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

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Walden University 2023

Abstract

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

by

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DSc, University of Maryland Baltimore, 2010

MPT, Baylor University, 1997

BS, Wake Forest University, 1994

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Education

Walden University

August 2023

Abstract

Physical therapy (PT) 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 problem addressed in this study is the gap in research related to the use of GoReact video assessment software and how its use relates to Doctor of Physical Therapy (DPT) program graduates' professional clinical work readiness. The purpose of this basic qualitative study was to explore the perceptions of DPT graduates' professional work readiness from using GoReact at an accredited DPT education program in the United States. The conceptual framework developed by Padley et al. to understand work readiness of medical graduates was used. The research question addressed the perceptions of DPT graduates about the use of GoReact video assessment software during their professional PT education program as it related to their readiness for professional clinical practice. Semistructured interviews were conducted with 15 DPT graduates via virtual teleconferencing software. Interview data were analyzed using descriptive and emotion coding that aligned with the six concepts described by Padley et al. Results indicated that most participants held an overall positive view of GoReact as it related to their preparedness for professional PT practice, with emphasis on feedback, self-reflection, repetition, and freedom of use as most beneficial. The study findings may be used to promote positive social change by expanding access to PT education via an increase in online programs and innovative teaching, learning, and assessment tools and practices to maximize graduate professional work readiness.

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Dedication

I dedicate this dissertation to my husband, Lonnie, and our three exceptional sons, Caleb, Declan, and Riley, whose unwavering support throughout this journey allowed me to achieve my ultimate academic goal. For this, I am eternally grateful and immensely blessed. I also dedicate this dissertation to my physical therapy students, who challenge and motivate me to be a better educator every day.

"The only limit to the height of your achievements is the reach of your dreams and your willingness to work for them." — Michelle Obama

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I would like to thank Dr. Gladys Arome and Dr. Charlotte Redden for their support, guidance, and mentorship throughout this dissertation journey. I also thank the many faculty, staff, fellow students, and colleagues for their advice and assistance during this process.

While it will never be enough, I thank my husband, Lonnie, and our children for their unwavering support, understanding, and sacrifice as I pursued this academic goal. Lonnie, your willingness to fulfill parenting duties when I had deadlines helped me more than you know. Boys, I love that you understood why I always had my laptop with me at your games and other events. I promise I was watching! I also thank my parents, Herbert and Stephanie Coley, who instilled the value of hard work and never put limits on my aspirations. I love you all.

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Chapter 1: Introduction to the Study

Physical therapy education programs adopting online teaching and learning must ensure students acquire the necessary skills for optimal professional work readiness. One concern in physical therapy skill development is whether students receive appropriate assessment and feedback in the online environment. In this study, I examined physical therapy graduates' perceptions of using the innovative video assessment software GoReact during their didactic training and professional work readiness. The use of GoReact video assessment software emerged during the early COVID-19 pandemic in the spring of 2020 when traditional Doctor of Physical Therapy (DPT) education programs were forced to shift to fully online teaching, learning, and assessment of academic content and practical psychomotor skills (Puzzifero & McGee, 2021). This study allows a practical application for the growing number of professional physical therapy education programs adopting online teaching and learning that include innovative educational tools (Bampton et al., 2022; Gagnon et al., 2020, 2022). Furthermore, this study provides insight into physical therapy graduates' perceptions of GoReact video assessment software and professional clinical work readiness to assist physical therapy education programs in developing and utilizing innovative teaching, learning, and assessment practices to best prepare their students to become successful licensed physical therapists. With the Bureau of Labor Statistics (2021) projection of a 21% increase in demand for physical therapists over the next 10 years, this study's findings may promote positive social change by expanding access to physical therapy education via an increase

in online programs and innovative tools to maximize graduate professional work readiness.

This chapter opens with background information related to the research problem and the gap in the literature that this study will address. In the next sections of this chapter, I present the purpose and rationale for the study, outline the research questions, and describe the study's conceptual framework. Subsequent sections of this chapter include information on the nature of the study and definitions of key terms related to video annotation software, psychomotor skills, and work readiness, followed by sections that identify potential assumptions and limitations and discuss the scope and delimitations of this study. The chapter concludes with the study's significance and a summary of the content.

Background

Administrative decisions stemming from the COVID-19 pandemic forced traditional 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 allowed 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).

Following psychomotor skill instruction during synchronous online class time or asynchronously via the learning management system, DPT faculty instructed students to upload videos performing those skills 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-toface instruction after 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).

While studies exist that examined the use of GoReact and other video annotation tools in higher education, little is known about the use of GoReact video assessment software 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 my study on DPT graduates' perspectives on the use of GoReact video assessment software 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 (2020a) 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 perspectives 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). This need for further research supports my aim to study the perceptions of DPT program graduates on how the use of GoReact video assessment software prepared them for professional clinical practice.

Problem Statement

The problem I explored in this study is the gap in research related to the use of GoReact video assessment software introduced during the shift to online teaching and learning during the early COVID-19 pandemic and how the use of GoReact relates to DPT program graduates' professional clinical work readiness. Therefore, in this qualitative study I aimed 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 a United States-based DPT education program accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). The importance of this study lies in understanding DPT graduate experiences with using GoReact video assessment software during their didactic training and using this information to improve performance feedback. In addition, I looked at clinical readiness via the GoReact platform as more DPT programs emerge that incorporate enhanced online learning strategies and innovative technology, such as GoReact, into their curriculum (Gagnon et al., 2022).

Purpose of the Study

The purpose of this basic 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.

Research Question

The research question guiding this study was "What are the perceptions of Doctor of Physical Therapy 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?"

Conceptual Framework for the Study

For this study I used the conceptual framework developed by Padley et al. (2021) to understand work readiness of medical graduates. Padley et al. (2021) identified six themes from the literature to create a conceptual model of work readiness: confidence, reflexivity, capability, responsibility, context, and resilience. These six concepts interact to help or hinder work readiness or preparedness (Padley et al., 2021). The use of GoReact video assessment software in physical therapy education involves these six themes, in that its use in soliciting performance feedback can help students build confidence in their abilities, allow for performance reflection and improvement, encourage responsibility in learning and practice, enhance the ability to receive and integrate feedback, and develop resiliency in the workplace (Padley et al., 2021). I used the six concepts by Padley et al. (2021) to frame the exploration of DPT graduate perceptions of work readiness or professional clinical preparedness from using GoReact video assessment software during online delivery stemming from the COVID-19 pandemic and continued by some DPT faculty after the return to hybrid and face-to-face instruction.

Nature of the Study

The nature of this study was a basic qualitative approach to explore the perceptions of DPT graduates on their readiness for professional clinical practice following the use of GoReact video assessment software stemming from the shift to online instruction during the early COVID-19 pandemic. A basic qualitative methodological approach is used to explore individuals' experiences, opinions, beliefs, attitudes, perceptions, or feelings about a particular event or issue (Percy et al., 2015). Using the six concepts by Padley et al. (2021) to explore and frame interview questions regarding professional clinical preparedness through GoReact video assessment software, I aimed to learn about DPT graduates' experiences, opinions, and perceptions consistent with a basic qualitative study approach. Data were collected from semistructured interviews with physical therapy graduates working as licensed physical therapists who used GoReact video assessment software during their professional physical therapy education. Interviews occurred via virtual teleconferencing software with only the audio portion recorded. Interview data were transcribed, coded, and analyzed using thematic analysis to identify key concepts and themes regarding the perceptions of GoReact use and professional work readiness (see Percy et al., 2015).

Definitions

Annotation: Virtual information, such as text or a label, used to describe an object or action (Reinoso et al., 2018)

Capability: An individual's competence or performance ability (Padley et al., 2021)

Confidence: An individual's feeling or self-perception of readiness to enter the workplace (Padley et al., 2021)

Context: The graduate's readiness for their role in the professional clinic setting (Padley et al., 2021)

Physical therapy graduate: Physical therapists who have met all requirements and received a degree for completion of their accredited entry-level professional education program (Stoikov et al., 2021)

Psychomotor skills: Practical hands-on physical tasks used by health professionals in the clinical setting (Plummer, Smith et al., 2021)

Reflexivity: An individual's reflections on their abilities and the influence on workplace performance (Padley et al., 2021)

Resilience: The graduate's readiness or preparedness "to manage the emotional, physical, and social challenges" (Padley et al., 2021, p. 5) in the workplace

Responsibility: An obligation of the new graduate to practice safely in their work environment (Padley et al., 2021)

Video annotation software: Online or offline video recording tools that add and synchronize text, audio, or video feedback to recorded images (Ardley & Hallare, 2020)

Work readiness: The degree to which an individual is prepared and ready to transition to work following completion of a professional education program (Wells et al., 2021)

Assumptions

I made certain assumptions for this study. I assumed that participants wanted to participate in the study to support educational research and that they met the inclusion criteria. Also, I assumed that the inclusion criteria were appropriate for this study and that participants used GoReact video assessment software during their didactic coursework with equal access to the technology. Additional assumptions were that participants responded honestly and accurately to my questions about their experience with GoReact and professional work readiness.

These assumptions were necessary in the context of the study because I sought to learn about the authentic perceptions of physical therapy graduates who are genuinely interested in supporting educational research. The participants needed to meet the inclusion criteria of using GoReact with no barriers to access to provide accurate accounts of its use and experiences related to work readiness.

Scope and Delimitations

While studies exist that examined the use of GoReact and other video annotation tools in higher education, little is known about the use of GoReact video assessment software in DPT education, nor its effect on DPT program graduates practicing in a professional clinical setting. I explored DPT program graduates' perceptions of how using GoReact video assessment software prepared them for professional clinical practice. GoReact may enhance DPT student didactic training, psychomotor skill performance, assessment, and, ultimately, professional clinical performance.

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 (Bampton et al., 2022; Gagnon et al., 2020, 2022).

This study included only DPT program graduates from an accredited United States-based DPT program who used GoReact video assessment software during their professional education program. Results from this study can inform administrators, faculty, and other key stakeholders from DPT programs of the graduate experience with GoReact as DPT students to offer innovative technology options to help students develop the psychomotor skills necessary for optimal work readiness. Furthermore, the results of this study can be generalized to other health professions education programs, such as medicine, dentistry, occupational therapy, athletic training, and others that involve psychomotor skills instruction and development. The results may also inform future research on innovative technology and applications to enhance teaching and learning in physical therapy and other health professions education.

Limitations

Limitations of this study included the potential difficulty recruiting willing DPT graduate participants who used GoReact video assessment software in their didactic courses during their professional physical therapy education at the targeted United States-based accredited DPT program. However, I was able to recruit all 15 participants from the targeted DPT program. An additional limitation was the effect of DPT graduates' recall of using GoReact video assessment software during their professional physical therapy education on the depth and breadth of data gathered for this study. I addressed

this limitation by including interview questions about courses and assessments that used GoReact during the participants' DPT program to stimulate recall of their experiences with GoReact.

I am a faculty member and GoReact user for the same DPT program as the graduates I studied. Since I planned to study program graduates, I held no authoritative position over participants, and coercion of subordinates was not an issue. As a GoReact user, I recognized that I come with my own experiences, beliefs, and perceptions. I clearly separated my professional role from that of a researcher to help maintain scholarly objectivity during data collection and interpretation and produce a dependable study. I used reflexive memo writing following the interviews to document my feelings and prevent potential biases (see Nowell et al., 2017; Ravitch & Carl, 2021). I employed member checking by providing summaries of the interview transcripts to each participant and offered to schedule follow-up interviews for participants to clarify their responses for accurate interpretation (see Ravitch & Carl, 2021).

Transferability was not a significant limitation of this study. I provided a thorough description of the background, data sources, instrumentation, and analysis 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 and health professions education programs (see Amin et al., 2020). Furthermore, the investigation of DPT graduates' perceptions in different course settings and across various contexts provides the opportunity for a richer understanding of the phenomenon and transfer to other health education programs (see Shenton, 2004).

Significance

This research fills a gap in understanding how the use of the GoReact video assessment software stemming from the abrupt shift to online learning during the early COVID-19 pandemic related to the perceptions of DPT program graduates' professional work readiness. This study allows 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 (see Gagnon et al., 2020, 2022). Additionally, this study provides insight into DPT graduates' perceptions of GoReact video assessment software and professional clinical work readiness to assist DPT education programs in developing and utilizing innovative teaching, learning, and assessment practices to best prepare their students to become successful licensed physical therapists. Furthermore, with the Bureau of Labor Statistics (2021) projection of a 21% increase in demand for physical therapists over the next 10 years, this study's findings may promote positive social change by expanding access to DPT education via growth in online programs and innovative tools to maximize graduate work readiness.

Summary

This chapter provided an introduction and background information for my study on DPT graduate perceptions of the didactic use of GoReact video assessment software and professional clinical work readiness. I described the study's problem statement, purpose, research question, and conceptual framework. Additionally, I detailed the nature of the study, defined key concepts and terms, and described study assumptions, scope, delimitations, and limitations. The chapter concluded with a description of the

significance of the study. The next chapter describes the study background and provides an extensive literature review of key concepts.

