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Physical Therapy Graduate Perceptions of the Didactic Use of GoReact Video Assessment Software and Work Readiness

Jacqueline Moore
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Author conflict statement: The author declares no competing interests and no financial conflict with regards to the research reported here.

Abstract

Introduction: Physical therapy education programs adopting online teaching and learning must ensure students acquire the necessary skills for optimal professional work readiness, including appropriate assessment and feedback in the online environment. The purpose of this qualitative study was to explore the perceptions of Doctor of Physical Therapy (DPT) graduates' professional work readiness after using GoReact video assessment software at an accredited DPT education program in the United States.

Methods: Semi structured interviews were conducted with 15 DPT graduates via virtual teleconferencing software. Interview data were analyzed using descriptive and emotion coding.

Results: Results indicated that most participants held an overall positive view of GoReact as it related to their preparedness for professional physical therapist practice, with feedback, self-reflection, repetition, and freedom of use noted as most beneficial. Negative opinions of GoReact and work readiness primarily involved the lack of in-person tactile feedback on psychomotor skills and technical challenges regarding recording angles and upload speeds. Participants also offered helpful suggestions for the use of GoReact in physical therapy and other health professions education programs.

Discussion: As more professional physical therapy education programs adopt online teaching and learning practices, there is a need for innovative technology to supplement and possibly replace conventional instruction, assessment, and feedback methods to positively impact DPT graduates' professional clinical work readiness. Understanding DPT graduate perceptions of GoReact and work readiness supports the greater need for innovative education research and practices to ensure students develop the psychomotor skills necessary for optimal work readiness.

Key Words: physical therapy education, GoReact, video assessment software, work readiness

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Introduction

Administrative decisions stemming from the COVID-19 pandemic forced traditional Doctor of Physical Therapy (DPT) education programs to shift to fully online teaching, learning, and assessment of academic content and practical psychomotor skills in the spring of 2020. As a result, instructors and students accustomed to face-to-face, synchronous instruction, demonstration, assessment, and feedback moved abruptly to online and often asynchronous educational delivery (Bampton et al., 2022; Lorio et al., 2021; Rossettini et al., 2021). In response to the abrupt shift to online instruction and concerns over its impact on professional work readiness (Hattar et al., 2021), some DPT program faculty introduced an innovative video assessment tool called GoReact to provide meaningful time-stamped formative and summative feedback to uploaded student performance videos (Puzzifero & McGee, 2021). The GoReact video assessment platform allows students to receive valuable online text, audio, or video feedback from instructors and peers on skill performance traditionally delivered in a face-to-face classroom setting (Hager, 2020; Wang & Goerke, 2021).

In the DPT program included in this study, faculty instructed students to upload videos performing skills learned during synchronous online class time or asynchronously via the learning management system to receive feedback on their technique, patient cueing, hand placement, and other aspects of the skill to facilitate learning and improvement (Puzzifero & McGee, 2021). Students accustomed to prepandemic methods of live performance feedback were allowed to solicit feedback via the GoReact platform at any time, while traditional classroom methods restricted these opportunities to class time or during office hours (Ardley & Hallare, 2020; Ardley & Johnson, 2019; Ardley & Repaskey, 2019; Stapleton et al., 2017). As DPT programs returned to traditional face-to-face instruction after the height of the COVID-19 pandemic, some DPT faculty continued to use GoReact video assessment software to encourage students to seek feedback on psychomotor skill performance. As a result, this innovative and interactive digital platform may be an effective adjunct to conventional instruction, assessment, and feedback methods to positively impact DPT graduates' professional clinical work readiness (Ortega et al., 2022).

Review of Literature

While studies exist in which researchers examined the use of GoReact and other video annotation tools in higher education, little is known about its use in DPT education or its effect on DPT program graduates practicing in a professional clinical setting. For example, Ardley and Johnson (2019), Ardley and Repaskey (2019), Ardley and Hallare (2020), and Boniface et al. (2022) studied the integration of GoReact into student teacher supervision during internship and found it was a helpful tool for providing valuable feedback and collaboration to support the learning of student teachers while on internship. Furthermore, Ardley and Hallare reported that GoReact and other video assessment programs support both asynchronous and synchronous learning and allow students the opportunity for self-reflection and formative evaluation essential for skill development. Ardley and Repaskey and Boniface et al. recommended further research into student teachers' perspectives of video annotation software during the various phases of an educational program, which aligns with this study on DPT graduates' perspectives on the use of GoReact during their physical therapy education and professional work readiness.
Physical therapy is a hands-on profession. As such, graduates of professional physical therapy programs are expected to possess psychomotor skills to effectively evaluate and treat their patient population (Commission on Accreditation in Physical Therapy Education, 2020). Development of these skills requires regular and personalized feedback from instructors, mentors, and peers, all of which proved challenging during the shift to online instruction with the COVID-19 pandemic, as reported by Bampton et al. (2022), Chesterton et al. (2022), MacDonald et al. (2020), and Plummer, Kaygisiz et al. (2021). In fact, a World Physiotherapy (2020) global survey reported that 80% of respondents from physical therapy education programs were most challenged in assessing practical skills in the online environment. The inability to adequately develop a basic psychomotor skill set during training may affect DPT graduates' readiness to practice following program completion (MacDonald et al., 2020).

