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Examining the 2:1 Model of Fieldwork for Occupational and Physical Therapy Students

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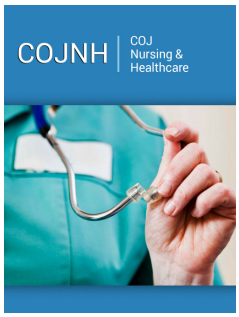

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Abstract

The COVID-19 pandemic has disrupted clinical placements, not just in the United States, but globally. A Call to Action is proposed to consider the 2:1 model of fieldwork as a viable solution to combat the potential fieldwork crisis that is looming on the horizon. The 2:1 model pairs two students for each fieldwork educator. Although the efficacy of this model has already been proven through prior research, a standardized framework is lacking for implementing the use of the 2:1 model. The aim of this study was to explore the perceptions of fieldwork educators and students on the successful factors of the 2 to 1 model in clinical education. A survey study was completed with occupational and physical therapy students (N=10) who participated in the 2:1 model of fieldwork. Results showed the students perceived the 2:1 model to be an effective model of clinical supervision. Communication, not individual time spent with the student, was what students reported as the most important factor to the effectiveness of the model. Limitations of the study include a small sample size and lack of validation of the survey tool. Future research on the perspectives of the fieldwork educators is recommended.

Keywords: Clinical instructor; Clinical supervision; Clinical placements; Fieldwork; Models of fieldwork

Examining the 2:1 Model of Fieldwork for Occupational and Physical Therapy Students

The current COVID-19 pandemic has disrupted the fieldwork placements, not just in the United States, but globally (Table 1). For the field of occupational and physical therapy to recover from this disaster, a Call to Action is proposed. The 2:1 model of fieldwork implies that each fieldwork educator (FWE) supervises 2 students. Implementing the 2:1 model of fieldwork is one of the ways in which practicing clinicians can be a part of the solution to this crisis.

Currently in the fields of occupational therapy (OT) and physical therapy (PT)/ physiotherapy, students must complete fieldwork or clinical education placements to demonstrate core competencies of their hands-on clinical skills to be eligible for licensure [1]. Several factors are impeding the clinical development of future therapists. The growth of OT and PT programs has led to an increasing shortage of clinical education sites available for students [2]. In addition, the COVID-19 pandemic restrictions have further delayed the ability for students to complete their clinical requirements. Several alternative supervisory practice models have been developed to try and increase the student placements. Most of these alternative approaches consist of peer or collaborative learning, such as the 2:1 model, which consists of 2 students to 1 FWE/clinical instructor (CI). In OT, the therapist who provides supervision is referred to as a FWE. In PT, the supervisor is referred to as a CI; these terms will be used interchangeably in this report.

Table 1: Global Occupational Therapy Perspectives on the COVID-19 Pandemic.

Quotes	Therapist and Country
"The COVID-19 has drastically affected OT studies in Kenya, with no E-Learning platforms, no online platforms to collect research data, new students cannot join college, hope of joining labour markets is in suspense. The OT students not only delay in completing their course work, but also continue battling with psychosocial challenges."	Bonface Kaimenyi, OT, Kenya
"OT students from different parts of the world often come to Botswana attached to different non-governmental organizations for exposure, learning the local cultures, way of life and how occupational therapy services are rendered here as compared to their countries. These students have had this once in a lifetime experience cancelled by Covid-19."	Gerald OT, Botswana
"COVID -19 is impacting OT students in the UK, and because of this; All the teaching is now online including regular online – calls, and the plan is to continue that way until further notice. These apply to the courses that involve exams. Work placements for both the 1st and 2nd - year students have been stopped, although the students have been passed with course work, they will have to take their placements at a later time to meet the Health and Care Professional Council (HCPC) requirements The third-year students have been put on the HCPC register temporarily to go into practice."	Catherine Ndiwanyu, OT, Occupational Therapists Without Borders, UK
" Everything here in Kuwait has stopped. I cannot graduate or go on to work in the hospitals. I wrote a Guide on how to stay safe during the pandemic, calling it the Butterfly Effect, but everyone is too busy to even look at my work. I admit that was disappointing and ambitious. It makes me feel that I am not one of OT family members yet. I still need to pass that obstacle (graduating and getting the certification). It is similar to the situation that you have the right skills, knowledge, and full tool kit of an assessment but you cannot apply it until I can take the test for certification. I feel hopeless and tied up with chains (graduation)."	Nora, OT Student, Kuwait
"Field work placement/clinicals is affected due to lockdown. Curriculum is not yet completed and both students and teachers are struggling to use other means like social media/internet where by majority 75% cannot afford its cost here in Uganda, many learners are staying in the villages where mobile internet/ charging systems are weak. Fears reported by students who are worried of the likely failure to complete their course this year. Anxieties of not being sure of whether the semester has been cancelled or not and or when school will resume as no official communication by the government has been made yet.	Victor Alochi, OT, Uganda
"In Guyana, we don't have any OT students currently, but it has impacted the physical therapy students' clinical rotations as well as their graduation schedules with the University."	Afeeza A. Khan, OT, Guyana