Chapter 2: Literature Review

The problem I explored in this study is the gap in research related to the use of GoReact video assessment software introduced during the shift to online teaching and learning during the early COVID-19 pandemic and how the use of GoReact relates to DPT program graduates' professional clinical work readiness. Therefore, in this qualitative study I aimed 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 importance of this study lies in understanding DPT graduate experiences with the use of GoReact video assessment software during their didactic training and using this information to improve performance feedback. In addition, I looked at clinical readiness via the GoReact platform as more DPT programs emerge that incorporate enhanced online learning strategies and technology, such as GoReact, into their curriculum (Gagnon et al., 2022).

Administrative decisions stemming from the COVID-19 pandemic forced traditional 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; de Almeida Medeiros et al., 2021; Lorio et al., 2021; Majsak et al., 2022; 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). In addition, the GoReact video assessment platform allowed 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). As DPT programs return to traditional face-to-face instruction after the COVID-19 pandemic, some DPT faculty continue 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).

While studies exist that examined the use of GoReact and other video annotation tools in higher education, little is known about the use of GoReact video assessment software in DPT education, nor 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 an internship. They found it a helpful tool for providing valuable feedback and collaboration to support student teachers' learning 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 is suggestive of my study on DPT graduates' perspectives on the use of GoReact video assessment software during their physical therapy education and professional work readiness.

Graduates of professional physical therapy programs must 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 practice, assessment, and personalized feedback from instructors, mentors, and peers (Plummer, Smith et al., 2021; Zylstra et al., 2020), all of which proved to be a challenge 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), Majsak et al. (2022), and Plummer, Kaygisiz et al. (2021). The inability to adequately develop a basic psychomotor skill set during training may affect DPT graduates' work readiness following program completion (MacDonald et al., 2020). Furthermore, as more DPT programs emerge that incorporate enhanced online learning strategies into their curriculum, there is a greater need for innovative education research and practices to ensure students develop the psychomotor skills necessary for optimal work readiness (Bampton et al., 2022; Gagnon et al., 2020, 2022). This need for further research supports my aim to study the perceptions of DPT program graduates on how the use of GoReact video assessment software prepared them for professional clinical practice.

This chapter includes a review of current and relevant literature to provide background information to support my study on DPT graduate perceptions of the contributions of the use of GoReact video assessment software during their physical therapy education to their professional work readiness following graduation. In this chapter I describe the literature search strategy I used to locate and retrieve pertinent peer-reviewed articles, followed by a thorough explanation of the work readiness conceptual framework and its application in medical education by Padley et al. (2021). This chapter concludes with a synthesis and discussion of key concepts from current research focused on video assessment, annotation, and feedback techniques in physical therapy education, the use of GoReact video assessment software in higher education, and aspects and perceptions of work readiness of new physical therapy graduates and their employers.

Literature Search Strategy

The strategy I used to search, identify, and collect relevant literature for this study consisted of using the Walden University Library system, the library system at my institution, and Google Scholar to access the following databases: CINAHL, MEDLINE, ProQuest, PubMed, EBSCO, ERIC, SAGE, and Science Direct. Within each of these databases, the following keywords or search terms were used separately and in combination: GoReact or Go React or goReact or go React, video assessment software or video annotation software, video assessment, video annotation, video coaching, video feedback, feedback, performance feedback, physical therapy education or physical therapy education, physical therapy

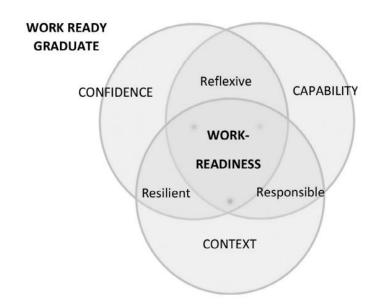
student or physiotherapy student or physical therapist student, health professions education or health professionals education, allied health professions education or allied health professionals education, online learning or e-learning or distance learning or virtual learning, COVID-19 pandemic, covid-19 or coronavirus or 2019-ncov or sarscov-2 or cov-19, work readiness or clinical readiness or professional readiness, clinical preparedness or clinic preparedness or professional preparedness. Due to the paucity of published research on GoReact and other video assessment software used in physical therapy education, this literature review includes other video instruction and feedback methods in physical therapy education and student perceptions of online teaching and learning in support of this study. This extensive literature review contains peer-reviewed research articles primarily from 5 years between 2017-2022.

Conceptual Framework

I used the conceptual framework developed by Padley et al. (2021) to understand work readiness of medical graduates. Padley et al. identified six overlapping themes from the literature to create a conceptual model of work readiness: confidence, reflexivity, capability, responsibility, context, and resilience, as shown in Figure 1.

Figure 1

Conceptual Model of Work Readiness of Medical Graduates



Note. From "Transitioning from University to Postgraduate Medical Training: A Narrative Review of Work Readiness of Medical Graduates," by J. Padley, S. Boyd, A. Jones, and L. Walters, 2021, *Health Science Reports*, 4(2), p. 6 (https://doi.org/10.1002/hsr2.270). Copyright 2021 by The Authors. Reprinted with permission. See Appendix A: License Agreement to Reproduce Figure 1.

These six concepts interact to help or hinder work readiness or preparedness (Padley et al., 2021). The use of GoReact video assessment software in physical therapy education involves these six concepts in that its use in soliciting performance feedback can help students build confidence in their abilities (Markowski et al., 2018), allow for performance reflection and improvement (Cattaneo et al., 2020; Gayathri et al., 2021), encourage responsibility in learning and practice (Guisard et al., 2019), integrate

feedback (Akizuki et al., 2020), and develop resiliency in the workplace (O'Brien et al., 2020; Padley et al., 2021). Since Padley et al. (2021) found that work readiness is largely an "individual, self-reported attribute" (p. 5), this framework was appropriate to guide the design of a study to explore new DPT graduate perceptions of the contributions of GoReact video assessment software use during their professional physical therapy education to their readiness to practice as licensed physical therapists. Each of the six concepts is explained in detail in the following sections.

Confidence

Padley et al. (2021) described confidence as the individual medical graduate's feeling or self-perception of readiness to enter the workplace. They found that self-confidence and work readiness were enhanced with proper supervision and constructive performance feedback during student internships. Likewise, Almond et al. (2021) and Sole et al. (2012) suggested that new graduate confidence levels could be improved with mentoring in the workplace, while Chipchase et al. (2022) and Atkinson and McElroy (2016) supported professional development activities. These findings support the exploration of DPT graduate confidence related to the use of GoReact video assessment software.

Capability

Padley et al. (2021) described capability as the individual's competence or "measure of ability to perform" (p. 4). Unlike self-perceived confidence, capability as a concept of work readiness can be determined by supervisors, colleagues, and patients in the workplace (Padley et al., 2021). However, self-confidence can affect capability,

especially in a new work setting, if faced with unfamiliar challenges or "higher stakes decision making" (Padley et al., 2021, p. 6). Furthermore, capability is a result of professional education and training. A physical therapy graduate's preparedness for clinical practice is affected by the professional training, feedback, and mentoring received during school and in the workplace (Almond et al., 2021; Chipchase et al., 2022; Lao et al., 2021). Hence, the concept of capability is appropriate for study in relation to the use of GoReact in a professional DPT program.

Reflexivity

Padley et al. (2021) stated that "reflexivity represents the overlap between initial confidence and actual capability" (p. 4). Retrospective thoughts on abilities from the graduates' didactic training and clinical internships may influence their perceived work readiness, especially if they completed their internships with a high level of self-confidence. Once in the workplace, it is vital to continue to reflect on performance and abilities to improve preparedness for more complex situations (Chipchase et al., 2022; Forbes et al., 2018). Furthermore, O'Brien et al. (2020) found that reflexivity, insight, and self-awareness ranked highest in work readiness characteristics among educators, supervisors, and clinic directors. Therefore, the reflexive nature of GoReact during didactic training supports including reflexivity as a concept for this study.

Responsibility

Padley et al. (2021) defined responsibility as an obligation of the new graduate to practice safely in their work environment. Work readiness is enhanced when the individual feels capable of and supported in providing safe patient care in their new

setting. Fairburn et al. (2019) emphasized the importance of physical therapy student competence in patient safety as vital to clinical readiness, which can be enhanced through psychomotor training, feedback, and collaboration. Hence, exploring the concept of responsibility in relation to GoReact use is appropriate for this study.

Context

Padley et al. (2021) described context as the medical graduate's readiness for their role in the clinic setting. Context also relates to the individual's training settings, such as school and clinical internships before graduation, and their impact on work readiness (Padley et al., 2021). Learning experiences involving video assessment tools and feedback can positively or negatively impact an individual's work readiness or preparedness. Furthermore, gaps in performance that affect work readiness must be identified to support graduates in their transition to professional clinical practice (Fairburn et al., 2019). These findings support the exploration of GoReact use in a DPT program and work readiness in the context of a professional physical therapy clinical setting.

Resilience

Padley et al. (2021) discussed resilience as the graduate's readiness or preparedness "to manage the emotional, physical, and social challenges" (p. 5) of the workplace. Resilience measures how one adapts to their new role in the clinic and any challenges they may encounter (Padley et al., 2021). O'Brien et al. (2020) described resilience as the ability to adapt, be flexible, accept feedback, and rebound from challenges. Their survey of allied health supervisors and clinic directors revealed

resilience as one of the most important characteristics in determining work readiness (O'Brien et al., 2020). Resilient physical therapists can manage stressful work situations while balancing life's other demands, which supports the need to study resiliency in DPT graduates as it relates to GoReact use during their professional DPT program.

Literature Review Related to Key Concepts

This section begins with an introduction of key concepts related to the use and perceptions of digital tools and video assessment techniques in physical therapy education. Next, I describe GoReact video assessment software and its use in higher education. Lastly, I discuss aspects and perceptions of work readiness or clinical preparedness of graduate physical therapists and employers.

Video Assessment, Annotation, and Feedback in Physical Therapy Education

Digital innovations in physical therapy education enhance the connection between all learning community members and allow for more direct interactions between students, peers, and instructors (Casale, 2020; Donlan & Alpert, 2018; Volansky, 2019).

Furthermore, innovations introduced during an educational program help DPT graduates enter the workforce better prepared for professional practice (Casale, 2020; Hughes et al., 2018; Worek et al., 2022). The unprecedented shift to online instruction during the early COVID-19 pandemic in the spring of 2020 saw increased use of innovative digital teaching and learning tools in physical therapy education (Bampton et al., 2022; Butcher & Lewis, 2022; Majsak et al., 2022; Puzzifero & McGee, 2021; World Physiotherapy, 2020a). Examples of tools included Skype, Teams, and Zoom online videoconferencing platforms to deliver instructional content (Plummer, Kaygisiz et al., 2021; Puzzifero &

McGee, 2021; World Physiotherapy, 2020b) and Kahoot and other gaming tools for digital gamification of learning activities (Fernandez-Carnero et al., 2020). Instructors used PhysioU and other digital learning resources to help teach foundational courses (Harmon et al., 2021) and psychomotor skills (Plummer, Smith, et al., 2021), while physical therapy programs leveraged the various learning management systems and distance learning applications to house and deploy course content, assignments, and examinations and support faculty and student interactions (Dumas & Golub-Victor, 2022; Savkin et al., 2021). These digital tools allowed DPT program faculty to continue teaching, students to continue learning, and all stakeholders to remain connected in the online environment (Puzzifero & McGee, 2021).

Video Methods

Among the various digital tools in physical therapy education used during the abrupt shift to online instruction, video assessment, annotation, and feedback emerged as innovations with the potential for lasting impact on teaching and learning (Ortega et al., 2022; Plummer, Kaygisiz, et al., 2021; Plummer, Smith, et al., 2021). However, the use of video technology in physical therapy education is not a new phenomenon, with literature documenting the use and benefits of video tools for teaching, assessment, and feedback before the shift to online instruction due to the COVID-19 pandemic. For example, Cachoni et al. (2018) complemented classroom and textbook instruction with "didactic movies" (p. 410) to demonstrate psychomotor massage skills to physical therapy students. Video assessment at the end of the course showed improved student technique and overall skill performance but found discrepancies in some aspects of the

skill, such as the amount of manual pressure. Similarly, Langfield et al. (2018) created short online videos as optional supplemental material to traditional classroom instruction for a first-year physical therapy program anatomy course. The videos detailed practical aspects of the anatomy course, such as landmarks on anatomic specimens and models, which instructors would assess during the semester. However, despite the supplemental instruction, the authors found that the cohort offered the videos performed worse on practical examination than previous cohorts, which they attributed to the optional nature of the videos and the resultant lack of use by some students (Langfield et al., 2018). A comparable study by Nation et al. (2020) corroborated these results and found that anatomy practical testing scores improved after physical therapy students received peer tutoring despite having access to online instructional videos. Green et al. (2018) and Richardson et al. (2018) found a positive relationship between physical therapy student time spent engaging with online learning content and performance. To increase engagement with online content, Richardson et al. suggested implementing a real-time feedback system to alert students of their time engaged with the online content to encourage more student use of video and other teaching and learning tools. To maximize the benefits of video technology to enhance instruction, students must access and use it, or instructors must consider whether to make its use mandatory and add a feedback component to increase student engagement.