To assist in psychomotor skill development and positive learning outcomes, DPT students need ample practice, assessment, and feedback, which must occur in and out of the classroom (Plummer, Smith et al., 2021; Zylstra et al., 2020). Furthermore, as more hybrid DPT programs emerge that incorporate enhanced online learning strategies into their curriculum, there is a greater need for innovative education practices to ensure students develop the psychomotor skills necessary for optimal work readiness (Bampton et al., 2022; Gagnon et al., 2020, 2022). This is supported by Chesterton et al. (2022), who found that students felt disadvantaged by online instruction in their ability to develop and practice hands-on skills. The authors suggested further research on DPT student perceptions in relation to clinical performance and employability, including the importance of professional digital competency (Chesterton et al., 2022). Similarly, Sole et al. (2012) examined the perspectives of physical therapy employers on DPT graduate work readiness and identified themes of professionalism, perspective, and confidence in skills and knowledge. The authors suggested additional investigation into the physical therapy graduates' perspective on work readiness and integration (Sole et al., 2012).

**Purpose**

The purpose of this qualitative study was to explore the perceptions of DPT graduates' professional work readiness after using GoReact video assessment software at an accredited DPT education program in the United States using the conceptual framework of medical graduate work readiness by Padley et al. (2021). The research question for this study was: “What are the perceptions of DPT graduates about the use of GoReact video assessment software during their professional physical therapy education program as that relates to their readiness for professional clinical practice?”

**Methods**

**Design and Rationale**

The central concept of this study was to discover DPT graduates’ perceptions of the use of GoReact video assessment software in physical therapy education and its role in preparing them for professional clinical practice. A basic qualitative approach was used to address the research question through exploration of participants’ experiences, opinions, beliefs, attitudes, perceptions, or feelings about their use of GoReact (Percy et al., 2015). By using the six concepts developed by Padley et al. (2021), shown in

![Image](https://doi.org/10.46409/003.AAHT4330)
Figure 1, to explore and frame interview questions regarding professional clinical preparedness with GoReact video assessment software, this study aimed to learn about DPT graduates' experiences, opinions, and perceptions consistent with a basic qualitative study approach.

**Figure 1**  
*Conceptual Model of Work Readiness of Medical Graduates*

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**Participants**

Criterion-based purposeful sampling was used to recruit and interview DPT program graduates who used GoReact video assessment software during the didactic portion of their physical therapy education program. Potential participants were identified from the alumni directory of the targeted United States-based DPT education program with permission from the institution’s director of alumni engagement, which included DPT graduates from December 2020 and beyond to allow capture of graduates who were still in their didactic coursework at the start of the COVID-19 pandemic in March 2020 and who possibly used GoReact during their courses. Potential participants were contacted via an email that included the study recruitment flyer and informed consent form. The first 15 respondents who met the study criteria of using GoReact during physical therapy school and were currently practicing as licensed physical therapists were invited to schedule a one-hour interview appointment via an online scheduling platform. Respondents who did not meet the study criteria based on the screening questionnaire received an immediate response of their ineligibility to participate in the study.

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Data Collection

Data collection for this study occurred through semi-structured interviews with 15 participants to reach saturation (Guest et al., 2020). Content validity was established based on feedback from two experts in the physical therapy education field on whether the interview questions measured what was intended. Interview questions were precisely sequenced yet semi-structured to allow participants to respond authentically to the questions (Ravitch & Carl, 2021). Each interview began with a set of general questions followed by more specific, open-ended questions based on the six themes of work readiness of medical graduates by Padley et al. (2021). This interview format helped ensure that sufficiently relevant and detailed information from the participants was obtained (Merriam & Tisdell, 2016).

The interviews occurred using a video conferencing platform, though only audio was recorded to ensure participant privacy and confidentiality. Following each interview, the audio recording was transcribed using the Otter.ai application, the transcription summarized into a one-page document, and the summary emailed to each participant within one week of the interview date for review and comments. The arduous and immersive process of listening to interview audio, correcting the automated transcription, and condensing data into one-page summaries allowed for intensive study of the data more closely to recognize emerging codes and possible themes (Merriam & Tisdell, 2016; Ravitch & Carl, 2021). Following summary review, interview data were uploaded to the Quirkos cloud-based qualitative research application to organize the data and supplement hand coding and analysis to prevent overlooking meaningful information from the interviews.

