitive congruence* according to which student tutors and student learners have similar learning experiences and a similar knowledge base and are therefore considered to be on the same 'wavelength' (Bugaj, 2019). Indeed, the lack of knowledge and expertise of mentors, compared to more experienced faculty members could be offset by *cognitive congruence* (Dolmans et al, 2002; Groves et.al. 2005). The concepts of *social* and *cognitive congruence* are further analysed next.

Social and Cognitive Congruence

Research on the relationships created throughout peer mentoring in educational contexts highlight that effective mentors can respond to mentees' academic and psychosocial requests as well (Ward et al., 2014). Such levels of response postulate social and cognitive congruence (Ten Cate and Durning, 2007). Social congruence can be enhanced when mentors disclose information regarding their own learning experiences and reveal their own past or even present learning challenges (DuBuois et al. 2011). In turn, mentees are then more likely to disclose their own learning gaps thus enabling support from their mentors. Equally important to social congruence is cognitive congruence which is defined as the ability of mentors to understand the cognitive and learning challenges of their mentees as well as anticipate any learning difficulties (Melgar and Meyers, 2020). When this is coupled with social congruence, mentees feel that the difficulties they face in the learning process are not only realised by mentors, but also addressed through explanations suitable for their learning needs (Melgar and Meyers, 2020). Social congruence has to be established prior to the mentors' use of cognitive congruence to provide academic support. In other words, the establishment of a strong emotional connection is necessary before mentors proceed with the achievement of the objectives of the programme or the academic support of the student. The extent to which social and cognitive congruence can be achieved in the online environment will be discussed, but first it is worth comparing online with face-to-face mentoring.

Online vs Face-to-face Peer Mentoring

The onset of the pandemic has proven that peer mentoring can take place in a technology-mediated environment, replacing the common in person-experience with online mentoring. Online mentoring can be both synchronous, with the use of video and audio-conferencing tools, and asynchronous using text-based media

(Schwartzman, 2013). Mentors, however, are faced with the challenge of maintaining student-centredness and engagement while providing their services online. Although the implementation of programmes that render peers as leaders in the academic domain continue to rise (Keup and Mullins, 2010), there has been scant research on whether these programmes could be successful in an online setting. As Melgar and Meyers (2020) highlight, in spite of the growing significance of online mentoring, studies on particular mentoring dynamics remain scarce. However, focusing on existing research on online mentoring, they argue that the online communication environment offers various advantages to participants in comparison to face-to-face mentoring programmes. Specifically, online mentoring can render all participants equal as demographic characteristics can affect interactions less (Scogin and Stuessy, 2015). Consequently, interactions between mentors and mentees are based on common goals and interests rather than on perceived differences or similarities stemming from demographic factors. Using online technologies may also be seen as less intimidating than interacting face-to-face by some online mentoring participants (Scogin, 2016). Hizer et al. (2017), in their study regarding the effectiveness of online supplemental instruction found that the outcomes of students taking part in online sessions were equivalent to those participating in face-to-face ones, a fact suggesting that the online environment was not an impediment to the effectiveness of the programme.

A number of challenges regarding online mentoring programs do exist however, mainly related to engagement and whether this can be sustained via online communication platforms, especially when the mentor-mentee interaction is exclusively online (Melgar and Meyers, 2020). Decreased engagement can result from the lack of real time interaction, especially if contact between mentors and mentees is not frequent and timely. However, web-conferencing, among other synchronous communication tools, target to address the shortcomings of asynchronous tools since participants can employ useful verbal information, such as words and tone of voice, and non-verbal information while interacting in the mentoring session (Melgar and Meyers, 2020). On the other hand, Shpigelman and Gill (2013) argue that limited digital literacy skills on the part of participants can affect online interactions and impact not only the motivation of participants to engage, but also the frequency of the mentor-mentee communication. Scogin and Stuessy (2015) in their study of online mentoring found that, despite the motivational support provided to mentors, there were variations in terms of the type and amount of support provided. They attributed these variations to challenges related to communication in an online environment and therefore recommendations were made for further training for online mentors. Shpigelman and Gill (2013) concluded that a more formal and distant communication style used by mentors in their interaction with mentees was conducive to unsuccessful online mentoring relationships. The authors also found that high levels of uncertainty in terms of which was the best way to use an online format led to unsuccessful interactions and, as a result, they recommend that online mentoring should function around specific discussion topics. Successful mentors, on the other hand, asked their mentees direct questions, employed a conversational style and offered them further learning resources (Scogin, 2016). Studies pertinent to the effectiveness of synchronous communication tools provide