Note: Quotes are from personal communication with the first author (Kate Barlow) in April 2020. Kate Barlow is the founder and host of an international mentorship program. All of the therapists who provided quotes are members of the mentorship program and gave permission for their quotes to be published.

Table 1

The benefits of the 2:1 placement model include improved student-educator relationships, increased student observation skills, collaboration skills, independence, and increased opportunities for students to give and receive feedback [3,4]. A systematic review by Sevenhuysen et al. [5] assessed 28 articles across 5 allied health professions, including OT, PT, speech language therapy, nutrition and dietetics, and social work. The conclusion of the review is that clinical placement models with multiple students and one FWE accommodates the growing number of healthcare students that can be placed in a clinical setting [5]. Additional research has been conducted to look at the 2:1 model of clinical education's impact on competency, productivity and time utilized in practice.

Clinical competency scores were compared for 95 students who participated in either 1:1 or 2:1 clinical placements and graduated from a western Canadian entry-level OT program [6]. This study found the clinical competence of students were comparable for both models of fieldwork; the results of the Competency Based Fieldwork Evaluation for Occupational Therapists (CBFE-OT) tool demonstrated no statistical difference between those students who participated in 1:1 and 2:1 placements [6].

FWE productivity was investigated in an acute care hospital in Orlando, Florida and results showed FWE productivity increased while supervising in both the 1:1 and 2:1 models [7]. Further, the study found FWE productivity reached over 125% when going from the 1:1 to 2:1 model [7]. Researchers in Australia found no statistical significance with use of 1:1 or 2:1 models when examining time-use of both speech and language therapy CIs and students [8]. The results of these studies suggest a 2:1 placement model can increase the quantity of placements without negatively impacting quality of CI performance or student competence.

The biggest challenges that FWEs perceived with the 2:1 model of clinical placement was their negative perceptions prior to engaging in the 2:1 model and their inexperience and knowledge to effectively conduct a 2:1 model of clinical education [9]. Sevenhuysen et al. [5] revealed a lack of a standardized framework for implementation or tools to accurately measure outcomes of the 2:1 model. Peer assisted learning was inadequately defined due to the lack of a formalized framework [5]. The FWE concerns from an Australia OT program included potential negative impact on patients, their workload, and management of two students [10]. Additional barriers consisted of increased documentation, planning and organization for the CI, comparison of student pairs, and unhealthy competition between students [3,4].

To ensure successful implementation and address the FWE and student challenges, the literature has emphasized the need for education and preparation prior to 2:1 clinical placements [5]. Bhagwat et al. [8] supported the need for FWEs' and students' pre-placement education to decrease their concerns and fears associated with the 2:1 model. A study by Alpine et al. [4] found that pre-placement education for both PT CIs and students was

the key to success of these multi-student placements in Ireland. The implementation of intentional student pairings according to their academic abilities arranged by the academic programs would prevent unhealthy competition and negative interactions [9]. Price & Whiteside [10] further suggested academic programs be accessible to FWEs to ensure guidance and support throughout the clinical experience. Adequate preparation of FWEs and students to the 2:1 model of clinical placement would increase the quantity of placements without impacting quality or the clinical experience.

In an Australian study, both the OT and PT FWEs and students preferred a 2:1 model. The students preferred the 2:1 model in the beginning of the clinical experience for the collaboration but preferred the 1:1 model toward the end of their clinical rotation [2]. Respiratory therapy students participating in peer learning at University Health Network in Canada began with a 2:1 collaborative model. When they gained independence with their skills and caseloads, they naturally moved to a 1:1 model [11]. Dorner & Colleagues [11] advocated for the need of one-on-one time for each student with the FWE to ensure successful implementation of this clinical model. Lynam et al. [3] emphasized the necessity for built in one-to-one time for each student with the FWE in order to progress their clinical knowledge and skill.