Other video instruction and feedback forms before the early COVID-19 pandemic included virtual reality and 360° video techniques. Hartstein et al. (2022) used interactive virtual reality to improve physical therapy students' clinical decision-making skills.

Throughout the activity, students received embedded performance feedback for their clinical decisions, noting the benefits of an authentic yet low-stakes assessment of their abilities (Hartstein et al., 2022). Similarly, Ulrich et al. (2021) compared 360° video to virtual reality for the instruction and performance of a psychomotor task but did not include a feedback component as Hartstein et al. did. Ulrich et al. reported that while students viewed the technology favorably, they found the lack of communication, interaction, and instructor feedback inferior to traditional teaching and learning methods. Hence, both studies supported the importance of feedback in the performance and assessment of clinical skills in physical therapy education.

Several studies reported the benefits of video-based technologies and physical therapy student self-assessment and peer feedback. Ebert et al. (2020), Maloney et al. (2013), and Perlow et al. (2019) explored physical therapy student self and peer assessment on video-recorded psychomotor skill performance. Similarly, Kachingwe et al. (2015) studied the effects of video recording student practical examinations and self-assessment on final examination scores. While the above studies' authors found that the video recording of skills enhanced students' ability to self-reflect, resulting in improved performance (Ebert et al., 2020; Kachingwe et al., 2015; Maloney et al., 2013), Perlow et al. recommended including instructor feedback in the process for comparison and progress toward independent self-assessment. Maloney et al. included instructor feedback in their study, reporting that asynchronous feedback from remote instructors enhanced student skill development. At the same time, Volansky's (2020) faculty survey supported posting instructor feedback in a public forum for students to learn from each other. In

their research, all of these authors emphasized the importance of reflection and feedback, whether from peers or instructors, as vital components of skill development and performance.

Additionally, Maloney et al. (2013) noted that student skill acquisition was positively influenced by a requirement to assess their video skill performance against a peer benchmark chosen by the instructors. Furthermore, Kachingwe et al. (2015) suggested that assignments and mock practical examinations include video recordings to help students prepare for final practical examinations. This is supported by Macauley et al.'s (2022) findings that physical therapy students appreciated formative skill assessments with instructor and peer feedback prior to practical examinations. With the prolific use of mobile technology today, physical therapy students could easily record themselves practicing psychomotor tasks for self, peer, and instructor assessment using their devices.

Several studies supported using mobile devices and applications for video instruction, assessment, and feedback as a valuable adjunct to traditional teaching and learning in physical therapy education. Hoglund (2015) and Bartlett and Smith (2020) studied the use of mobile devices in physical therapy education for supplemental training in psychomotor skills performance, while Kandasamy et al. (2021) used mobile devices to provide vision-based augmented reality training for video learning of spinal movements. Faculty provided expert performance videos and instructions for students to access on the devices, allowing students to practice the skills and receive feedback from their peers. Furthermore, viewing the videos multiple times allowed students to self-

assess their performance while practicing with peers and keep the videos for future clinical reference (Hoglund, 2015; Kandasamy et al., 2021; Volansky, 2019). Similarly, Rowe and Sauls (2020) studied video-based instruction of a psychomotor task. They found that students in the video group performed better than their peers who learned the skill face-to-face. Likewise, Ødegaard et al. (2021) reported that combining student-produced videos with classroom instruction and self and peer feedback enhanced student skill acquisition, while Røe et al. (2019) supported the value of such student-focused teaching strategies. These studies supported video-based learning, production, and feedback using mobile devices and other technology as promising adjuncts to traditional face-to-face instruction to allow more class time for discussion, student and instructor interaction, and psychomotor skill refinement. It should be noted, however, that for truly effective video-based teaching and learning, instructional video content must be high quality, vetted, and trustworthy (Shah et al., 2022). Furthermore, embedded videos and video assessment tools must be easily accessible and user-friendly (Olivier et al., 2020).

Following the onset of the COVID-19 pandemic, DPT faculty accustomed to face-to-face instruction found novel ways to use video assessment and feedback.

However, despite this creative use of video technologies for physical therapy student teaching and learning, few studies exist on the topic. In a phenomenological study across three countries, Plummer, Kaygisiz, et al. (2021) reported that physical therapy faculty used student-recorded videos for practice and feedback of psychomotor skills during fully online instruction successfully, while Bampton et al. (2022) and Seymour-Walsh et al. (2020) concluded that psychomotor skill teaching and assessment are more effective in a

face-to-face campus environment despite adopting online teaching during the COVID-19 pandemic. Furthermore, El-Sobkey (2022) and Majsak et al. (2022) reported that physical therapy program faculty were concerned with psychomotor skill development and assessment with online learning as compared to face-to-face learning. These conflicting conclusions regarding the effectiveness of face-to-face versus online teaching and learning of psychomotor skills support the need for further research on video assessment in physical therapy education, which is the aim of my study.

One study that emerged from the COVID-19 pandemic by Plummer, Smith, et al. (2021) described using student video skill performance and feedback as part of an innovative coaching model to teach and assess psychomotor skills to DPT students online. After viewing instructional materials and practicing the assigned skills for one week, students met with an instructor online to demonstrate the skills with a partner or share a pre-recorded video of skill performance (Plummer, Smith, et al., 2021). During these coaching sessions, students received personalized feedback on skill performance, asked the instructor questions, and discussed strategies to improve their performance. Following the coaching sessions, students recorded and posted a video of skill performance to a discussion board in which they incorporated instructor feedback and provided feedback on their peers' posted videos and a self-reflection on their own videos (Plummer, Smith, et al., 2021). Plummer, Smith, et al. suggested that an innovative coaching model to teach and assess hands-on psychomotor skills virtually might benefit DPT students with psychomotor skill development and reflective practice. This is supported by Seymour-Walsh et al. (2020), who concluded that video technology can be

an effective psychomotor skill teaching tool in the online environment if the learning activity design encourages active student engagement. Since enhanced skill development can lead to greater professional work readiness, more innovative assessment and feedback methods are needed to best prepare physical therapy students for professional clinical practice.

Physical Therapy Graduate Perceptions

While many studies discussed physical therapy student perceptions of online learning, no articles were found that addressed the perceptions of physical therapy students or graduates of the use of video assessment software during their professional didactic training. One study, however, discussed physical therapy student attitudes toward the use of video instruction to supplement classroom demonstration of psychomotor massage skills (Cachoni et al., 2018). The authors reported that students felt more autonomous in their learning and preferred the option to view the videos repeatedly to enhance their understanding of the techniques. Similarly, Alexander et al. (2019) reported high physical therapy student satisfaction with technology-enhanced learning, citing individual learning style accommodation and autonomy of learning as main benefits. Likewise, Veneri and Mongillo (2021) related that DPT students found "micro learning videos" (p. 6) most helpful in preparing for class discussion and practice. Interestingly, while the above studies supported the use of video technology to enhance student learning, van Kessel et al. (2018) found that physical therapy students chose to engage with video resources to supplement immediate practical skill learning rather than improve their long-term outlook as competent clinicians. Given the variety of reasons for

student use of video resources for learning, there is a need for further investigation of the use of video tools such as video assessment and feedback software to enhance physical therapy student instruction, skill practice, and performance.

The shift to online instruction during the early COVID-19 pandemic affected physical therapy students in many ways, including their sense of community and skill acquisition. For example, Hyland et al. (2021), Ng et al. (2021), and Savkin et al. (2021) found students most concerned with challenges to their physical and mental health, learning effectiveness, motivation to study, and lack of social interaction and sense of community with peers. Additionally, MacDonald et al. (2020) identified common themes and concerns that less hands-on instruction may lead to physical therapy graduates having a diminished clinical skillset, while Anderson and Dutton (2022) reported that DPT students cited the lack of psychomotor skill practice as a significant stressor during the early COVID-19 pandemic. Similarly, Chesterton et al. (2022) reported that students felt disadvantaged with online instruction in their ability to develop and practice hands-on skills, yet Cherry and Blackinton (2017) discussed the successful use of video recording and instructor and peer feedback in a hybrid DPT program. Furthermore, Rossettini et al. (2021) concluded that student satisfaction and performance using online resources was just as high as that with traditional in-person learning, supporting Willis et al.'s (2018) assertion that DPT students can thrive in an online learning environment. These mixed results regarding student satisfaction and performance with online resources, including video technology, combined with the need for an improved sense of community with peers and instructors and more hands-on instruction and practice, support the use of video

assessment and feedback as an essential adjunct to online or blended physical therapy instruction to meet learning outcomes and prepare graduates for professional clinical practice.

GoReact Video Assessment Software

GoReact Description

GoReact is a Family Educational Rights and Privacy Act of 1974 (FERPA), Health Insurance Portability and Accountability Act of 1996 (HIPAA), and Children's Online Privacy Protection Act (COPPA)-compliant video-based assessment platform that allows students to record skill performance videos using their existing camera technology such as smartphones, tablets, or computers (GoReact, 2022; Hager, 2020; Hager et al., 2020; Wang & Goerke, 2021). The student can either record the video directly in the GoReact application or upload a recorded video from their device (Stapleton et al., 2017). The video is stored in a secure, password-protected cloud system (Hager, 2020). Individuals with access to the videos, such as instructors, students, and peers, can view the recordings and provide specific time-stamped text, audio, or video feedback at any distinct point throughout the video (Short & Bruster, 2021; Stapleton et al., 2017). Multimodal feedback is permitted from multiple reviewers for the same video. Reviewers also have the option to upload YouTube video links to provide additional information or instruction in support of their feedback. As the student views or listens to their video after feedback is provided, the inserted time-stamped text, audio, or video annotations appear on the screen at the corresponding time in the video for immediate and specific feedback from the identified author (Ardley & Hallare, 2020). All video files can be close

captioned or have added audio descriptions for accessibility and Section 508 compliance (GoReact, 2022). Additionally, instructors can create custom rubrics and up to 30 optional color-coded markers for more efficient tagging of common performance errors. GoReact integrates with most learning management systems, such as Blackboard and Canvas, to allow instructors and students to use the application directly in their courses (Hager et al., 2020). It should be noted that GoReact is not a free program, with pricing starting at \$59.00 per user and volume discounts for 100 or more licenses (GoReact, 2022).

GoReact Use in Higher Education

GoReact began in 2011 to provide an innovative platform for observing and assessing skill-based learning (GoReact, 2022). According to the GoReact website, over 800 institutions across multiple countries use GoReact in their programs. The company saw record growth in 2020 with increased use in health professions and nursing education programs due to the transition to online learning with the COVID-19 pandemic (Kanaly, 2020). With the ongoing trend toward adopting more innovative technology in education, GoReact and other video assessment tools continue to grow in popularity despite the return of many programs to in-person instruction. As such, the successful use of GoReact and other technology requires proper planning, training, and understanding of the confidential nature of some of the recorded video content (Hager et al., 2020).

According to a report on COVID-19 and the adoption of online video assessment, American Sign Language, communications, and teacher education programs used GoReact technology most frequently before the COVID-19 pandemic (GoReact, 2022).

However, the onset of the pandemic saw over a 1000% increase in active student use of online video assessment technology in nursing and other healthcare education programs, such as physical therapy (GoReact, 2022). Despite this massive increase, no empirical studies were found on using GoReact video assessment or annotation software in health professions education. Instead, several studies on GoReact for student teacher training supported its use to improve task observation and feedback that traditionally occurred either in person or through written communication (Ardley & Hallare, 2020; Ardley & Johnson, 2019; Ardley & Repaskey, 2019; Boniface et al., 2022; Hager, 2020; Short & Bruster, 2021; Stapleton et al., 2017). In addition, Suh et al. (2021) reported that GoReact video recordings enabled student teachers to focus and reflect on their performance in the video and see how their peers performed in similar and challenging situations. Likewise, Hager (2020) asserted that the important benefits of video recording of skill performance are allowing the student to view, self-evaluate, and improve their performance, while Short and Bruster (2021) reported the benefits of fostering student self-efficacy and collaborative peer review through the use of GoReact. As with my study, Hager (2020) commented that technology introduced during online learning, such as GoReact, may enhance teaching and learning in on-campus programs while also improving student and instructor or mentor collaboration (Ardley & Repaskey, 2019; Groth & Morrison, 2020) with the ability to mimic face-to-face interactions found in the classroom (Stapleton et al., 2017). Furthermore, Ardley and Johnson (2019), Boniface et al. (2022), Hager et al. (2020), Short and Bruster (2021), and Stapleton et al. (2017) suggested that video

annotation software has the potential to help student teachers improve their teaching practices, which is an essential step toward professional work readiness.

Other education areas utilized GoReact video assessment software to improve student readiness for professional employment. For example, Lee (2020) discussed GoReact use in preparing business communications students for professional presentations and the communication skills needed to be competitive in the workplace. Lee described using the GoReact platform to record student presentations live in the classroom rather than in an online or distance learning environment as previously described with teacher education programs. Business communications instructors used GoReact to provide time-stamped feedback on the video recordings after each class more quickly and efficiently than their traditional method of waiting for the information technology team to provide the recordings for review (Lee, 2020). Moreover, students could view the time-stamped instructor feedback at specific points in their presentation to help complete a self-reflection assignment of their performance.