mixed results. Beaumont et al. (2012) in their study of peer assisted programs found that a sense of connection between the mentor and mentee was low although communication took place through video conferencing and audio. Similarly, Hizer et al. (2017) in their research on the effectiveness of peer-led sessions at university in which both synchronous and asynchronous communication tools were used found that students opted for chat-based interactions instead of real time mentoring sessions. Overall, research on online peer mentoring programmes is an area that needs to be further developed with researchers calling specifically for further research on the effectiveness of synchronous communication tools in peer mentoring and to what extent they can replicate the face-to-face experience. The purpose of this paper as explained next is to contribute to this direction.

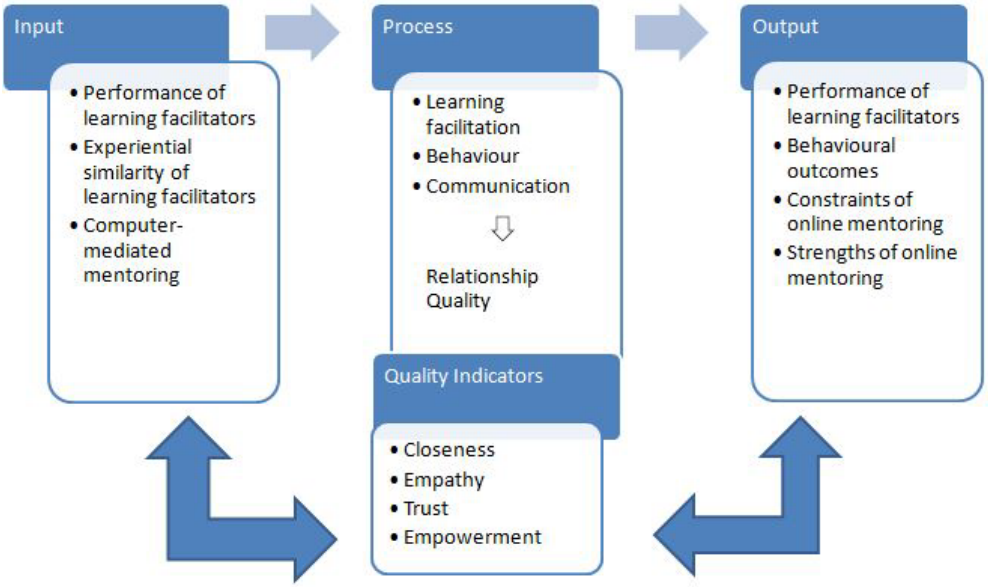
Methods

Research Design

This study provides a process evaluation with the intention of aiding the decision-making process when a review takes place. Since the objective of evaluators is to aid decision makers make wiser decisions, evidence is provided which shows both the successes and drawbacks of programmes. As a result, evaluators pinpoint some of the factors involved with better or worse outcomes, as well as explain how the programme works in practice. There are expectations, then, that these data will influence the decision-making process and affect the actions that managerial staff takes (Weiss, 2005). To gain full understanding of mentoring, evaluation measures should ideally address the mentoring process and the outcomes as well as the factors that could shape it (National Academies of Sciences, Engineering and Medicine, 2019).

The conceptual framework in order to evaluate the transition from face-to-face peer mentoring to online peer mentoring and its effect on mentors' feelings and experiences was a general input-process-output one as illustrated in Figure 2. The model was based on Input-process-output model of mentoring adapted by Eby et. al (2013) and National Academies of Sciences, Engineering, and Medicine (2019) and was further adapted to serve the purpose of this research.