The 2:1 clinical placement model has yet to become a standard practice but has promising evidence to support expanding its use in future clinical education. Research studies from both Lynam et al. [3] and Myers et al. [9] of collaborative learning utilized peer observation and feedback. The toolkit referenced by Myers et al. [9] included preparation strategies and frequent electronic contact with the students, FWEs, and the academic institutions. Both studies revealed the importance and need for FWEs and students to have preparation prior to implementing this model. They also felt the importance of a close partnership between FWEs and academic institutions. There is still currently no standardized framework that is widely used or accepted for implementing and measuring the use of a 2:1 model. The aim of this study was to explore the perceptions of FWEs and students on the successful factors of the 2 to 1 model in clinical education.

Methods

This study was approved by the college's Internal Review Board. All students (and their respective FWEs) who were paired with another student at the same level of education, was eligible to participate in the study. The students and FWEs were conveniently sampled, and consent was obtained. The online survey was composed of 11 questions, consisting of open-ended and Likert questions. The two open ended questions on the survey were: "What were the positives to the 2:1 Model?" and "What were the negatives to the 2:1 Model?".

The survey was developed by two of the authors of the study (Kate Barlow), both of whom were academic fieldwork coordinators at the time of the study. The OT students were third year master's level students on their Level II fieldwork. The PT students were first, second and third-year doctoral students on a 12-week clinical internship.

Result

A total of ten OT and PT students completed the survey. No FWE surveys were returned. Students who completed the survey consisted of five OT students and five PT students (four PT students in their third year of the program and one student in their first year of the program). Students were placed in a variety of settings including outpatient, skilled nursing, pediatrics, sports and mental health. All ten students reported the 2:1 model to be an effective model of clinical supervision, ranging from somewhat effective to extremely effective (Figure 1). The students rated that communication was the number one personal characteristic of the FWE that made the 2:1 model successful. Additional factors, in their perspective order, that made the 2:1 model successful were the FWE's ability to deliver effective feedback, teaching ability and time management skills.

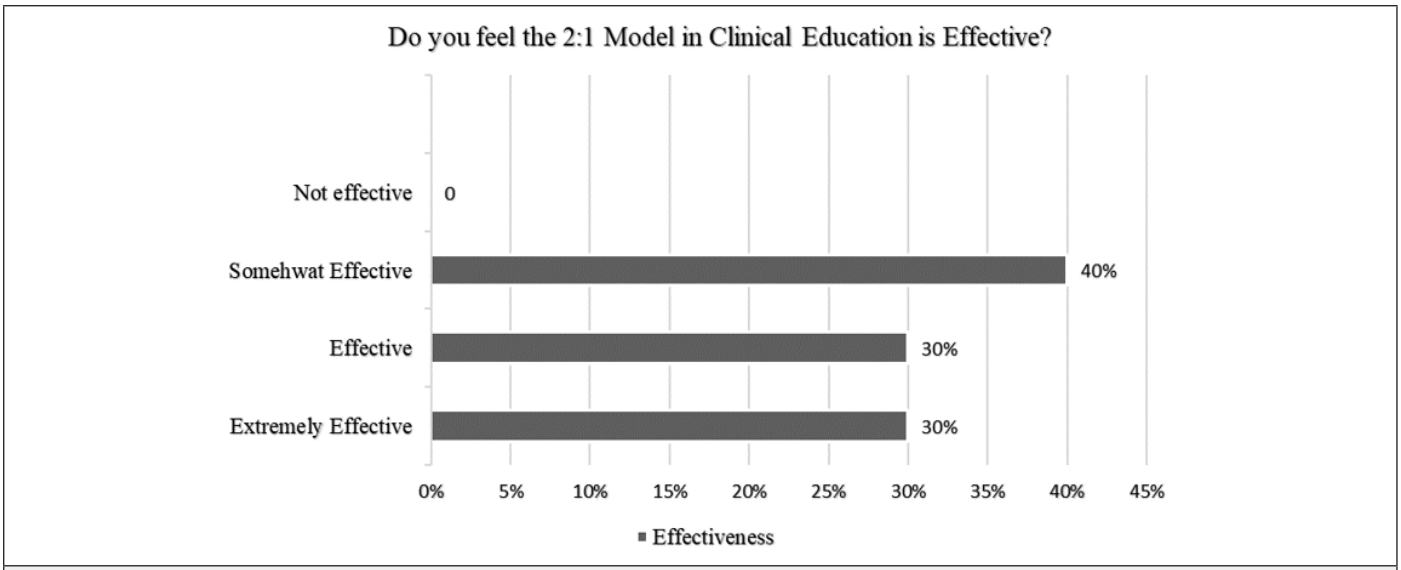

Figure 1: Effectiveness of the 2:1 model of clinical education.