Aguero (2022) presented a case report of unique GoReact video assessment software use during the early COVID-19 pandemic. He used the platform for English-Spanish interpretation students to practice their simultaneous interpretation skills during synchronous online class sessions. After Aguero introduced the class and shared learning objectives, students logged on to GoReact to listen and record simultaneous interpretations of an instructor-uploaded speech. Once complete, the class returned to the synchronous online session to discuss the task and provide feedback. While this technique was effective in the short-term, emergency online teaching and learning

environment, Aguero decided GoReact was too cumbersome to use in this format.

However, students benefitted from using GoReact in this case to return to their video recordings to view the feedback along with their simultaneous interpretation technique to help improve their skills. Based on the available literature, it appears that GoReact is most effective for instructor, student, and peer assessment and feedback in clinical situations, such as student teaching in the classroom or demonstrating psychomotor skills necessary for professional clinical work readiness.

Work Readiness of New Physical Therapy Graduates

Physical therapy professionals use a variety of skills to provide competent and effective patient care. To this end, entry-level physical therapy graduates must possess minimum foundational skills for professional clinical work readiness (American Physical Therapy Association, 2009; World Physiotherapy, 2011). This minimum skill set develops through didactic training and clinical internships throughout a professional physical therapy education program (Nof et al., 2019). Furthermore, frequent and personalized intrinsic and extrinsic feedback enhances the development of these skills and future performance expectations (Akizuki et al., 2020; Ebert et al., 2020). As a result, students matriculating from physical therapy education programs are expected to be ready for professional clinical practice, yet studies demonstrate that further preparation and training may be needed (Almond et al., 2021; Dutton & Ough Sellheim, 2017; Guisard et al., 2019).

Physical Therapy Graduate Perceptions

Entry-level physical therapy graduates often enter the workforce expecting to provide proficient and beneficial patient care services at the level of their more experienced colleagues. However, studies revealed that graduates lack confidence in their abilities to perform certain skills and rely on senior colleagues for mentoring and guidance (Almond et al., 2021; Lao et al., 2021). Furthermore, Forbes et al. (2018) found that graduates valued observation and authentic experiences during clinical instruction, feedback from instructors and peers, and the ability to self-reflect on performance as positive contributors to professional work readiness. Recognizing the challenging transition to professional practice, Chipchase et al. (2022) described a structured employer-provided professional development program for new physical therapy graduates in the workplace. Physical therapy graduate participants reported that the program supported their growth as a clinician through patient interaction, self-reflection, and regular mentoring from senior physical therapists (Chipchase et al., 2022). These studies and others (Atkinson & McElroy, 2016; Forbes & Ingram, 2021; Ingram et al., 2019; Leahy et al., 2020; Martin et al., 2021; Stoikov et al., 2022) confirmed that physical therapy graduates benefit from mentoring, feedback, and self-reflection opportunities to improve professional clinical work readiness.

Mentoring and feedback also help develop new physical therapy graduate selfefficacy and work readiness in interprofessional collaboration, conflict resolution, and patient education. Jones et al. (2021) reported that physical therapy graduates lacked confidence in situations of interprofessional conflict, such as when team members had differing opinions. Graduates attributed this to limited training in complex cases during their education programs and described the benefits of constructive feedback and mentoring from supervisors to develop self-efficacy (Jones et al., 2021). Likewise, physical therapy graduates reported challenges with patient education in complex situations (Wilesmith et al., 2020). The use of simulation and feedback in curricular scenarios involving potential conflict and complex patient education scenarios helps prepare students for interprofessional collaboration and communication as graduate physical therapists. Additionally, Schwab et al. (2022) recommended that physical therapy faculty receive post-professional training in other fields, such as psychology and education, to enhance their ability to teach complex patient management and critical thinking skills to improve student readiness for professional practice.

Another work readiness concern of physical therapy graduates entering the professional workforce is the inability to meet the caseload demands of a busy clinical practice while safely managing patients with complex presentations (Merga, 2016; Phan et al., 2022; Stoikov et al., 2021, 2022). Physical therapy education program faculty facilitate readiness for patient management through high fidelity simulations, role-playing with peers, and low-stakes assessment and feedback opportunities with and without video (Forbes et al., 2018; Hartstein et al., 2022; Martin et al., 2020; Ødegaard et al., 2021; Phillips et al., 2017). Merga (2016) recommended that employers assist new physical therapy graduates through mentoring and support to improve work readiness, as asserted by Chipchase et al. (2022) and Forbes et al. (2018). Furthermore, Montoya et al. (2020) suggested remedial complex task training between graduation and employment to ensure

work readiness, while Scrivener et al. (2021) touted the benefits of an online continuing education program to help physical therapy graduates improve their skills and confidence in treating complex patients. Taken together, these studies support the provision of mentoring and continuing education for new physical therapists entering professional clinical practice to improve self-efficacy and enhance work readiness.

Physical Therapy Supervisor and Employer Perceptions

New physical therapy graduate work readiness is important to all stakeholders involved, including program faculty, clinical instructors, supervisors, clinic directors, and beneficiaries. In addition to the minimum foundational proficiencies, physical therapy clinic supervisors and employers expect physical therapy graduates to possess certain generic attributes reflective of anticipated work readiness and performance. These characteristics include resiliency, self-awareness, communication and organizational skills, commitment to lifelong learning, and professionalism, among others (O'Brien et al., 2020; Sole et al., 2012). Additionally, employers in the acute care setting expect physical therapy graduates to demonstrate safety, reliability, responsibility, and the ability to recognize red flags in their high-risk patient population (Nof et al., 2019). The inability to possess these characteristics carries potential professional liability concerns.

Employer perceptions of physical therapy graduates' readiness to enter the workforce involve several factors. Wells et al. (2021) found that employers rated new graduates as fully ready for private practice employment three years after graduation. This readiness was influenced by graduates' clinical and business skills, knowledge, and generic skills such as communication and collaboration, which served as either

facilitators or barriers to work readiness. Wells et al. asserted that physical therapy education or workplace training programs must address these skills to alleviate the potential negative impact on patient care. This information on essential professional attributes can assist DPT programs in curriculum development and instructional design to ensure students are ready for a professional clinical setting.

Summary and Conclusions

Multiple studies demonstrated the successful implementation and utilization of video assessment software in higher education (Ardley & Hallare, 2020; Ardley & Johnson, 2019; Ardley & Repaskey, 2019; Boniface et al., 2022; Hager, 2020; Short & Bruster, 2021; Stapleton et al., 2017; Suh et al., 2021). Additional studies acknowledged the introduction and use of video-based assessment and instruction in physical therapy education (Ebert et al., 2020; Kachingwe et al., 2015; Maloney et al., 2013; Perlow et al., 2019; Plummer, Kaygisiz, et al., 2021; Plummer, Smith, et al., 2021). Many of the findings related to teaching, learning, and assessing essential skills to improve work readiness for professional practice apply to physical therapy education. However, no studies exist that address the use of video assessment software in professional physical therapy education as it relates to work readiness. Furthermore, no studies were found that investigated the use of GoReact video assessment software in professional physical therapy education, nor physical therapy graduates' perceptions of its use and contributions to work readiness.

This literature review included 30 qualitative studies, 22 quantitative studies, 22 mixed methods studies, four systematic reviews or meta-analyses, five descriptive

studies, and 11 case reports. Only seven qualitative studies were found that looked at video assessment in higher education, with no qualitative studies of video assessment in physical therapy education. I located no qualitative studies that investigated program graduates' perspectives on using video assessment software and professional work readiness. Unlike prior studies on video assessment software, this study will contribute to the body of knowledge related to the use of GoReact video assessment software in physical therapy and other health professions education to assess its usefulness in preparing graduates for professional clinical practice. In the next chapter, I describe the research method for this study.

Chapter 3: Research Method

The purpose of this basic 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. While studies exist that examined the use of GoReact in higher education (e.g., Ardley & Hallare, 2020; Ardley & Johnson, 2019; Ardley & Repaskey, 2019; Boniface et al., 2022; Hager, 2020; Stapleton et al., 2017; Suh et al., 2021), little is known about the use of GoReact video assessment software in DPT education, nor the effect of GoReact on DPT program graduates practicing in a professional clinical setting. In this study, I explored DPT graduates' perceptions of the use of GoReact video assessment software during the didactic portion of their physical therapy education and how the use of GoReact relates to their professional clinical work readiness.

This chapter opens with a justification and rationale for the chosen research design of this study. The next sections include a description of the researcher's role, identification of the study population and participant selection process, description of the instrumentation for this study, and an outline of the procedures for participant recruitment, data collection, and data analysis. The chapter concludes with a discussion of trustworthiness and other ethical considerations and procedures.

Research Design and Rationale

The research question for this study was "What are the perceptions of Doctor of Physical Therapy 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?"

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. I used a basic qualitative approach to address the research question. A basic qualitative methodological approach is used to explore individuals' experiences, opinions, beliefs, attitudes, perceptions, or feelings about a particular event or issue (Percy et al., 2015). By using the six concepts developed by Padley et al. (2021) to explore and frame interview questions regarding professional clinical preparedness with GoReact video assessment software, I aimed to learn about DPT graduates' experiences, opinions, and perceptions consistent with a basic qualitative study approach.

Role of the Researcher

My role as the researcher of this study was to design the study, develop interview questions based on the six concepts of work readiness by Padley et al. (2021), and recruit and interview DPT program graduates who used GoReact video assessment software during the didactic portion of their physical therapy education program. Following data collection, I was also responsible for data transcription, coding, analysis, and interpretation. This role is consistent with the researcher's role in a qualitative research approach, which is to serve as the research instrument and bring my experiences to help inform and shape the research (Geddis-Regan et al., 2022; Karagiozis, 2018; Merriam & Tisdell, 2016; Ravitch & Carl, 2021). However, to prevent bias, I engaged in reflexive

practices and addressed potential biases openly, as discussed in the next paragraph (see Karagiozis, 2018). Furthermore, I did not serve as a participant or observer-participant in this study.

I am a faculty member and GoReact user for the same DPT program as the graduates I planned to study. Since I studied graduates of the program, I hold no authoritative position or power over potential participants, and coercion of subordinates is not an issue. Furthermore, I did not interview current program students, as my study focused on the perceptions of program graduates who used GoReact during the program and are now working as licensed physical therapists in a professional clinical setting. Therefore, there were no issues with supervisory or instructor to student relationships in this study.

As a GoReact user, I recognize that I came to the study with my own experiences, beliefs, and perceptions. I had to clearly separate my professional role from that of a researcher to help maintain scholarly objectivity during data collection and interpretation (see Burkholder et al., 2016). To mitigate this, I used reflexive memo writing following the interviews to document my feelings and prevent potential biases (see Geddis-Regan et al., 2022; Nowell et al., 2017; Ravitch & Carl, 2021).

As the researcher, I conducted semistructured interviews with participants who met the selection criteria using the Zoom video teleconferencing program. I recorded the audio portion of the interviews for data transcription and coding. I employed member checking to ensure transparency and uphold validity by providing each participant with summaries of their interview transcripts (see Amin et al., 2020). Additionally, I offered to

schedule follow-up interviews for participants to clarify their responses for accurate interpretation and an opportunity for rebuttal or further explanation (see Ravitch & Carl, 2021). From this data, I performed inductive thematic analysis; the results are reported in Chapter 4.

The development and execution of this study also involved an iterative process of analytic memo writing (see Ravitch & Carl, 2021; Saldaña, 2021). Analytic memos helped me to organize, guide, and reflect on data analysis and thematic development. This practice also helped identify potential ethical issues that may have arisen during data collection, such as my role as an instructor for the physical therapy program of the graduate participants and GoReact user. Analytic and reflexive memo writing also mitigated the possibility of influencing the interview and data collection with my body language or interjecting my perspectives on the use of GoReact and work readiness. Furthermore, I provided a \$10.00 gift card as an incentive to participate in the study, which I offered to the first 15 respondents who completed the interview process. The \$10.00 amount was a modest sum to reward participants for their time and was unlikely to improperly influence the voluntary participation of respondents (see Burkholder et al., 2016).

Methodology

In this section I detail the logic used for participation selection, the researcherdeveloped instruments for data collection, the procedures for participant recruitment, participation, and data collection, and the data analysis plan.

Participant Selection Logic

To conduct this study, I used criterion-based purposeful sampling to recruit and interview DPT program graduates who used GoReact video assessment software during the didactic portion of their physical therapy education program (see Patton, 2015). All participants are licensed physical therapists working in a professional clinical setting. Since all participants shared the same experiences, criterion-based purposeful sampling was appropriate for this study (see Patton, 2015). Since I was able to recruit an appropriate number of participants, I did not need to employ snowball sampling to build my participant pool (see Patton, 2015).