Figure 1. Input-process-output Model of Mentoring adapted by Eby et al. (2013) and National Academies of Sciences, Engineering, and Medicine (2019)



Context of the Study

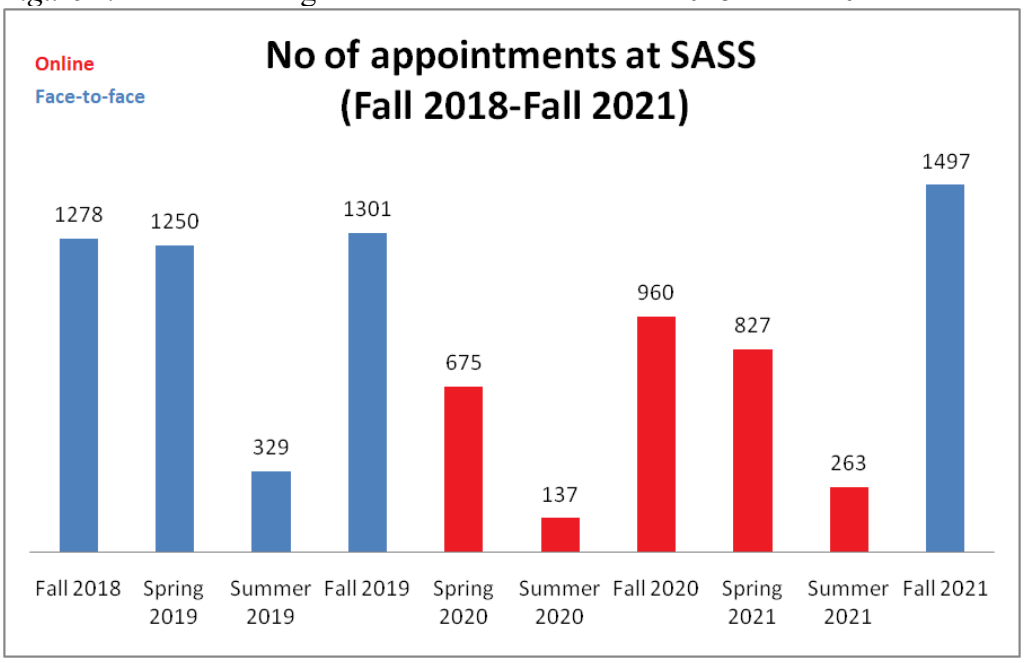
This study was conducted in the largest private college in Greece, Deree College, which, as reported in its website (www.acg.edu) serves almost 4200 students in a variety of fields. Student Academic Support Services (SASS) is presented as a key benefit of the College since this service is not offered by other private colleges, let alone public universities. The role of SASS, which is also shared on the site of the college (https://www.acg.edu/undergraduate/academic-enrichment-programs/student-academic-support-services/the-role-of-sass/), is to enhance the educational experience through both one-to-one and group sessions. The philosophy of learning facilitators at SASS is non-instructional reflecting their own mindset, critical reasoning skills and abilities. Their role is supportive and distinct from that of instructors as the learning facilitators are not content experts or evaluators. However, instructors and learning facilitators collaborate and through their cooperation aim to assist students with developing appropriate college skills to become owners of their own learning process.

Impact of COVID-19 on Peer Mentoring at Deree College

Mentoring students face-to-face was abruptly overturned at Deree College during the Spring Semester 2020 due to the COVID-19 pandemic. While in the Fall Semester of 2019, 1301 students received learning facilitation on campus, a number similar to that of the previous year (see Figure 3), in the Spring Semester, with the onset of the pandemic and the closure of the college on March 3rd and with the learning facilitation turning online, the number plunged to almost half. It is worth noting that although the figure for Spring Semester 2020 refers to online mentoring, few sessions took place face-to-face in January and February 2020. After March and until all

learning facilitators returned to campus in September 2021, mentoring sessions were conducted via Zoom meetings and MS Teams. Remote mentoring continued in Spring and Summer 2021, with 827 and 263 students being mentored mainly via MS Teams respectively.