Figure 1

When looking at factors that facilitate success of the 2:1 model of supervision, students ranked the following as extremely important: the years of experience of the supervising therapist, organization, and structured learning opportunities. The amount of individual time the FWE spent with the student did not correlate with the effectiveness of the 2:1 model or whether the student would try the 2:1 model when they become a FWE.

The students also reported on productivity and 60% of the students felt that their FWEs' productivity increased and 20% felt productivity evened out over time. There were three students who completed their fieldwork in a mental health setting and all three students had a different opinion on productivity. One student felt that productivity was not impacted and another student felt that productivity decreased. The third student completing a level II fieldwork experience in a mental health setting reported that the productivity increased.

The main positive theme was the collegial support given by the paired students. The negatives of the model reported were the lack of individual time spent with the clinical instructor, lack of materials and the reduction of patients (Table 2).

Table 2: Student Feedback on the 2:1 Model.

Positives of the 2:1 Model	Negatives of the 2:1 Model
"Having another student there created somewhat of "competition" which motivated me to keep coming up with new interventions daily but also teamwork as we would give each other advice on what we should try with our students."	"I had to share my supervisors case load with the other student, so I did not get the full experience of having a full caseload by the end of the 12-week fieldwork."
"One of the best examples of why I truly value the 2:1 model experience includes the following: (1) the first time that our FWE told us to complete a patient admission screening, she let us go out into the milieu together and screen the same patient so as to decrease any level of anxiety we had, and (2) whenever one of us felt more comfortable with something (maybe administering the Allen) the FWE let us observe one another or sit in on the assessment being done."	"The biggest negative was the lack of materials. We only had 1 laptop, which made documentation difficult." "A student would get hands on experience in a situation I would not be able to."
"The schools had different curriculum. There were some things that the other student learned, that we did not learn, and vice versa. We were able to go back and forth and discuss what we learn."	"There were days that there were not enough patients for two students."
"Practicing skills with the other student and exchange of information/techniques between students"	"Limited 1:1 supervision and discussion with CI"

Discussion

This pilot study, although a small sample size, provided important information for academic fieldwork coordinators to ponder if considering the 2:1 model. For this study, the academic fieldwork coordinators did not arrange the 2:1 model with the fieldwork site. Instead, the 2:1 model was determined by the clinical site; therefore, the OT and PT students paired were not both from the same institution. If the academic fieldwork coordinators are going to request the 2:1 model to pair two OT or two PT students together to help recover from the COVID-19 pandemic, pairing two students of matching ability is recommended. Although the students in this study all reported the 2:1 model to be effective, it is important to know what makes the 2:1 model successful.

From these preliminary findings, communication, not individual time spent with the student, was what students perceived as the most important factor to the effectiveness of using the 2:1 model. When deciding whether the 2:1 model is a good fit for a clinical site, factors to consider would be the FWE's years of experience, the ability to deliver effective feedback and time management skills.

The type of setting and the amount of individual time spent with a student did not appear to be factors which predict success using the 2:1 model. Although the 2:1 model of supervision may be a necessary consideration for the sustainability of the OT and PT clinical education requirements, careful selection of FWEs who are organized and experienced may be crucial to the model's success.

FWEs considering the 2:1 model would benefit from academic programs providing training on organizational strategies and how to conduct structured learning opportunities with two students. Future studies on the outcomes of FWE training may have a powerful impact on the 2:1 model's success. The limitations of this study include the small sample size, the lack of reliability and validity of the survey and the lack of FWE insight and perceptions of the model.

Conclusion

In the wake of the COVID-19 pandemic, OTs and PTs that serve the profession as FWEs should consider implementing the 2:1 model of supervision across all practice areas. The vast network of rehabilitation stakeholders, including professional organization leaders, program directors, FWEs, academic fieldwork coordinators and therapy students, can all recognize that the current system that supports OT and PT clinical rotations was experiencing a strain prior to the current global pandemic. Now, with so many therapy students being notified that their clinical placements have been cancelled in the wake of government shutdown and practice setting restrictions, the stress on the fieldwork system has intensified significantly. Implementation of the 2:1 model of fieldwork will effectively double the capacity of therapy students that FWEs can accommodate. Utilization of this fieldwork model in clinical rotations, starting once practice settings reopen to students, will provide a viable solution to combat the potential fieldwork crisis that is looming on the horizon.

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