Data Analysis

During the interviews, participants discussed their experiences with GoReact in their DPT program, including which courses used the software, the benefits and challenges of using GoReact, and how GoReact use may have related to their confidence, capability, reflexivity, responsibility, role, and resilience in the professional clinical workplace following graduation. The following steps were used to analyze the interview data after transcription and review:

1. Interview data were entered into a Microsoft Excel spreadsheet with separate tabs for each of the six concepts discussed by Padley et al. (2021). All participant responses were listed for each concept in the rows of the spreadsheet tab.
2. A second column was created in each spreadsheet tab to list first-cycle descriptive and emotion codes from the analysis of the interview data (Liu, 2020; Ravitch & Carl, 2021; Saldaña, 2021).
3. Data were reviewed again with the identification and color-coding of second-cycle patterns among repeated first-cycle codes for each of the six concepts (Ravitch & Carl, 2021; Rubin & Rubin, 2012). These second-cycle patterns were listed in a third column in each spreadsheet tab.
4. Broader categories were inductively developed from the second-cycle patterns based on how they aligned with the study’s six conceptual framework concepts (Padley et al., 2021; Ravitch & Carl, 2021). These larger categories led to the generation of themes for this study.
Evidence of Trustworthiness

Trustworthiness in qualitative research relates to the validity of the results and whether they genuinely represent the participants’ perspectives and experiences (Burkholder et al., 2016; Ravitch & Carl, 2021). Reporting the trustworthiness of a study helps impart confidence in the study results (Amin et al., 2020). Furthermore, Adler (2022) asserted that all qualitative research must be trustworthy. The four criteria of trustworthiness are credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985).

Credibility

Credibility is the researcher’s degree of certainty and confidence that the study results truthfully reflect the participants’ perceptions (Korstjens & Moser, 2018). To ensure credibility, researchers typically employ one or more of the following strategies: prolonged engagement, persistent observation, member checking, and peer debriefing (Amin et al., 2020; Korstjens & Moser, 2018; Nowell et al., 2017; Ravitch & Carl, 2021; Shenton, 2004). For this study, I engaged in persistent observation and immersive engagement by reading the transcriptions, listening to the interview recordings to correct the transcribed data where needed, and critically analyzing the data in depth through the iterative process of identifying codes and patterns until clear and salient themes emerged on the graduates’ perceptions of GoReact and work readiness (Amin et al., 2020; Ravitch & Carl, 2021). I also offered a follow-up interview to any participant as a form of member checking. However, all participants opted to review the one-page interview summary and provide feedback via email (Amin et al., 2020; Shenton, 2004). Furthermore, I discussed my research process and study results with physical therapy faculty colleagues for their external assessment (Nowell et al., 2017). Prolonged engagement was not possible for this study since interviews were conducted virtually and only once.

Transferability

Transferability refers to the reader's ability and decision to transfer a study's results to their setting (Korstjens & Moser, 2018; Shenton, 2004). A researcher assists in the transferability of the findings by providing rich, thick descriptions of the participants, setting, methods (including instrumentation), and results (Amin et al., 2020; Korstjens & Moser, 2018). For this study, I thoroughly described the background, data sources, instrumentation, and analysis procedures and results in detail to allow the reader to understand, compare, and possibly apply the findings to their situation and context, such as stakeholders in other physical therapy education programs (Amin et al., 2020). Furthermore, the investigation of DPT graduates’ perceptions in different courses, programmatic settings, and across various contexts provides the opportunity for a richer understanding of the phenomenon (Shenton, 2004).

Dependability

Dependability involves examining the qualitative research process, which helps ensure transparency throughout the process (Amin et al., 2020; Korstjens & Moser, 2018; Nowell et al., 2017; Ravitch & Carl, 2021). When possible, employing an auditor to check the "research path" of a study using the "audit trail" (Korstjens & Moser, 2018, p. 122) strategy, such as reading analytic memos, transcripts from meetings, research materials, and data collection and analysis information, ensures a consistent, replicable, and neutral study design (Nowell et al., 2017;
To ensure dependability, I asked two physical therapy faculty colleagues to review my interview questions. I also discussed my research findings with them for another perspective on my thematic analysis. While they are not technically independent external auditors due to our collegial relationship, their input helped develop and analyze my study. Furthermore, since I did not maintain a reflexive paper journal with notes detailing observations during the interviews, I asked my colleagues to review the notes I took following the interviews and while reviewing the recordings for their perspectives.

**Confirmability**

Confirmability is the understanding that a study’s findings are grounded in the data and not a result of the researcher’s inclinations (Korstjens & Moser, 2018). It involves examining a qualitative study’s outcomes or data and their meanings, which could also be confirmed by a different researcher (Amin et al., 2020; Korstjens & Moser, 2018). As with dependability, an external auditor helps ensure confirmability, which I again asked my physical therapy faculty colleagues to do. I also referred to the notes I took during and following interviews and while reviewing the interview recordings of any important or unique information or observations. The interview summaries and data organization techniques using Microsoft Excel and Quirkos also helped ensure the transparency of results. These tasks met the confirmability criteria and mitigated perceptions and assumptions regarding the results (Amin et al., 2020).