Figure 2. Peer Mentoring Sessions at SASS from Fall 2018 to Fall 2021



Data Sample

Participants in this research are the learning facilitators of SASS who are directly involved in the delivery of mentoring to other students, regardless of the programme attended at Deree College. Learning facilitators serve as an academic resource to students by helping them understand and apply course content; they support the development of essential academic skills by offering their guidance to students to reach their academic goals. As a result, learning facilitators help students identify their needs in the context of specific tasks and propose processes and methods appropriate to the course level and assignment. The SASS learning facilitators perform their duties in direct or indirect cooperation with Deree instructors, bearing in mind the ultimate purpose, which is to help students improve. To that end, the minimum requirements for the Selection of Learning Facilitators are their very good academic standing, a minimum C.I. of 3.5 out of 4, and their completion of at least 50 out of the 121 credits at the college. In addition, all learning facilitators belong to at least one "Circle of Learning", which is determined by the facilitator's major field of study, corresponding to the following "Circles":

- Quantitative courses, Natural Science, Computer Science
- Business fields
- Social Sciences

- Humanities
- Performing & Visual Arts

The intention of the study was for all circles to be focused on, so that the sample is qualitatively representative and a holistic perspective is achieved. The aim is accomplished as shown in Table 1 below. I subjected data from male and female participants, albeit using pseudonyms, so that similarities and differences could be identified.

Table 1. Circles taught by each Participant

Participants		**Giannis**	**Maria**	**Giorgos**	**Pavlos**	**Ioanna**	**Vasilis**	**Tina**	**Rita**
CIRCLES	**Quantitative courses, Natural Science, Computer Science**			√	√	√	√		√
	Business fields	√		√			√		√
	Social Sciences	√	√		√	√		√	
	Humanities		√		√			√	
	Performing & Visual Arts		√		√				

The Office of SASS at Deree College consists of the Director of the Student Academic Support Services, the Secretariat and 21 learning facilitators. The intention was that 8 learning facilitators, more than 1/3 of the overall group, be interviewed to ensure saturation. In the event that saturation was reached within 5 interviews, (one participant from at least one Circle), it would still be necessary to extend the interviews to 8, if not more, to ensure a holistic perspective of SASS regarding the topic to be researched. However, in the event that saturation was not reached within 8 interviews, the number of the participants would be extended as needed.

Participants whose studies were from different circles were selected from the total of 21 Learning Facilitators at Deree College to ensure that the sample is qualitatively representative. All participants were audio recorded after signing a consent form. The interview consisted of 6 open-ended questions which, eliciting oral data, focus on the mentors' experience of interacting and teaching online. In addition, prompt questions were also posed throughout the interview in order to

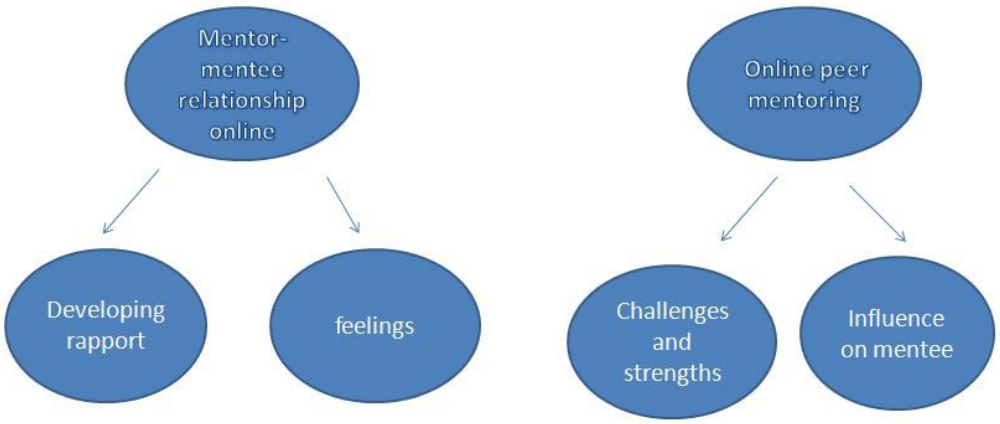
elicit as much information as possible, depending on the flow of the interview, and to foster the environment of a casual conversation, rather than a strict interview process. The main themes covered were: 1) the experience of the interviewees with the change to online mentoring and the feelings derived from such a change, 2) the main challenges they faced and how they would evaluate such a change, 3) how they would assess the impact of such a change on mentees 4) which are the best practices to adopt and action to be taken by both SASS and universities to enhance the online mentoring experience.

All interviews were conducted face-to-face and were audio recorded. The verbal data were transcribed into written form so as to conduct a thematic analysis. It is worth mentioning that in my effort to conduct an effective thematic analysis the transcripts retained all the necessary information while remaining true to their original nature (Edwards, 1993).