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 (Appendix B). DPT graduates were contacted via an email that included the study recruitment flyer (Appendix C) and informed consent form. The email instructed interested individuals to click on a link to complete a screening questionnaire (Appendix D) to determine eligibility for the study. The first 15 respondents who met the study criteria of using GoReact during physical therapy school and are currently practicing as licensed physical therapists were invited to schedule an interview appointment via the Calendly online scheduling platform. According to Guest et al. (2020), 12 or more interviews can help attain higher levels of thematic saturation. However, since I was able to recruit and interview 15 participants, I did not need to reduce the sample size due to redundancy in the data (see Patton, 2015).

Instrumentation

The instrumentation for data collection includes a Google Form screening questionnaire (Appendix D), an interview guide (Appendix E), and audio recordings of participant interviews. The Google Form screening questionnaire helped determine participant appropriateness for the study. I designed the interview guide to assist me in conducting the semistructured participant interviews. The interview guide consists of interview questions developed by me and based on the conceptual framework of work readiness for medical graduates by Padley et al. (2021). The interview audio recordings were used to develop transcripts to guide thematic data analysis. All the instruments developed were appropriate for use in this study.

Researcher-Developed Instruments

As the researcher for this study, I developed the Google Form screening questionnaire (Appendix D) and the semistructured interview questions (Appendix E). I designed the interview questions based on the six concepts of work readiness of medical graduates by Padley et al. (2021) to answer this study's research question. Prospective participants received the screening questionnaire via an email link, which collected information to determine their appropriateness for the study, including whether they graduated from a DPT program in the United States, used GoReact for any of their DPT program coursework, and if they are currently working as a licensed physical therapist. Respondents who did not meet the study criteria based on the screening questionnaire received an immediate response via Google Form skip logic of their ineligibility to participate in the study (Appendix F).

Two experts in the physical therapy education field, a DPT program director and a DPT core faculty member with professional doctoral degrees, externally evaluated the research instruments for appropriateness. The core faculty member asked whether the screening questionnaire should include the graduation date to reflect the inclusion criteria. I responded that recruitment would involve emails to program graduates from December 2020 and beyond, including graduates still in didactic courses during the early COVID-19 pandemic in the spring of 2020. The core faculty member commented that the interview questions are straightforward and ordered logically based on the conceptual framework by Padley et al. Additionally, the core faculty member appreciated that definitions of the conceptual framework themes were included in each question so that the participants' responses were based on standard definitions. Furthermore, the core faculty member concluded that "the benefits, challenges, and concluding questions are a great way to wrap up your interview" (personal communication, January 3, 2023).

The second expert reviewer, a DPT program director, suggested that I modify the opening statement of the screening questionnaire, which is reflected in Appendix D. The reviewer also commented that clarification might be needed on the opening interview question asking when participants started their DPT program, such as Spring, Summer, or Fall term start. I did not change this question, but I provided clarification during the interview if the participant did not understand the question. The reviewer also asked whether it is necessary to include an explanation of the conceptual framework and theme definitions for each question, stating, "I believe it will just add more questions to your participants and may distract from the information you are trying to gather" and "I'm not

sure having the 'themes' will add to your exploration" (personal communication, January 5, 2023). The reviewer also expressed concern that the themes may bias participants' answers toward the definitions. I responded that I felt the statements were necessary to provide context for the interview questions, so I did not remove them from the interview guide.

I established content validity based on the feedback from my committee and the two experts in the physical therapy education field on whether these instruments measure what is intended. I ensured that interview questions were precisely sequenced yet semistructured to allow participants to respond authentically to the questions (see Ravitch & Carl, 2021). I began each interview 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 I obtained sufficiently relevant and detailed information from the participants (see Merriam & Tisdell, 2016).

Procedures for Recruitment, Participation, and Data Collection

Study participants were recruited from the alumni directory of the targeted United States-based DPT education program. The alumni directory includes the names and email addresses of all DPT program graduates across the program's five campuses. I obtained permission from the institution's director of alumni engagement via an email (Appendix B) to use the alumni directory to contact DPT graduates. An email that included the study recruitment flyer (Appendix C) and informed consent form was sent to all DPT program alumni who graduated in December of 2020 and beyond, explaining the study and

inclusion criteria. The December 2020 graduation date allowed me to capture students who were still in their didactic coursework at the targeted DPT education program at the start of the COVID-19 pandemic in March 2020 and who possibly used GoReact during their courses. The December 2020 graduates' final summer and fall terms were spent on clinical internship with no didactic courses in the curriculum at that time and hence no potential for GoReact use. The email instructed interested individuals to click on a link to complete a Google Form screening questionnaire (Appendix D) to determine eligibility for the study. If a participant did not meet the inclusion criteria, they received immediate notification of their ineligibility after completing the questionnaire through Google Form skip logic (Appendix F). After completing the screening questionnaire, I notified the first 15 respondents via email of their eligibility to participate in the study and invited them to schedule an interview appointment via the Calendly online scheduling platform.

Data collection for this study occurred through semistructured interviews with 15 participants to reach saturation (Guest et al., 2020). Additional interviews were not needed to confirm saturation. The interviews were scheduled for one hour in duration over the Zoom video conferencing platform and were audio 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. Additionally, I offered to schedule follow-up interviews for participants to clarify their responses for accurate interpretation and an opportunity for rebuttal or further explanation (see Ravitch & Carl, 2021). All data files,

including the transcriptions as the primary data source, were stored in a password-protected cloud-based storage system for a five-year period and will be deleted after five years. Participants were released from the study and received their \$10.00 thank you gift card once all data collection procedures were completed.

Data Analysis Plan

For data analysis, I planned to use the Quirkos cloud-based qualitative research application to manage, code, and analyze data from the participant interviews. Instead, I used Excel spreadsheets and inductive thematic analysis to list all first-cycle codes, identify second-cycle patterns by color-coding related codes using different colors, and sort them into descriptive categories (see Ravitch & Carl, 2021). I used the six concepts of work readiness by Padley et al. (2021) to create thematic categories to help align the data with the conceptual framework and recognize emerging themes or concepts. From the categories, I identified themes representative of the data. I also wrote and kept analytic memos throughout the data collection and analysis process to ensure reflexivity (see Ravitch & Carl, 2021; Saldaña, 2021). Furthermore, to avoid overlooking meaningful information from the data, I reviewed the interview transcripts after coding, compared the results, and modified them as needed.

Discrepant cases, or outliers with data that contrast with other participants' responses, may be discovered during data analysis. Discrepant cases do not fit emerging patterns in the data but can contribute to a deeper understanding of the study phenomenon (Booth et al., 2013). Any discrepant cases identified in the data were labeled and included

in the results to provide a richer description of the data, stimulate discussion, and offer suggestions for further research.

Issues 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), and Adler (2022) asserted that all qualitative research must be trustworthy. Furthermore, as the research instrument for data analysis, I am responsible for conducting a transparent and trustworthy study (Nowell et al., 2017). Lincoln and Guba (1985) discussed four criteria for trustworthy qualitative research: credibility, transferability, dependability, and confirmability. These four criteria are discussed in the following paragraphs.

Credibility

Credibility is the researcher's degree of certainty and confidence that their study results truthfully reflect their participants' perceptions (Korstjens & Moser, 2018). To ensure credibility, the researcher employs 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 on the perceptions of physical therapy graduates on their use of GoReact video assessment software as it relates to professional work readiness, I engaged in persistent observation by reading and analyzing the data in depth multiple times and recoded when needed, until clear and salient themes emerged on the graduates'

perceptions (see Amin et al., 2020). I also used member checking by sharing the interview transcript with the participant and offered a follow-up interview as another strategy to ensure the credibility of my study (see Amin et al., 2020; Shenton, 2004). In addition, I consulted with a physical therapy faculty peer to seek an external assessment of the research process and findings (see Nowell et al., 2017).

Transferability

Transferability refers to the reader's ability to transfer a study's results to their setting (Korstjens & Moser, 2018; Shenton, 2004). A researcher assists in the transferability of their findings by providing rich, thick descriptions of their participants, setting, methods (including instrumentation), and results (Amin et al., 2020; Korstjens & Moser, 2018). However, the reader ultimately decides whether a study's findings are transferable to their unique setting (Shenton, 2004). For this study on DPT graduates' perceptions of their use of GoReact video assessment software as it relates to professional work readiness, I described the background, data sources, instrumentation, and analysis 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 (see Amin et al., 2020). Furthermore, the investigation of DPT graduates' perceptions in different course settings and across various contexts provides the opportunity for a richer understanding of the phenomenon (see Shenton, 2004).

Dependability

The trustworthiness criterion of 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" (Korstjens & Moser, 2018, p. 122) of a study using the "audit trail" (p. 122) strategy, such as reading analytic memos, transcripts from meetings, other research materials, and data collection and analysis information, ensures a consistent, replicable, and neutral study design (Nowell et al., 2017; Shenton, 2004). While I likely will not employ an external auditor for my study, I kept memos and other materials to review during the iterative and reflexive process of the research.

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. However, I planned to keep an audit trail of interview recordings and transcripts, reflexive and analytic memos, data summaries, and conclusions to address the confirmability of my study. These tasks help ensure transparency of results, which is a characteristic of quality research that serves to mitigate perceptions and assumptions regarding the results (Amin et al., 2020).

Ethical Procedures

Since this study involved interaction with human subjects, I obtained approval from Walden University's Institutional Review Board (IRB) (Approval number 02-20-

23-1015587). I did not need approval from the targeted DPT program's IRB since the participants are graduates and no longer under the institution's purview. There were minimal psychological risks to participation in this study, and pseudonyms were used when reporting the study results. Although some participants may know the researcher from their professional DPT education program, there were no risks of relationship harm, conflicts of interest, or other ethical issues since the participants are no longer students at the university. 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.

Ethical procedures for this study included obtaining participants' informed consent, maintaining privacy and confidentiality by safeguarding participant identity and interview data and removing any identifying information from interview transcripts, and allowing participants to withdraw from the study at any time. The informed consent form included a description of the study purpose, data collection procedures, and inclusion criteria in language familiar to potential participants. The informed consent form also included an anticipated time frame for participation in the study, including time allotted for interviews and review of interview transcripts by the participants. The informed consent form contained a clear statement that participation in the study was voluntary with no penalty for withdrawal at any time. Researcher contact information was included for participants' general questions regarding the study. The informed consent form also contained information detailing how participant privacy was maintained. Audio

will be stored for five years on a password-protected personal computer or in a secure location with sole access by the researcher. All research documents will be destroyed after the five-year period.

Summary

In this chapter I described the research design and rationale for the study, the researcher's role in the study, participant selection and recruitment procedures, study instrumentation, and data collection and analysis procedures. This chapter included a description of the researcher-developed interview questions based on the conceptual framework of work readiness of medical graduates by Padley et al. (2021). I concluded this chapter with a discussion of potential trustworthiness issues and ethical considerations for the study. In Chapter 4, I present the study results, which include the setting, participant demographics, data collection and analysis procedures, and evidence of trustworthiness.

Chapter 4: Results

The purpose of this basic 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 research question that guided this study was "What are the perceptions of Doctor of Physical Therapy 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?"

In this chapter, I describe the setting, including any personal or organizational conditions that may have influenced participants or their experiences during the study. Next, I present the relevant participant demographics and characteristics and my data collection methods, including variations from the plan presented in Chapter 3. I then address data analysis and describe codes, categories, and themes that emerged from the data. The chapter continues with a description of the evidence of trustworthiness, including the implementation of and adjustments to credibility, transferability, dependability, and confirmability strategies from Chapter 3. I conclude the chapter with a presentation of the study results and a summary of the answers to the research question.

Setting

Data collection for this study occurred via the Zoom video conferencing platform.

I conducted 15 participant interviews in a private location at home using my passwordprotected personal laptop computer. Participants joined the Zoom sessions from home or

work via a computer or smartphone. Interview transcripts were produced by otter.ai using a password-protected smartphone application and downloaded to a password-protected personal laptop computer. Interviews lasted an average of 35 minutes.

Since all participants attended and graduated from the same DPT program, it is possible that organizational conditions influenced their experiences. For example, variations in the use of GoReact across different courses and instructors and the type of feedback received may have influenced the participants' responses. Personal conditions such as motivation, openness to feedback, course performance, or life circumstances or events during the program may have influenced their experiences using GoReact and professional work readiness.

Demographics

I recruited participants for this study from the alumni directory of the targeted DPT program who used GoReact video assessment software during the didactic portion of their professional DPT education program and are currently working as licensed physical therapists. These demographics were essential to learning about the perceptions of GoReact users and professional work readiness following graduation (Table 1).