**Ethical Considerations**

Institutional review board approval was obtained for this study. Participation recruitment was non-coercive, and study participation was voluntary. Participants received a $10.00 gift card as a thank you gift for participating in the study. Complying with the ethical guidelines, participant identity and data were safeguarded through de-identification and protected on a secured, password protected laptop computer.

**Results**

Fifteen DPT graduates participated in this study. Six of those started their DPT program during the early COVID-19 pandemic in either January or May of 2020. Nine participants started the program before the COVID-19 pandemic began, ranging from January 2017 to September 2019. Graduation dates ranged from December 2020 to December 2022 for all 15 participants.

The participants listed various courses in which they used GoReact video assessment software. The participants also described completing assignments and assessments using GoReact, such as performing evaluation skills, patient interviews, safe patient transfers, and other psychomotor tasks for a grade. Most participants used GoReact to upload skill performance videos to the platform for instructor feedback and self-reflection. One participant described using GoReact for an interprofessional education exercise during the DPT program, while another participant recounted how a GoReact acute care module substituted for the inability to complete an acute care clinical internship during the COVID-19 pandemic (Table 1).
Table 1  
*Participant Demographic Data*

<table>
<thead>
<tr>
<th>Participants</th>
<th>Program start</th>
<th>Graduation date</th>
<th>Courses with GoReact</th>
<th>GoReact uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>January 2020</td>
<td>August 2022</td>
<td>Differential Diagnosis, Musculoskeletal 1, 2, Interprofessional education</td>
<td>Patient interview and safe patient transfer video assignments</td>
</tr>
<tr>
<td>P2</td>
<td>January 2019</td>
<td>December 2022</td>
<td>Neuromuscular</td>
<td>Visual, postural, and tactile cueing videos for instructor feedback</td>
</tr>
<tr>
<td>P3</td>
<td>January 2019</td>
<td>August 2021</td>
<td>Musculoskeletal 3, Pediatrics</td>
<td>“TED talk” assignment, Skill demonstration videos for instructor feedback</td>
</tr>
<tr>
<td>P4</td>
<td>September 2017</td>
<td>May 2021</td>
<td>Biophysical Agents</td>
<td>Skill demonstration videos for instructor feedback and self-reflection</td>
</tr>
<tr>
<td>P5</td>
<td>January 2020</td>
<td>August 2022</td>
<td>Applied Anatomy 1, 2, Movement Science, Cardiopulmonary, Pediatrics, Musculoskeletal, Patient Care Management 2</td>
<td>Psychomotor skill demonstration videos and entire patient evaluations for instructor feedback, Assignments, Practical examinations</td>
</tr>
<tr>
<td>P6</td>
<td>September 2018</td>
<td>August 2022</td>
<td>Did not recall</td>
<td>Patient handling, interviewing, intervention skill videos for instructor feedback and self-reflection</td>
</tr>
<tr>
<td>P7</td>
<td>January 2020</td>
<td>August 2022</td>
<td>Patient Care Management, Musculoskeletal, Applied Anatomy, Cardiopulmonary</td>
<td>Skill demonstration and scenario-based performance videos for instructor feedback and self-reflection, Practical examinations</td>
</tr>
<tr>
<td>P8</td>
<td>September 2018</td>
<td>August 2021</td>
<td>Musculoskeletal, Neuromuscular 2, 3</td>
<td>Discussion and skill demonstration videos, Self-reflection on patient interactions, Peer feedback</td>
</tr>
</tbody>
</table>

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Since one of the primary goals of physical therapy education is to prepare students to enter the professional clinical workplace, many participants shared strong emotions toward using GoReact and work readiness. As a result, emotion coding was used for the first coding cycle (Figure 2). Descriptive first-cycle coding was also used to capture the participants’ thoughts on using GoReact and professional work readiness, such as helpful for reflection and not realistic for clinical practice (Ravitch & Carl, 2021; Saldaña, 2021).
In general, most participants held a positive view of GoReact use during their DPT program. The first code that emerged from the data was that GoReact was helpful for reflection across most of the study concepts. Participants explained how GoReact allowed them to reflect on skill performance, communication, body language, and patient interactions in preparation for the professional clinical workplace. For example, one participant reported that self-reflection through GoReact encouraged her to practice skills repeatedly to “get the techniques” without going through “trial and error” with real-life patients. Another participant stated that GoReact allowed her to...
The next code that emerged was feedback, as participants frequently mentioned how they used instructor and peer feedback to guide their skills practice and identify areas for improvement. One participant stated GoReact allowed her to “feel better that I’m doing it correctly because I’ve had so much feedback throughout my schooling.” Feedback was also discussed negatively, in that some participants preferred in-person, instant, and tactile feedback over text or video-based feedback in GoReact. Two participants discussed the relationship between feedback and resilience, in that instructor feedback could be an “emotional or triggering aspect of the assignment” yet could teach students to receive feedback and criticism, which is important in learning to manage emotions.