Interview Analysis

Analysis focused on the area of interest, that is, how learning facilitators experienced their role after abruptly having to mentor peer students online and the equivalent thematic codes. In the following section, taking into consideration online peer mentoring and the implications based on the quality indicators of mentor/ mentee relationship mentioned in the literature review, I will analyse the experience of the learning facilitators interviewed. Overall, the thematic analysis that follows is inductive, being data-driven and not fitting into a pre-existing coding frame or any analytic prejudices of the researcher (Braun and Clarke, 2006). Thematic analysis was used due to its flexibility and opportunity to provide a rich and detailed account (Braun and Clarke, 2006). A theoretical approach which required my engagement with the literature prior to analysis was used (Braun and Clarke, 2006). By examining the interviewees' experiences of mentoring students online as learning facilitators, I investigated how their own feelings mirror the challenges of online mentoring mentioned above. Interview excerpts presented in this paper provide the basis for my research findings while rendering the concepts understandable and applicable. It should be noted that learning facilitators were asked to share their feelings of mentoring students online based on their experiences rather than which they perceive to be the differences between online and face-to-face mentoring. What is more, the interviews include examples of the mentors' experiences illustrating this comparison. Based on Braun and Clarke's (2021) step by step guide of doing thematic analysis, I firstly familiarised myself with data (phase one), then did coding (phase two) and generated initial themes (phase three) which I developed and reviewed next (phase four). My final themes and sub-themes, after refining, defining and naming them (phase five) are the following:

Figure 3. Map showing Two Main Themes derived from Interviews and Sub-themes



I am aware that the coding I have undertaken helped me retain an empathetic awareness of the experiences described by the participants. This enabled me to engage in theoretical analysis of the discourse without losing connection to the affective quality of their accounts. In the last phase (phase 6) I began writing up the analysis presented next.

Results and Discussion

Based on the research questions and within the theme of mentoring relationships online and its subthemes, the main points that emerged were feelings of impersonalisation and lack of intimacy primarily because mentors often did not have eye contact with the student and could not see their facial expressions as in many cases students opted for a turned off camera.

Feelings of Impersonalisation and Lack of Intimacy

Seeking assistance from learning facilitators at a distance can be achieved in a variety of ways, with video conferencing being the most preferred method. Unlike face-to-face mentoring sessions, online mentoring may lack the visual cues, including body language and eye contact that help students and mentors develop a positive relationship; this occurs when the mentee opts for a turned off camera. As a result, the mentor, being unable to see the mentee's face, must infer from the tone of voice what the student's concerns are. It is clear that all participants expressed their concern that online mentoring posed hindrances for mentors in terms of comprehending whether or not the mentees fully understood what was being conveyed to them due to the absence of non-verbal cues. It was also stated that interpreting mentees' feelings and insecurities was not as straightforward with online mentoring. Since full communication involves understanding both verbal and non-verbal cues, there was consensus that online communication posed challenges. Both Giannis and

Maria mentioned the lack of intimacy experienced as opposed to face-to-face mentoring sessions. Specifically, Giannis mentioned:

> *"It was quite difficult because most people wouldn't turn on their cameras. So, it was like talking to the wall, I wasn't sure if they listened. They pretty much stayed in the call until I was done talking which was kind of puzzling […] I think that you get a lot from the other person's facial expressions. […] So, it was like we were completely detached with one another. There was a wall between us."*

Maria added her concern about impersonalisation rendered due to the lack of eye-contact stating:

> *"It wasn't the same as doing it in person because there are many things that influence the face to face session and the online. One of the more important aspects of the face to face and facilitation in general is the connection you can have with the student […] especially for a student having dyslexia or something like that, there's a need to have the presence there […] I need to see the body, I need to know that they see me in order for them to be focused."*

Similarly, Giorgos, Pavlos, Ioanna and Vasilis presented the scarcity of facial expressions and body language as a great impediment to learning and mentoring. Characteristically, Ioanna stated: *"[...] the interaction is so different. Here I can see their facial expressions, I can see their body language […] with online especially many times they wouldn't even open their cameras. I need to have a face to go with a name. And I was essentially talking to a blank screen quite a few times".*