Table 1

Participant Demographic Data

Participants	Program start	Graduation date	Courses with GoReact	GoReact uses
P1	January 2020	August 2022	Differential Diagnosis Musculoskeletal 1, 2 Interprofessional education	Patient interview and safe patient transfer video assignments
P2	January 2019	December 2022	Neuromuscular	Visual, postural, and tactile cueing videos for instructor feedback
P3	January 2019	August 2021	Musculoskeletal 3 Pediatrics	"TED talk" assignment Skill demonstration videos for instructor feedback
P4	September 2017	May 2021	Biophysical Agents	Skill demonstration videos for instructor feedback and self- reflection
P5	January 2020	August 2022	Applied Anatomy 1, 2 Movement Science Cardiopulmonary Pediatrics Musculoskeletal Patient Care Management 2	Psychomotor skill demonstration videos and entire patient evaluations for instructor feedback Assignments Practical examinations
P6	September 2018	August 2022	Did not recall	Patient handling, interviewing, intervention skill videos for instructor feedback and self-reflection
P7	January 2020	August 2022	Patient Care Management Musculoskeletal Applied Anatomy Cardiopulmonary	Skill demonstration and scenario-based performance videos for instructor feedback and self-reflection Practical examinations
P8	September 2018	August 2021	Musculoskeletal Neuromuscular 2, 3	Discussion and skill demonstration videos Self-reflection on patient interactions Peer feedback
P9	January 2020	August 2022	Biophysical Agents Differential Diagnosis Musculoskeletal 3	Skill demonstration videos for instructor feedback Group project assignment Practical examinations

Participants	Program start	Graduation date	Courses with GoReact	GoReact uses
P10	September 2019	April 2022	Biophysical Agents Musculoskeletal Neuromuscular	Psychomotor skill demonstration videos for instructor feedback Skill checks Practical examinations
P11	January 2017	December 2020	Did not recall	Scenario-based video assignments Course learning module
P12	May 2020	December 2022	Applied Anatomy 2 Soft Tissue Mobilization 1, 2 Differential Diagnosis Musculoskeletal 4	Psychomotor skill demonstration videos for instructor feedback Practical examinations
P13	January 2019	August 2022	Applied Anatomy Pediatrics Neuromuscular Patient Care Management	Introduction and patient education videos Mock practical videos Practical examinations
P14	September 2019	April 2022	Applied Anatomy Musculoskeletal	Skill demonstration videos for instructor feedback Practical examinations
P15	May 2020	December 2022	Musculoskeletal Neuromuscular	"Diagnosis-type assignment" Demonstration video of skill sequencing Practical examinations

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.

Data Collection

Data collection for this basic qualitative study consisted of semistructured interviews with 15 participants using the Zoom video conferencing platform between March 2023 and April 2023. All participant interviews followed the same script and were asked the same questions. Each interview took approximately 35 minutes using the Zoom videoconferencing platform. Interviews were audio recorded and transcribed using the Otter.ai application into a Microsoft Word document.

Following each interview, I compiled all data into a one-page summary, which I emailed to the corresponding participant for review, approval, correction, or clarification. The arduous and immersive process of listening to interview audio, correcting the automated transcription, and condensing data into one-page summaries allowed me to study the data more closely and recognize emerging codes and possible themes (see Merriam & Tisdell, 2016; Ravitch & Carl, 2021). I also offered each participant the opportunity to schedule a second video or telephone meeting to discuss the interview summary, other aspects of the interview, or additional thoughts on GoReact use and professional work readiness. Following summary review, I uploaded interview data 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.

Overall, the data collection process followed the plan described in Chapter 3. After IRB approval, 21 volunteers responded to the study recruitment email, and 15 respondents participated in interviews. All 15 participants received a \$10.00 gift card via email as a thank-you gift. While I planned to keep a reflexive paper journal with notes detailing observations during the interviews, I found myself too focused on the participants' responses and failed to complete this aspect of data collection. However, I took notes following the interviews and as I reviewed the recordings to document anything that emerged as important or unique. I encountered no other unusual circumstances during data collection.

Data Analysis

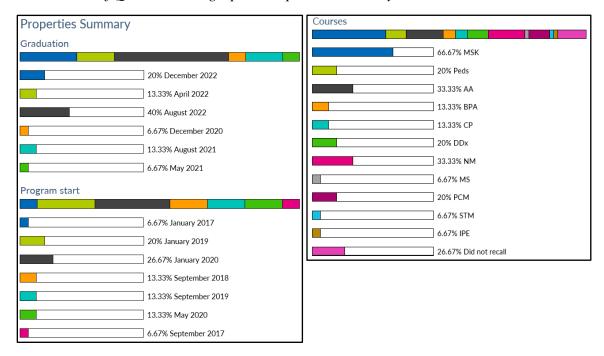
During the interviews, participants discussed their experiences with GoReact in their DPT program, including the courses that used the software, the benefits and challenges of using GoReact, and how GoReact use may have related to their confidence, capability, reflexivity, responsibility, role, and resilience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

- 1. Interviews were transcribed in real-time using the Otter.ai application.
- 2. Otter.ai transcripts were transferred to a Microsoft Word document and reviewed for accuracy by listening to the interview audio recordings.
- 3. 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.
- A second column was created in each spreadsheet tab to list first-cycle descriptive and emotion codes from the analysis of the interview data (see Liu, 2020; Ravitch & Carl, 2021; Saldaña, 2021).
- 5. I read through the data again and identified and color-coded second-cycle patterns among repeated first-cycle codes for each of the six concepts (see Ravitch & Carl, 2021; Rubin & Rubin, 2012). These second-cycle patterns were listed in a third column in each spreadsheet tab.
- 6. I inductively developed broader categories from the second-cycle patterns based on how they aligned with my study's six conceptual framework concepts (see Padley et al., 2021; Ravitch & Carl, 2021). These larger categories led to the generation of themes for this study.
- 7. I also used the cloud-based Quirkos qualitative research application to organize demographic data and arrange interview data into "quirks" or code bubbles based on the six concepts of this study's conceptual framework (see Padley et al., 2021). I then used the software-generated report to view the demographic (Figure 2) and interview data (Figure 3) and identify patterns among all interviews for each concept. This use of Quirkos differed from my data analysis plan in Chapter 3, in which I stated Quirkos would be used to list all first-cycle codes, identify second-cycle patterns by color-coding related

codes using different colors, and sort them into descriptive categories, but instead I used Microsoft Excel for these tasks.

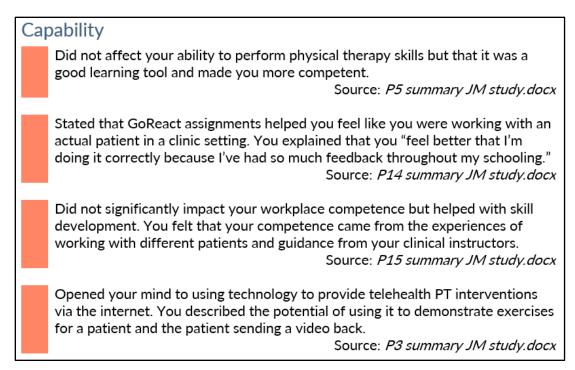
Figure 2
Screenshots of Quirkos Demographic Properties Summary



Note. From Quirkos Software-Generated Report (Word document)

Figure 3

Screenshot of Data Excerpt from Quirkos Self-generated Report



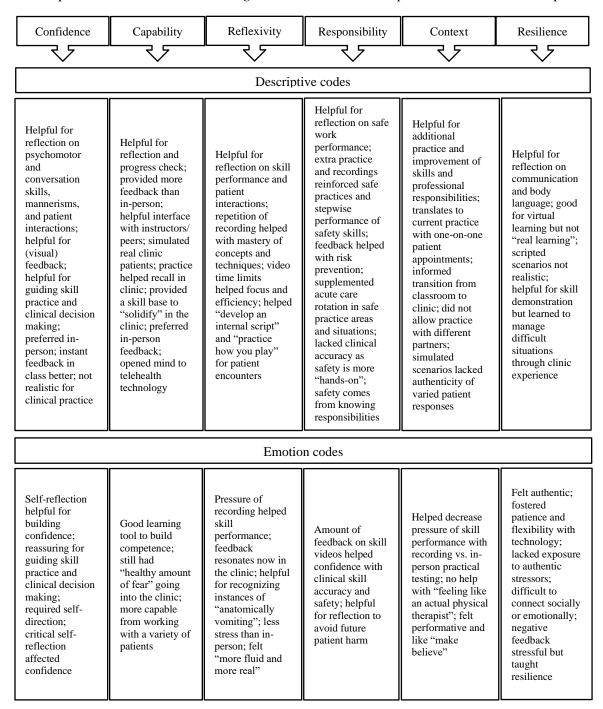
Note. From Quirkos Software-Generated Report (Word document)

4).

Since one of the primary goals of physical therapy education is to feel prepared to enter the professional clinical workplace, many participants shared strong emotions toward using GoReact and work readiness. As a result, I used emotion coding for the first coding cycle (Figure 4). According to Liu (2020), emotion coding or sentiment analysis explores participants' feelings, opinions, emotions, and attitudes toward products, services, or topics. I also used descriptive first-cycle coding to capture the participants' thoughts on using GoReact and professional work readiness, such as helpful for reflection and not realistic for clinical practice (see Ravitch & Carl, 2021; Saldaña, 2021) (Figure

Figure 4

Descriptive and Emotion Codes Aligned with the Six Conceptual Framework Concepts



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 reflect on her skills and practice "for real life."

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 that I observed throughout the interview data, I subsequently created the broader categories of reflection, feedback, knowledge and skill translation, emotional effects, and preparedness factors. Since these categories all addressed positive and negative aspects of GoReact use, I developed the themes of positive work readiness, negative work readiness, benefits, challenges, and suggestions, which are discussed in the Results section.

Discrepant Cases

Discrepant cases are outliers with data that do not fit emerging patterns but can contribute to a deeper understanding of the study phenomenon (Booth et al., 2013). While no individual study participant presented as a discrepant case, some responses to interview questions significantly differed from others. For example, one participant reported that using GoReact "opened [his] mind" to telehealth technology for physical therapy services. Another participant felt GoReact was too "performative" and "makebelieve" to simulate professional clinical practice. While these responses were limited to two participants, these discrepant cases added to the rich description of the use of

GoReact in a DPT program and the relation to professional work readiness. Furthermore, deviations from most responses potentially serve as suggestions for further research on the use of GoReact in physical therapy and other health professions education.

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, the researcher employs 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 (see 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 (see Amin et al., 2020; Shenton, 2004). Furthermore, I discussed my research process and study results with physical therapy faculty colleagues for their external assessment (see 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 on DPT graduates' perceptions of their use of GoReact video assessment software as it relates to professional work readiness, 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 (see 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 (see 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" (Korstjens & Moser, 2018, p. 122) of a study using the "audit trail" (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; Shenton, 2004). 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 as planned, 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 (see Amin et al., 2020).

Results

The purpose of this basic 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. Inductive thematic analysis from codes to patterns to themes aligned the study results with the conceptual framework to explain the study's findings on GoReact and work readiness.

The research question for this study was "What are the perceptions of Doctor of Physical Therapy 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?"

Theme 1: Positive Work Readiness

Most participants held a positive view of GoReact use during their DPT program and its impact on professional clinical work readiness. Since this study is based on the conceptual framework by Padley et al. (2021), I discuss the theme of positive work readiness in relation to each of the six concepts that guided this study.

Confidence

Padley et al. (2021) described confidence as the graduate's feeling or selfperception of readiness to enter the workplace. Most study participants shared a positive opinion of GoReact use and confidence in their professional work readiness. A collective comment was that GoReact helped them reflect on their psychomotor skills and patient interactions, positively affecting their confidence upon entering the professional workplace. For example, P4 stated, "It was good to be able to see yourself doing something...and then you can kind of either change things or just see what things need to be improved to help you." Similarly, P6 shared that the ability to replay and reflect on videos "shed a little bit of perspective on...how you're speaking to someone...some mannerisms and...your body language." P6 also stated that GoReact gave him more confidence in being "assertive [and] more prepared in talking with different patients." P5 reported that GoReact improved his confidence since he had the option to review and rerecord their videos "in order to get the proper form, proper force angle, all that good stuff," while P8 shared that GoReact allowed him to practice his mannerisms, such as body language and eye contact.

Another positive aspect of GoReact was the ability to receive instructor feedback on video-based skills performance. Participants described submitting videos to the GoReact platform to receive instructor feedback on their hand placement, body mechanics, technique, verbal instructions, and interactions with the patient. P10 shared that GoReact feedback was helpful outside of the classroom since instructors could not

provide feedback to every student during in-person sessions. P7 commented on GoReact time-stamped feedback, stating:

I thought it was helpful with the timestamps and stuff that you could at least...go to a section of the video, and it was already marked there for you...you submit the video, and then you just see this random compilation of...feedback bullet points....tied to...a technique that you were doing at...such and such time.

P9 reported that GoReact improved his confidence by providing feedback on practical skills that "I can use in my career...I can take that feedback and apply it to anytime that I go and use that skill [in the clinic]." Similarly, P12 shared that GoReact feedback benefitted her "because I took advantage of these opportunities that our school offered to utilize it." P12 stated further that "based on the feedback that...I received from professors...I was able to gauge what I needed to fix" so that "when you go out into the real world, I gained the confidence of...I know what I am doing because I got feedback from it...so now I will get it right."