Another code that emerged was a transition from classroom to clinic. Participants discussed the use of GoReact during the didactic portion of their DPT program and how it either facilitated or hindered their clinical work readiness. For example, one participant stated that GoReact allowed him to reflect on and practice mannerisms in preparation for patient interactions in the clinic. In this case and others, GoReact was viewed positively as a valuable tool to “practice how you play” and hone skills before entering the “real world” of professional clinical practice. On the other hand, some participants viewed GoReact as unrealistic, stating that the simulated patient scenarios were “not clinically accurate” and provided limited context for preparing for the role of a professional, licensed physical therapist.

Based on the patterns of codes observed throughout the interview data, broader categories of reflection, feedback, knowledge and skill translation, emotional effects, and preparedness factors were subsequently created. Since these categories all addressed positive and negative aspects of GoReact use, the following themes emerged: positive work readiness, negative work readiness, benefits, challenges, and suggestions.

Discussion

The purpose of this qualitative study was to explore the perceptions of DPT graduates' professional work readiness from using GoReact video assessment software during and following the physical therapy profession's online curriculum delivery during the early COVID-19 pandemic at an accredited DPT education program in the United States. The findings of this study included four themes related to DPT graduates' perceptions of GoReact use and professional work readiness.

Theme 1: Positive Work Readiness

Study participants expressed an overall positive attitude toward GoReact and work readiness. This included increased confidence, capability, responsibility, and resilience in entering the professional physical therapy clinical setting. Participants collectively perceived the ability to reflect on performance and receive feedback as most positive in relation to work readiness. These findings are consistent with Suh et al. (2021), Hager (2020), and Reeves and Wickard (2022), who reported that GoReact use enabled student teachers to reflect on and self-evaluate their performance. However, while these authors and Short and Bruster (2021) discussed peer reflection and collaboration as positive aspects of GoReact, few study participants mentioned using peer review in their experiences with GoReact. As supported by Maloney et al. (2013),
including a peer review component with GoReact in a DPT program may positively influence skill acquisition when required to assess performance against a peer benchmark.

The theme of positive work readiness is also supported by Forbes et al. (2018), who found that DPT graduates valued instructor and peer feedback and the ability to self-reflect on performance during their education programs as positive contributors to professional work readiness. Similarly, several authors confirmed that DPT graduates benefit from mentoring, feedback, and self-reflection opportunities in the professional workplace, which may provide reinforcement following GoReact use during their didactic coursework (Atkinson & McElroy, 2016; Forbes & Ingram, 2021; Ingram et al., 2019; Leahy et al., 2020; Martin et al., 2021; Stoikov et al., 2022). Additionally, since Almond et al. (2021) and Lao et al. (2021) reported that DPT graduates lacked confidence in their abilities to perform certain skills, this study’s findings that GoReact use can positively affect confidence in skill performance provide support for the technology.

Previous studies on employer expectations for DPT graduates reported that physical therapy clinic supervisors and employers expected physical therapy graduates to possess certain generic attributes reflective of anticipated work readiness and performance. These characteristics included resiliency, self-awareness, communication and organizational skills, commitment to lifelong learning, and professionalism (O’Brien et al., 2020; Sole et al., 2012). These studies reinforced the findings that GoReact use can positively impact DPT graduates’ confidence, capability, responsibility, and resilience, contributing to their work readiness and anticipated success in the professional clinical workplace.

**Theme 2: Negative Work Readiness**

The second theme described the participants’ negative perceptions toward GoReact and professional work readiness. While participants expressed fewer negative feelings toward GoReact, there was an overall negative opinion of online instruction, especially during the COVID-19 pandemic. As supported by Chesterton et al. (2022), some study participants felt disadvantaged by online instruction in their ability to develop and practice hands-on skills, despite using GoReact to mitigate these concerns. This is consistent with Bampton et al. (2022) and Seymour-Walsh et al. (2020), who concluded that psychomotor skill teaching and assessment are more effective in a face-to-face campus environment despite adopting online education during the COVID-19 pandemic, but contrary to Rossettini et al. (2021), who concluded that student satisfaction and performance using online resources was just as high as that with traditional in-person learning.

Study participants shared a preference for face-to-face instruction and feedback once able to return to campus following the COVID-19 pandemic. Therefore, they did not find GoReact as useful in preparing for professional clinical practice following graduation. This is supported by El-Sobkey (2022) and Majsak et al. (2022), who reported that physical therapy program faculty were concerned with psychomotor skill development and assessment with online learning compared to face-to-face learning. However, an innovative digital platform such as GoReact may be an effective adjunct to conventional instruction, assessment, and feedback methods to positively impact DPT

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graduates’ professional clinical work readiness (Ortega et al., 2022).

Some participants reported negative to no effect of GoReact use on the concepts of responsibility, context, and resilience in relation to work readiness. These opinions may have resulted from the choice to use GoReact sparingly, corroborating Green et al. (2018) and Richardson et al. (2018), who found a positive relationship between physical therapy student time spent engaging with online learning content and performance. Additionally, some participants reported difficulties using GoReact during their DPT program as a negative contributor to professional work readiness. This supports the findings of Olivier et al. (2020), who reported that video assessment tools must be easily accessible and user-friendly.