Rita mentioned: *"[…]some students were not opening their cameras, so I had to ask because it was like talking to the wall. And I didn't know if they were understanding what I was saying or not. So, I was asking them turn on their cameras, because it's better, you can teach better, you can see if they're confused, or not […] face to face is better because you have like connection with the student […] what I'm doing is like sitting next to them, so I can understand when they're confused, where to stop."*

These statements shed light on how online mentoring instigates alienation and how the participants felt disconnected from their mentees. However, the difficulties present in virtual interaction with the students may hinder not only communication, but also the establishment of rapport with the mentee. Pavlos mentioned, *"[…] when people come here, you kind of build a connection. Because some people feel like they're too close with you or friends with you. […] It's kind of weird, but it's better because I believe it builds a better connection and better relationship even if you're not friends. […] I think the main difference is the relationship you can build through face to face and not with online classes."*

A similar concern was expressed by Vasilis who stressed the need for cooperation, empathy and closeness with the mentee while building a relationship in which mentor and mentee are equals. Specifically, Vasilis mentioned, *"I think that empathy is important […] I think that there needs to be cooperation between the student taking the course and the learning facilitator. They have to work together to come as close as possible, […] try to get to know each other a bit. Build a relationship, that it's not necessarily the one of a teacher student, because in the*

end, we are not teachers, we are just humans that have passed the course. This is something that the students need to understand. We were in the same position.". This approach can indeed foster not only engagement in learning (*cognitive congruence*), but also psychosocial support (*social congruence*). Giannis also highlighted that empathizing with the mentee in person greatly differentiates face-to-face mentoring from e-mentoring. In his own words *"(mentees) need to know that we're just like them […] we struggle as well.".*

Since interaction mediated by technology could impede the establishment of a relationship or rapport (Driskel et al, 2003), the need for the creation of such intimacy while interacting with the student online is of paramount importance. As Giorgos suggested it is vital for the mentee to concentrate and be able to communicate fully with their mentor. To ensure concentration, it is advisable for the mentee to feel that they have entered the learning space of the mentor, thus drawing the attention of the mentee. However, the online environment posed challenges to all the participants.

Challenges and Strengths of Online Peer Mentoring

One of the main challenges all participants faced was the difficulty in replicating the best practices of face-to-face peer mentoring. The majority of the participants found online peer mentoring time-consuming and their job restricted. Characteristically, Tina argued:

> "*I felt like a job being done as 20% instead of potentially 100%. The students, including myself, are in a completely different context. Because since we are in our own rooms, there are a lot of familiar distractions, a lot of things that you kind of feel like that you wanna devote your time to them instead of what's happening right in front of you."*

Similarly, Ioanna, teaching Natural Science and Math courses, highlighted "*we covered half the material that we would have if we were face-to-face".* It is worth quoting Ioanna's challenge while teaching Biology:

> *"How on earth am I supposed to teach someone photosynthesis, if I can't actually draw something and show him a flower to start with. It was very, very hard to convey the information that was needed in a way that made students understand what the topic, the material was about. Now, MS Teams does have a whiteboard but with the cursor, trying to draw it was really bad writing and time-consuming".* It is worth noting however, that this time-consumption derived from low computer literacy skills or even lack of equipment on the part of mentees. Specifically, Pavlos stated that " *(mentees) don't know how to check, they don't know how to use the code, they don't know basic stuff, which makes it very difficult. […]And there are many difficulties with equipment. Some of them don't have computer, some of them don't have Wi-Fi connection.".*

It must be stressed that there was consensus among learning facilitators and especially for those teaching Natural Science courses and quantitative courses that the online environment cannot replicate the practices of face-to-face peer mentoring. This became more evident to certain learning facilitators who dealt with students having dyslexia or other learning difficulties. The experience of Giorgos who has

dyslexia himself is worth considering*: "For me, because I have dyslexia […] it was very hard to focus. So, this was a problem for my online class. I imagine students that also have learning difficulties, how difficult it was to concentrate."*

However, despite the challenges, every learning facilitator employed their own practices to enhance the online mentoring process and facilitate mentees so that the negative impact on the mentees, analysed next, could be mitigated.