P14 reported that GoReact enhanced her confidence through both reflection and feedback. She described submitting videos for feedback, "but also I could watch it again and say...maybe that looked a little wrong. Like I could play it back, and then I could take the feedback in a more constructive manner." P14 shared that GoReact helped reassure her clinical decision-making and techniques, which translated to treating patients more confidently.

Capability

Padley et al. (2021) described capability as the graduate's competence to perform in the workplace. Like confidence, many participants reported that GoReact positively affected their capability to work as a physical therapist in a professional clinical setting. P14 stated that GoReact assignments simulated authentic patient interventions, or "how I would do it in the clinic now," which made her "feel better that I'm doing it correctly because I've had so much feedback throughout my schooling." P13 felt that GoReact forced her to practice skills repeatedly until "you get it kind of right or less clunky or more fluid." Likewise, P12 shared that the repetition of seeing and performing skills multiple times made her more capable, while P8 stated that GoReact helped him "maintain that poker face" to recall information during patient interactions instantly and competently. P1 reported a slightly different positive effect on capability, sharing that he "felt like you had to go through [a skill recording] the whole one time because, in real life, that's how you deal with patients. You can't be like, oh, sorry, I messed up. Let me go start from the beginning."

P6 described how GoReact helped with practical skills competency in one of his less familiar courses, where he "could go back to the video and kind of see what I'm doing." He continued, "It was good for me to use some of that feedback, and it kind of either reinstilled really good habits or...maybe I need to change something up." Similarly, P4 related that "there's things that you can...catch in a GoReact that you might not catch in a real-life situation." This ability to self-reflect on skills performance "helps

with just making sure that everything was done properly and seeing...if things...needed to be fixed" (P4).

While P12 rated the effect of GoReact on her competence as positive, she felt it relied on "continuously seeing these patients and different problems" in a clinic setting. Likewise, P7 and P10 felt that instructor feedback via GoReact helped build specific psychomotor skills, but "they were solidified once I went off to clinicals and I had...an instructor there to help me...physically with...my hand placement or tell me...how it's supposed to feel" (P10). P11 described a "carryover between confidence and competence" and asserted that GoReact helped him feel competent. This positively affected his confidence, but he still had "a healthy amount of fear going into clinical rotations." Similarly, P9 related how GoReact boosted his confidence which helped him "apply and actually be able to [perform skills]."

One unique comparison of GoReact and capability was to telehealth. P3 shared that learning to use the GoReact platform and communicate with instructors virtually "opened my mind" to "a bunch of potential there for even just like demonstrating exercises to the patient or having the patient send it back to you."

Reflexivity

Padley et al. (2021) described reflexivity as "the overlap between initial confidence and actual capability" (p. 4). Participants were asked to consider how GoReact use during their DPT program influenced their ability to perform as a professional physical therapist following graduation. All but one participant (P2) felt that GoReact positively affected their ability to work as a professional physical therapist. P7

thought that scenario or case-based assignments and assessments were the best use of GoReact in terms of work readiness. P3 stated that GoReact feedback or "tips on how to improve body mechanics, hand placement, how to better appraise the feedback from the patient" helped prepare him for professional clinical practice, and "I still carry some of those with me when I'm working." P6 also shared that GoReact "helped give a lot of feedback," which "instilled a lot more confidence and capability in me at the end, but it was a long process for some of those things." Similarly, P9 felt that GoReact "was a good way for me to get feedback on the skill and be able to use it in the clinic" and "it helps to just shape how we go about treating and…performing any…technique."

The reflexive nature of GoReact allowed participants to refine their skill performance, or as one participant stated, to "practice how you play" (P14). P4 shared that "visual feedback" allowed her "to be able to see yourself doing something...and then you can kind of either change things or just see what things need to be improved to help you." Similarly, P5 described how he used GoReact reflexively to practice with a partner before practical examinations to "see what we messed up on and be able to learn from that." P10 shared a comparable use for GoReact, stating that "we had to be a little bit more methodical about...checking off a lot of things" and "make sure...I know step by step what I'm going through" when recording skills performance. Likewise, P13 felt that the repetition involved in skills practice was a good opportunity for "trial and error without having to go through trial and error with patients in real life."

P8 discussed how GoReact helped him with his "bedside manner...maintaining my professional tone." He continued that he "had to work on my pronunciation...making

sure my cadence wasn't too, you know, rapid." Additionally, P8 stated that GoReact allowed him to recognize and correct when he was "anatomically vomiting on somebody." He stated:

I would have all these terms, and I had to work on not talking like a doctor. I...in kind of interacting with the patients but also hearing myself, I said I can't talk like this, like it's just gonna go over everybody's head, you know, especially if someone's recovering from a brain injury or something else is going on.

P15 expressed a similar sentiment regarding verbalization of skills performance during GoReact recordings, which "helped me post-school just so that I could relay information and my exam findings to a patient in…like non-professional or non-medical terms and make it easy for them to understand."

P12 shared a unique view of GoReact use for practical testing. She felt that GoReact "made it feel more fluid and more real" than being tested in person with a "professor just staring at you and just writing down notes." P12 described the process as "almost like a real-life situation scenario...without the stress of having another professor watching you." Her comments highlight the reflexivity inherent in GoReact, where students record their performance in a comfortable and familiar environment without the pressure of being observed to prepare them for professional clinical practice.

Responsibility

Padley et al. (2021) defined responsibility as an obligation of the new graduate to practice safely in their work environment. Unlike confidence, capability, and reflexivity, fewer participants felt that GoReact helped prepare them to practice safely as physical

therapists in the clinic following graduation. P15 commented on using GoReact assignments "to make sure...we're doing technique[s] safely and correctly, and...being able to then verbalize what we did and why we did kind of influenced how I was able to perform safely at work." Similarly, P12 credited talking through the technique while recording a GoReact video as helpful for awareness and information processing to ensure patient safety.

P7 laughingly alluded to the "pass-fail [safety] criteria" of his DPT program, meaning that regardless of whether the skill was performed digitally via GoReact or inperson, the "same criteria where it was easily pass-fail...was engrained to us...but at least we got reps [using GoReact]." Likewise, P6 discussed how "in most DPT programs, safety is kind of number one red flag, okay, pass or fail." He continued to explain that GoReact kept him accountable for performing safe patient tasks because "if you didn't do that in our DPT program, you fail, and then in real life, you could hurt someone." Furthermore, P6 felt that GoReact "helped me safety-wise, and now I am sure I'm probably a little bit overprotective, but I think that keeps everyone safe [in the clinic]."

P4 provided a specific example of how GoReact contributed to her responsibility to practice safely in the clinic. She described how she failed a GoReact virtual practical examination because she forgot one of the pass-fail safety items, despite working as a physical therapy assistant for many years. P4 stated that her instructor "rewatched the video over and over and over again...hoping that [P4] would say something and [she] didn't say it." P4 felt that this ability to view the video multiple times and reflect on

the tasks performed positively affected her awareness of essential patient safety requirements and subsequent safe patient practices in the professional clinic setting.

As with reflexivity, P10 described the stepwise process of recording a GoReact video as contributing positively toward her professional work readiness. She explained that GoReact helped ensure she followed "each of those steps as I'm going through... asking the patient for consent...making sure that I'm draping appropriately... asking any of those...red flag questions" as part of her "script" that she continues to use in the clinic today.

P14 felt that safe practices were "maybe more targeted" sharing:

My fear as a student and now being a clinician at the time as a student was will I be doing all of this correctly, well enough, and safe enough to do it in real life because we were learning half online...to be able to...get as much feedback as I needed, even outside of...the class time and...the very brief periods of lab we had in person, it really made me feel like I'm doing this correctly. Like there was no gray area...and if you're not sure, let's make sure you're positive before you actually go out into the real world.

P9 also discussed instructor feedback on GoReact video skills performance as positive, stating that "professors were definitely able to comment on any...unsafe practices that we did during the video." He continued that feedback was "helpful for making sure that when we're actually practicing [in the clinic], we don't hurt our patients."

P11 shared his unique experience with how GoReact exposed him to additional learning opportunities within acute care settings, preparing him for his first professional physical therapy position at a long-term care facility during the COVID-19 pandemic.

Context

Padley et al. (2021) described context as the graduate's readiness for their role in the clinical setting. Eleven participants shared a common belief that GoReact positively affected their preparedness for their role as professional physical therapists. P10 described how GoReact helped her practice professional responsibilities, such as asking the proper questions to know when a patient might not be appropriate for physical therapy and need a referral to another service. Similarly, P11 explained how GoReact use "contextually... worked out well because I felt like I had information to translate that was discussed in the GoReact interface to take from...classroom to clinic."

P1 stated that GoReact "prepared me for...going into real life [clinical practice]" but with "less pressure... because the teachers weren't right in front of you." Similarly, P6 described how GoReact "helped my readiness by giving professors...some insight [into] what...my manual skills look like." He continued that GoReact helped him know when he "was on the right track" by "show[ing] my professors, okay, they're clinically competent for some things...maybe work on something else."

P3, P4, P9, and P14 alluded to the reflexive nature of GoReact when describing context. P3 stated that learning with GoReact "made me feel unlimited" because "there's always a way to try to improve something... in person through the screen, written communication when we give our HEP (home exercise program)...there's still a way to

be effective." P9 reported reflecting on GoReact assignments that used "role-playing," which "helped us gain the skills we required to actually be a physical therapist in the clinic." Likewise, P14 stated that GoReact assignments and practical examinations were "so task-specific to...what you would do in the clinic, so it felt like you were practicing for real life in that moment." She continued with "if anything, [GoReact] was a little bit better because you could replay it." P4 expanded on the reflexive aspect of GoReact, stating:

I just feel like it gave us a lot more practice...especially those that...notice one little thing wrong, and then it's like, okay, let's go back and redo it all over again to make sure that we did...everything correctly. So, in that context, I feel like that is kind of what helped a little bit was just trying to be that perfectionist...and... going back every time and making sure that every little thing was done correctly.

While still positive, P5 shared that GoReact "readied me a little" to work as a professional physical therapist. He felt less of an influence "because it was only like one case versus like if we were in person doing it in lab" where students could work with different partners to gain various perspectives. In contrast, P8 described how GoReact taught him to focus on a single patient, which prepared him for his current role as a physical therapist in a single provider-to-patient environment. P12 provided a detailed description of how GoReact prepared her for multiple roles in the clinic, such as "supporter" for the patient, the "actual physical therapist" performing the interventions, and the businessperson working through insurance coverage issues. She described that

"with GoReact, that was another situation of [if] you were able to distinguish these different roles and have the professor see the different roles that you play[ed]."

Resilience

Padley et al. (2021) described resilience as the graduate's readiness or preparedness "to manage the emotional, physical, and social challenges" (p. 5) of the workplace." Of all the conceptual framework concepts, resilience garnered the fewest positive responses. Four participants (P1, P3, P4, P14) felt that GoReact prepared them to manage challenging or stressful situations in a professional physical therapy clinic following graduation. P3 and P14 shared that the technology challenges of GoReact, such as internet connection issues, "kind of translates to things also don't always go perfectly in the clinic" (P14), which taught resiliency or "different strategies...that I definitely use as...life skills...in the clinic" (P14). P3 stated that GoReact helped him be "more openminded...and understanding it's part of the process." P14 also described how she and her classmates designed mock scenarios with complex patients to practice "motivational interviewing, different techniques, and strategies that we can use in the clinic."

P4 discussed the "stressful part...of being recorded...but then also listening to yourself back" as helpful in building resiliency. He also felt that the ability to reflect on facial expressions and physical reactions during GoReact encounters "plays a huge factor...[in] what is my body language telling this person" and helped prepare him to manage emotional challenges in the professional workplace.

Theme 2: Negative Work Readiness

While most participants viewed GoReact use as generally positive during their professional education, some aspects of GoReact elicited negative reactions. As with Theme 1, the theme of negative work readiness is discussed in relation to the conceptual framework of Padley et al. (2021).

Confidence

Several participants stated that GoReact negatively affected their confidence to work as a physical therapist following graduation. P13 shared that GoReact made her critical of herself because she "felt like she had to turn in a perfect video…knowing I don't have retakes with a patient." Another participant (P1) reported that GoReact hindered their confidence due to the difficulty framing an entire skill demonstration on the video screen. P1 confided that:

Still, to this day, I don't feel confident with [manual skills] just because...they can see it, but it was only on top because they needed to see your hand position, but my lower body...I didn't feel comfortable, and I would try to adjust to it so they can see my position with my feet...I don't think it got your whole body mechanics.

In fact, many participants stated that finding the correct camera angle to allow instructors a complete view of their technique was a negative and challenging aspect of GoReact, although not related to confidence.

Two participants felt GoReact did not affect their confidence to work as a physical therapist following graduation. Some were already licensed physical therapy

assistants or working as physical therapy technicians or aides before or during their DPT program, which they attributed to their confidence. P3 stated they were "a little different...one day off during the week, I worked as a tech in a long-term acute care setting under PT supervision...that's where my confidence came from." Similarly, P2 reported that their work as a PT assistant contributed to "any confidence I might have had as far as preparing me for going out into the workforce." While P7 had an overall positive view of GoReact and confidence in their work readiness, they also shared that GoReact was "better than nothing" during virtual learning, yet "once we...got more...to the inperson things...it's hard to beat in person [learning]." Likewise, P10 felt that GoReact "was making the best out of a worse situation" but "was never 100% confident going into my clinicals...especially with my manual skills."