**Theme 3: Benefits**

The third theme encompassed the perceived benefits of GoReact by the participants. Participants cited the ability to receive feedback and self-reflect on skills performance as the most beneficial aspects of GoReact. This is supported by the findings of Akizuki et al. (2020) and Ebert et al. (2020), who reported that frequent and personalized intrinsic and extrinsic feedback enhances the development of these essential psychomotor skills and future performance expectations. This study’s participants also shared the added benefit of on-demand feedback whenever they choose to upload skill performance videos for instructor review, which supports the assertions of Lee (2020) that students favored GoReact time-stamped feedback rather than waiting for class time to receive feedback.

The benefits of self-reflection on skill acquisition and performance are supported by Ødegaard et al. (2021) and Røe et al. (2019), who reported that student-focused teaching and learning strategies, such as student-produced videos, enhanced skill development. These videos allowed students to receive feedback but also view their performance for self-reflection and improvement, as discussed by the participants of this study. These findings are also corroborated by Maloney et al. (2013) and Perlow et al. (2019), who found that instructor feedback facilitated accurate self-assessment, reflection, and skill development. Likewise, Short and Bruster (2021) endorsed the ability of GoReact to improve reflective practice, further supporting this study’s findings on the benefits of GoReact.

**Theme 4: Challenges**

The fourth theme revealed the participants’ perceived challenges with GoReact use in a DPT program. Study participants discussed environmental issues as particularly challenging, with most describing difficulty finding adequate recording angles so as to not limit an instructor’s ability to evaluate a student’s skill performance. This is supported by the findings of Ardley and Johnson (2019), who reported that supervisors could only assess what is visible within the “sphere of the lens” (p. 493). Similarly, Ardley and Repaskey (2019) and Stapleton et al. (2017) discussed technical issues with GoReact regarding storage limits and audio quality, but participants of this study did not mention these challenges. To help mitigate these challenges and maximize GoReact benefits, Ardley and Hallare (2020) recommended thorough training and access to technical support, while Hager (2020) implemented online training for supervisors using GoReact for assessment and feedback. Stapleton et al. (2017) stated that GoReact provided 24-hour technology support for users in their study. These findings support the assertions of
several study participants who discussed the desire for formal GoReact training before using the software during their DPT program.

In contrast, Short and Bruster (2021) refuted the reported challenges with GoReact use. The authors stated that GoReact does not require complicated equipment or training, noting that students can easily upload videos for instructor review and feedback. However, based on this study’s findings of the technical challenges with GoReact use in a DPT program, it is recommended that students and instructors receive training and support to encourage its use and positive contributions to professional work readiness.

Theme 5: Suggestions

The fifth theme involved the participants’ suggestions for GoReact use in a DPT program. Most participants favored GoReact as a tool for soliciting instructor feedback rather than for virtual practical skills testing. This confirms the findings of many studies in which the authors supported the importance of formative instructor and peer feedback in the performance of clinical skills in physical therapy education (Ebert et al., 2020; Forbes et al., 2018; Hartstein et al., 2022; Hoglund, 2015; Kandasamy et al., 2021; Macauley et al., 2022; Maloney et al., 2013; Ødegaard et al., 2021; Perlow et al. 2019; Plummer, Kaygisiz, et al., 2021). In particular, the study by Macauley et al. (2022) reinforced these findings by reporting that physical therapy students appreciated formative skill assessments with instructor and peer feedback prior to practical examinations.

Another participant suggestion was for more challenging patient scenarios with the option to alter the case in real-time for more spontaneous student responses. The need for more authentic and challenging scenarios is supported by Forbes et al. (2018), who found that physical therapy graduates valued authentic experiences during clinical instruction as a positive contributor to professional work readiness. Such experiences may also be possible during didactic coursework via GoReact before students begin their clinical internships. Additionally, Jones et al. (2021) reported that physical therapy graduates lacked confidence in situations of interprofessional conflict, such as when team members had differing opinions, which graduates attributed to limited training in complex cases during their DPT program. Wilesmith et al. (2020) provided further support for challenging and authentic scenarios with their finding that physical therapy graduates reported challenges with patient education in complex situations. Through complex patient care scenarios, DPT students learn to manage potential conflict and patient education challenges to build resiliency in preparation for professional clinical practice.

Limitations

This study had several limitations worthy of discussion. One limitation was difficulty recruiting willing DPT graduates who used GoReact in their didactic coursework during their professional physical therapy education at a particular United States-based accredited DPT program. The limitation was mitigated by receiving access to the program’s alumni directory, which granted access to nearly 2,000 DPT graduates across four campuses. Another limitation of this study involved participant difficulty recalling the courses, contexts, and feelings toward GoReact use during the didactic portion of their DPT program, which was addressed during the interviews by reviewing and discussing course content, assignments, and assessments at the beginning of the interviews to stimulate more recollection of GoReact and subsequent

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perceptions, opinions, and attitudes toward its use.