Impact on Students/mentees

Regarding the interview question about the impact of the change from face-to-face peer mentoring to online mentoring, there was agreement by all interviewees that the impact on students was mainly negative. Giorgos, underlying the difference between face-to-face and online mentoring mentioned:

> *"They're more committed in class […] pay more attention to take notes [...] and they are more prone to study, because they're in the environment of the library (where SASS is located). They see other students in other classes to start doing (mentoring sessions)".*

This could partly explain the significant drop in the number of appointments at SASS depicted in Figure 3. The sharp decline in mentoring sessions taking place in a technology-mediated environment during the COVID -19 era must be attributed to the online environment. As verified by Tina, *"we had a lot less appointments at academic support services, exactly for this reason, because there was absolutely no motivation on the part of the students […] A student is going to seek help from people they trust, not from strangers (meaning learning facilitators)"*

Ioanna commenting on the negative impact of the transition from face-to-face to online peer mentoring raised interesting points about the difference of being taught by a professor from being taught by a peer as well as the difference of the learning environment, be it virtual or real, as a crucial parameter. Specifically, Ioanna stated: "*The mentality of actually having a facilitation session with someone […] not a classroom professor is very different. You take it with a completely different frame of mind. […] I have students who are drinking wine as I was facilitating a session or smoking a cigarette. […] Much more relaxed, informal […] which is because I'm a student, I'm a classmate of theirs. But still […] It's a session. Pay attention. […] sometimes they were really relaxed, like people (learning facilitators) were their friends and somebody to rely on during that difficult period".* This statement challenges the benefit of the online environment being less intimidating for mentees, as mentioned in the literature review, by presenting the downside of such an informal and relaxed atmosphere. Areas for improvement in online peer mentoring are presented next.

Areas for Growth in Online Peer Mentoring

Since contributing to changes in practice necessitates a robust understanding of the practices and how these practices could change, (Saunders, 2012) the last half of the interview questions focused on this. The context of use in this evaluation is

institutional with the emphasis of the practice being quality enhancement and accountability (Saunders, 2012). As a result, responses to the last 3 questions of the interview were centered around the need for change and adaptability providing food for thought as well as certain implications for improvement.

In addition to sharing the challenges they faced, participants talked about the areas they felt could be improved upon to better support themselves when offering peer mentoring online. Based on the responses they shared, all eight participants expressed the need to be provided with more advanced technological products, such as computers, cameras, earphones that will assist them reach out to the mentee more. Giannis stressed the need for reevaluation of teaching techniques and the need to have students more engaged in an online setting. Vasilis continued by describing the idea of attending seminars by experts to enhance their skills while Ioanna highlighted the need for presentation sessions, in particular. To that end, all participants expressed the need to be well trained, so that they can be prepared to mentor students in an online environment and respond to specific student needs in an online setting.

Conclusion

This study addresses a gap in the peer mentoring literature by furthering our understanding of the impact of online peer mentoring on the mentor-mentee relationship. While previous studies of peer mentoring have mainly focused on the experiences of mentees in a classroom environment, this study highlights mentors' experiences in a virtual setting. In line with published research on the significance of establishing social congruence (Rhodes et. al, 2005) this study focused on whether and to what extent an online mentoring environment can foster interactivity and the provision of psychosocial support. The purpose of this study is to gain a deeper understanding of how learning facilitators feel while providing their services online. According to the data derived from the interviews, learning facilitators operate differently in an online space, and this might influence how well they are able to offer peer mentoring and set up meaningful relationships with their mentees. In order for students to receive the benefits of effective peer mentoring services, learning facilitators must deliver these services using the appropriate tools and with positive feelings. The detailed descriptions of the mentors' experiences presented in this paper as opposed to the experiences of mentees, which are commonly presented in literature, although not in a virtual setting as is done in this study, contribute to a holistic perspective and underscore a side that, albeit neglected in literature, offers crucial insight for decision making. Several implications emerge from this analysis. Firstly, both the mentors and the mentees need to set expectations regarding timeliness in communication. In addition, the mentor must ensure availability, confidentiality, and trustworthiness so that the relationship between the mentor and the mentee is built on shared communication as well as mutual respect and equality. Subsequently, mentors need to personalise, contextualise and adapt their mentoring practices to individual mentees, while ongoing training is probably the most crucial contributing factor to a successful online peer education programme (Latino and Unite, 2012). With intentional planning, a technology-mediated mentoring session which enhances

both social and cognitive congruence, can better prepare colleges for a possible prevalence of online peer mentoring in the future.

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