Researcher bias was another potential limitation of this study. As a faculty member and GoReact user for the same DPT program as the graduates I recruited and interviewed, I ensured I held no authoritative position over them as they were no longer students at the university. Likewise, coercion of subordinates was not an issue.

Areas for Future Research

Recommendations for further research emerged from the strengths and limitations of this study. Since this study focused on the perspectives of DPT graduates from a single targeted university accredited by the Commission on Accreditation in Physical Therapy Education, additional studies are recommended to investigate GoReact use at other DPT and health professions programs in the United States. In addition to graduate perspectives, further research on student and faculty perspectives, specific uses of GoReact, and performance outcomes will offer more insight into the benefits and challenges of GoReact as a learning and assessment tool. Furthermore, suggestions to improve GoReact use, such as designing and implementing more complex scenarios or high-fidelity simulations, may prepare DPT graduates to serve their patient populations better (Forbes et al., 2018; Hartstein et al., 2022; Martin et al., 2020; Ødegård et al., 2021; Phillips et al., 2017).

Implications

Positive social change is a commitment to improving the lives of individuals and the communities in which they live, learn, and work. This study can potentially contribute to positive social change at the individual, organizational, and societal levels. At the individual level, the results of this study provide insight into DPT graduates’ perceptions of GoReact video assessment software and professional clinical work readiness. Understanding the use of GoReact as it relates to professional work readiness can inform DPT and health professions students and faculty members of innovative teaching and learning practices to improve preparedness to work as licensed physical therapists. Furthermore, suggestions to improve GoReact use, such as designing and implementing more complex scenarios or high-fidelity simulations, may prepare DPT graduates to serve their patient populations better (Forbes et al., 2018; Hartstein et al., 2022; Martin et al., 2020; Ødegård et al., 2021; Phillips et al., 2017).

At the organizational level, the results of this study allow a practical application for the growing number of professional physical therapy education programs adopting a hybrid teaching and learning model that includes innovative educational tools (Gagnon et al., 2020, 2022). Additionally, the results of this study can assist DPT education programs in developing and utilizing innovative teaching, learning, and assessment practices to prepare their students best to become successful licensed physical therapists. At the societal level, this study can positively impact equitable access to essential rehabilitative services by helping physical therapy programs meet workforce needs. With the Bureau of Labor Statistics (2021) projection of a 21% increase in demand for physical therapists over the next
ten years, this study's findings have the potential to promote positive social change by expanding access to DPT education via growth in online programs and innovative tools to maximize graduate work readiness.

This study revealed that most participants held a favorable view of GoReact video assessment software use during their DPT program. Recommendations for practice include continuing GoReact use in participating programs and introducing GoReact as a helpful feedback and reflection tool to programs not utilizing it. As new DPT programs emerge with more online teaching and learning and less in-person instruction, GoReact is a viable option to help students receive valuable feedback on their skill performance to ensure timely progression through the curriculum.

Conclusion

This study sought to fill a gap in the literature on the use of GoReact video assessment software in DPT education and the perceptions of DPT program graduates on their readiness to practice in a professional clinical setting. Participants shared an overall positive view of GoReact use and professional work readiness and offered helpful suggestions for its use in professional physical therapy education programs. Negative opinions of GoReact use and work readiness primarily involved the lack of in-person tactile feedback on psychomotor skills and technical difficulties with finding ideal recording angles and slow video file upload speeds.

As more professional physical therapy education programs adopt online teaching and learning practices, there is a need for innovative technology to supplement and possibly replace conventional instruction, assessment, and feedback methods to impact DPT graduates' professional clinical work readiness positively (e.g., Bampton et al., 2022; Gagnon et al., 2020, 2022; MacDonald et al., 2020; Ortega et al., 2022). Understanding DPT graduate perceptions of GoReact and work readiness supports the greater need for innovative education research and practices to ensure students develop the psychomotor skills necessary for optimal work readiness.

References


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Association for the Advancement of Computing in Education. https://www.learntechlib.org/primary/p/20951/


Ingram, M., Forbes, R., & Jones, A. (2019). Physiotherapy new graduate self-


Liu, B. (2020). *Sentiment analysis: Mining opinions, sentiments, and emotions* (2nd ed.). Cambridge University Press. [https://doi.org/10.1017/9781108639286](https://doi.org/10.1017/9781108639286)


https://doi.org/10.1186/s12909-021-02896-1


https://doi.org/10.22605/RRH6132

https://doi.org/10.3233/EFI-2004-22201

Short, D., & Bruster, B. (2021). Using technology to enhance teaching 
https://doi.org/10.46409/003.AAHT4330


https://doi.org/10.1080/09593985.2020.1744206

https://doi.org/10.1108/IJLLS-09-2020-0073

https://doi.org/10.1097/JTE.0000000000000058


**Appendix: Interview Guide**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Interview questions and script</th>
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</thead>
<tbody>
<tr>
<td>Introduction and demographic information</td>
<td>Script: Thank you for agreeing to participate in this study on the use of GoReact video assessment software during your Doctor of Physical Therapy (DPT) education program and your perceptions of readiness for professional clinical practice following graduation. This interview is being audio recorded for transcription and data collection purposes. All responses will be kept confidential and any identifying information will be protected.</td>
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<tr>
<td></td>
<td>Do you consent to being recorded today?</td>
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<td></td>
<td>Thank you. Let’s begin with a few basic questions about your DPT education.</td>
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<td></td>
<td>1. What term and year did you start your DPT education program?</td>
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<td>2. What month and year did you graduate from your DPT program?</td>
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<tr>
<td>Topic</td>
<td>Interview questions and script</td>
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<td>3. In which courses do you recall using GoReact video assessment software?</td>
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<td></td>
<td>4. With what type(s) of assignments or assessments do you recall using GoReact?</td>
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<td></td>
<td><strong>Script:</strong> The following questions address your thoughts on the use of GoReact during your courses and how GoReact may have affected how prepared you felt for clinical practice. These questions are based on a conceptual framework with six themes developed by Padley et al. (2021) in their study on work readiness of medical school graduates. Each of the following questions will address those six themes.</td>
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<tr>
<td>Work readiness theme:</td>
<td><strong>Confidence</strong> Script: The first theme is confidence, which Padley et al. (2021) described as the graduate’s feeling or self-perception of readiness to enter the workplace.</td>
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<td>5. Based on this definition, what are your thoughts on how the use of GoReact during your DPT program affected your confidence to work as a Physical Therapist (PT) following graduation?</td>
</tr>
<tr>
<td>Work readiness theme:</td>
<td><strong>Capability</strong> Script: Thank you for providing me your thoughts related to your confidence to work as a PT and the use of GoReact. The next theme is capability, which Padley et al. (2021) described as the graduate’s competence to perform in the workplace.</td>
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<td>6. Based on this definition, what are your thoughts on how the use of GoReact during your DPT program affected your ability to perform as a PT in the clinic following graduation?</td>
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<td>Work readiness theme:</td>
<td><strong>Reflexivity</strong> Script: Thank you for providing me your thoughts related to your capability to work as a PT and the use of GoReact. The next theme is reflexivity, which Padley et al. (2021) described as “the overlap between initial confidence and actual capability” (p. 4). This can be thought of as how your performance during your DPT program influenced your ability to practice in a professional physical therapy setting following graduation.</td>
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<td>7. Based on this description of reflexivity, what are your thoughts on how the use of GoReact prepared you to practice as a PT in a professional clinical setting following graduation?</td>
</tr>
<tr>
<td>Topic</td>
<td>Interview questions and script</td>
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</table>
| Work readiness theme: Responsibility | Script: Thank you for providing me your thoughts related to your preparedness to work as a PT and the use of GoReact. The next theme is **responsibility**, which Padley et al. (2021) defined as an obligation of the new graduate to practice safely in their work environment.  
8. Based on this definition, what are your thoughts on how the use of GoReact during your DPT program affected your responsibility to perform safely as a PT in the clinic following graduation? |
| Work readiness theme: Context | Script: Thank you for providing me your thoughts related to your feelings of responsibility for safe practices in the clinic and the use of GoReact. The fifth theme is **context**, which Padley et al. (2021) described as the graduate's readiness for their role in the clinic setting.  
9. Based on this description of context, what are your thoughts on how the use of GoReact prepared you for your role as a PT in the professional clinical setting following graduation? |
| Work readiness theme: Resilience | Script: Thank you for providing me your thoughts related to your preparedness for your clinical role as a PT and the use of GoReact. The sixth and final theme is **resilience**, which Padley et al. (2021) described as the graduate’s readiness or preparedness "to manage the emotional, physical, and social challenges" (p. 5) of the workplace. The authors stated that resilience measures how one adapts to their new role in the clinic and any challenges they may encounter (Padley et al., 2021).  
10. Based on this description of resilience, what are your thoughts on how the use of GoReact prepared you to manage any emotional, physical, or social challenges or stressful situations that you might encounter in the professional clinical workplace following graduation? |
| Benefits and Challenges | Script: Thank you for providing me your thoughts related to your clinical resilience and the use of GoReact. The last questions relate to your use of GoReact during PT school.  
11. What, if any, benefits do you see to using GoReact during PT school? |
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<th>Topic</th>
<th>Interview questions and script</th>
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<td>12. What, if any, challenges did you encounter in using GoReact during PT school?</td>
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</table>

**Conclusion**

Script: Thank you for speaking with me today and contributing to my study.

13. In closing, is there anything else you would like to add, such as thoughts, experiences, ideas, or suggestions, about the use of GoReact video assessment software during your DPT program and your preparedness or readiness to work as a professional PT following graduation?

Script: I will contact you within a week to share a transcript of today’s interview. Please review the transcript and respond to me with any comments, changes, or clarifications. We can also schedule another meeting to discuss the transcript if that would be easier for you. Thank you again for your time!