Capability

Only one participant (P2) felt that GoReact negatively affected her competency to perform in a professional physical therapy setting. P2 stated that she did not feel strong in some of her skills because she "couldn't get that feedback from my instructors directly...I was having to rely on video" and did not "feel like I got as much practice as I could have." This participant preferred in-person courses where instructors could provide instant and direct feedback to improve her clinical competency and work readiness.

Reflexivity

As with capability, only one participant (P2) felt that GoReact did not influence her ability or preparedness to practice in a professional physical therapy setting after graduation. P2 shared how her clinical rotations provided more hands-on practice than

her didactic coursework. Furthermore, she stated, "if there was something I was unfamiliar with or...we kind of touched on it in one of my classes...I could really rely on [my clinical instructors] to...allow me to get more of that practice." P2 concluded that "unfortunately, GoReact did not prepare me for real life in that sense. My clinical instructors did."

Responsibility

Several participants expressed a negative (P1, P5) or negligible to no effect (P2, P3, P13) of GoReact on their responsibility to perform safely in the professional physical therapy clinic setting following graduation. P13 felt that GoReact was not helpful, as safety training "needed to be more hands-on than...record[ing] yourself for a GoReact video." Likewise, P1 explained how the video angle influenced what could be visualized, which hindered the demonstration of safe body mechanics. P5 did not think that GoReact "itself was an influence in terms of safety" but that "you yourself as a person...knowing your job and...what you're supposed to do is the true...tell." P2 stated that her recollection of GoReact "didn't really involve safety, per se...I don't think it really made much of a difference and, you know, my responsibility and safety with, you know, interacting with patients."

Context

Four participants shared a negative (P7, P13) or neutral (P2, P5) effect of GoReact on their readiness for their role as physical therapists in a professional clinical setting. P13 described how GoReact felt "very performative" and "make believe" because the skills were not recorded in a clinical setting, which "added to that performative

feeling of I'm faking being a therapist versus like I am a therapist." Similarly, P7 felt that GoReact was limited in context because "there's only so much that you could do...even with your fake patient" during didactic training. P2 cited clinical internships and not GoReact as the best preparation for her professional physical therapy clinic role. P2 stated, "sometimes it could take...three, four days to get feedback, and that's a long time...and I just want to know how I did so that I don't continue practicing it incorrectly."

Resilience

Contrary to the other conceptual framework concepts, GoReact had the most negative or neutral effect on physical therapy graduate resiliency. Three participants (P6, P9, P13) felt that GoReact did not prepare them to manage emotional, physical, or social challenges in the professional workplace. In comparison, eight participants (P2, P5, P7, P8, P10, P11, P12, P15) cited no effect of GoReact on professional clinical resiliency.

While P13 stated that some technical aspects of GoReact were stressful, such as relying on an internet connection and the "sheer panic of watching...the one percent at a time" video uploads, she felt that GoReact did not help with resiliency and work readiness. Similarly, P9 explained how feedback via GoReact could be "a very emotional or triggering...aspect of the assignment...that you might not like what a professor said, or you might disagree." However, P9 expressed that GoReact improved his ability to take constructive criticism and learn from it, stating, "We were able to take that feedback and learn how to manage our emotions and our feelings toward that feedback...whether it be positive or negative." P6 felt that it was "challenging to connect...socially or

emotionally...in any sense on video," which in turn negatively affected the ability of GoReact to foster resiliency.

P5 stated that GoReact use occurred in a "closed environment, so you're not really...exposed to all those stressors." P12 felt that resiliency was inherent to "the character [of] who I am as a physical therapist and as a clinician...the ability to adapt on the spot to different situations comes back to how has this student in the past learned from these stressful situations." She felt that GoReact had little to no effect on preparing for resiliency in the workplace as "it's a lot to do with the character of the clinician more than anything of what...GoReact can do to process that." However, P12 did state that practicing responses to more complex GoReact scenarios and receiving instructor feedback could help build resiliency when facing similar situations in the clinic. P15 described resiliency as "experience-based and kind of situational and more from guidance of a clinical instructor" rather than via GoReact use. Similarly, P2 felt that GoReact was not used for stress-inducing scenarios but rather "during clinical rotations, absolutely." She continued to explain that GoReact "was helpful in the moment when we couldn't be on campus, but...I think a lot of the real learning came from...being with your instructors and your classmates...and then during the [clinical] rotations."

P10 stated that GoReact did not affect her ability to manage difficult circumstances. Instead, she explained that:

A lot of what I learned about dealing with harder situations with social issues was during clinical [internship] and then also just beyond [after graduation]. I'm in a pediatric setting right now, so I'm learning much more from my peers about how

to deal with tough family situations. When am I supposed to be contacting... social services?...How best to...communicate both with the parent but then also with the child?

Likewise, both P7 and P8 stated that GoReact did not affect their ability to deal with "difficult patients who are resistant to physical therapy" (P8). P7 recounted a patient from the day of his study interview who came to physical therapy only because his surgeon required it for eight weeks prior to his spinal surgery. To make matters worse, the patient was already irritated and late for his appointment after spending 40 minutes in traffic. P7 described using most of the session to educate his patient rather than perform active interventions. He felt that GoReact could not have prepared him for situations like this but rather, "here's your scenario…it usually doesn't really veer off script."

P11 shared that GoReact could not prepare him for the emotional challenges and "harsh reality" of patient death in a skilled nursing setting. He described the "spectrum of emotions that went into…not knowing…who is actively dying from day to day…people that we work with every day so…there's a high level of attachment…especially for long term residents."

Theme 3: Benefits

The interviews concluded with questions about benefits, challenges, and suggestions for GoReact use in a DPT program. The most frequently cited benefits included the ability to receive feedback and self-reflect on skills performance, the repetition of skills practice, and the freedom to use GoReact at any time outside of class.

Feedback

Most participants listed feedback as a benefit of GoReact, with several citing the time-stamped feedback feature as a positive contributor to their learning. For example, P10 liked having "a method where you can have...one-on-one-ish...direct feedback, and you're able to give it...at certain times." She continued, "with GoReact, [instructors] can look at you individually, make their comments and suggestions and be able to point out different things that you're missing." Furthermore, P10 discussed the benefits of time-stamped comments from student to instructor, stating, "You can at least say [to the instructor] can you look at this specific time period? Am I doing this thing right?" Similarly, P12 discussed the benefits of time-stamped feedback:

I would go back to the timestamps being a major [benefit] because when we look at our feedback, we don't have to watch our whole video again. It was easy to...you could see like a little note, I think something like that, and it gives out a star you could just click that [and] go straight to that point and...I think it also gave transcription feedback.

P12 also stated that GoReact feedback allowed her to get questions answered about her technique more promptly than waiting for the next class session, explaining, "What is more difficult is waiting...for us to have the next class, and sometimes we don't even remember questions or feedback on how to do certain things."

P4 explained that GoReact "gives you that feedback in every aspect of the term...and I think that feedback is super important." However, P4 stated that she did not receive much time-stamped feedback from instructors, which she felt "might have been

something that would have been more beneficial. She continued, "A huge benefit is getting that time-stamped kind of communication back and saying okay, here is where maybe this needs to change...specifically...I think it would be amazing."

While P5 touted the benefits of feedback, he preferred receiving video feedback rather than text. He stated, "I know one professor…he watched the video, and then he had a whole video of himself…giving feedback, so that was nice for me with…visual [and] verbal cues." P5 also felt that video feedback revealed the instructor's "emotional response" to his performance via their "facial expressions." He laughingly said he would interpret his instructor's expressions as "like, oops, I need to do this again."

Many participants used GoReact to upload demonstration videos and ask questions for instructor feedback. P5 stated, "That's the only thing I really see it being useful for." P2 also preferred to get answers via GoReact, explaining:

If there's something...maybe you just didn't know, then getting the feedback from, you know, the instructor because even sometimes in class, you might not always get the time to ask...some of those questions, or it might be something you thought of after the fact.

P14 cited the main benefit of GoReact was "getting more feedback outside of the classroom," while P15 thought "it was nice that our professors allowed us to submit GoReacts for feedback on any of the skills or things that we were doing in preparation for an exam or a practical." Likewise, P9 felt GoReact "is a good learning tool in that you can submit a video, even if it's not part of an assignment, and you can get feedback." He

recalled a course where he could upload practice videos to a GoReact link for instructor feedback, which "act[ed] as a study tool rather than an assignment or assessment."

Self-Reflection

Many participants listed self-reflection as a benefit of GoReact during their DPT program. P5 stated that "self-assessment and self-reflection" were most beneficial. P3 described how the ability to self-reflect coupled with instructor feedback helped him realize when his "posture...or my tone or my cadence" was not ideal. He stated, "Not only do you get the feedback from the professors...but you could actually just watch it right back and be like, oh, I actually do this all the time...I didn't realize." P8 expressed that "it's also good to perhaps reflect on your tone, how much volume you are using," but also "the practice of reading someone's body language, of working on pronunciation and cadence and vocabulary selection" as benefits of GoReact. Likewise, P14 favored receiving feedback outside of the classroom via GoReact to have "more time to reflect on my own skills." She described the ability to "review it and kind of like watch it back and say, oh yeah, that's something I had to work on."

P4 felt that self-reflection with GoReact can help DPT students with their competence and preparedness, explaining "that watching it back [and] saying okay, this is what maybe you did wrong, or maybe your communication was a little different, and you can try saying something different, you know, next time" to improve clinical skills. P12 liked the option to view a "little snippet of what I needed to work on or what I did good on, and just easily follow through with the videos."

Repetition

The ability to practice and perform skills repeatedly using GoReact was another benefit frequently cited by study participants. P2 described using GoReact video recording to self-correct her skill performance through multiple repetitions. She stated, "If you record it, and you...watch it back yourself [and think] oh no, I don't like how I did that or...I know that wasn't right, and you could do it over again before you submit it." P13 felt that GoReact forced students to "practice in order to turn in something versus...in a classroom, we have limited time and practice...you're just trying to get it done in the moment [during class]." She continued, "At home in a private setting, I feel like it allows you to slow down your practice. It's not timed, and you can get it...you can wait to get it right."

While P15 discussed how GoReact often required "multiple takes" to perform the skill technique correctly, she thought GoReact "kind of forces you to think...if I didn't have multiple takes on a GoReact, how would I perform and how could I do this more seamlessly?" P15 stated that she did not want to "spend like a whole hour making this...three-minute clip perfect" but preferred submitting her initial takes for instructor feedback. In her case, while the ability to record tasks repeatedly using GoReact was seen as a benefit, she felt that repetition with GoReact did not translate to proper performance in a professional clinical setting.

Freedom

Many participants viewed the freedom of use with GoReact as a benefit. P1 liked that GoReact "didn't have anyone looking over my shoulder" assessing his skill

performance in person. He stated, "I personally would rather do it all myself thinking like, okay, I did this right, did this right, this right...okay, I'm gonna send it in [and] see what they (instructors) say." Furthermore, P1 felt that GoReact was a beneficial tool for people who find in-person skill performance and assessment stressful, stating, "I know a lot of my classmates got stressed out during...one on one practicals, so I think...GoReact would be able to help people with anxiety [and] stress." Similarly, P12 described how GoReact was:

Super helpful in decreasing the stress because when you have that professor watching it (skill performance in person), you're stuttering, you're having all these mixed emotions going on, but that doesn't reflect the true self of the student. The student can be well prepared, but when it comes to having a professor there, it's, oh God, test anxiety.

She continued, "GoReact is capable of doing, seeing, what the student knows in a sense and getting that feedback of how it truly feels for the student" without the added stress of being in person.

While recording with GoReact seemed less stressful to some participants, P4 described how using GoReact to record performance videos helped her overcome the "fear factor" of being recorded. She supported GoReact use in DPT programs, stating it is "very beneficial to continue to use and probably even more in different classes." P6 also supported GoReact use in describing the freedom to study concepts and techniques outside of the classroom. He stated:

I think PT schools, in general, are changing, and the fact that not everything has to be in the classroom. Things are becoming more efficient. Time, you know, is valuable to everyone, not only professors, but there [are] certain concepts that you could put on GoReact and say, hey look, let's study these, work on this instead of being in the classroom and throwing everything all at once. I mean, I could go to a certain concept or a certain video that's submitted and say, okay, this is what I need to work on.

P6 shared that he might not have been as successful during his PT program without technologies like GoReact, which "helped me a lot."

P7 described the "convenience" of GoReact, stating, "If there's an issue with getting people physically together, there's always an option to submit something digitally." Similarly, P9 and P15 appreciated the freedom to submit videos for instructor feedback. P9 stated, "I think the GoReact software is a very unique software in that it does allow you to upload a video or record a video and then get the feedback." He recalled a course that allowed him to "submit videos of our practice and then get feedback on that practice" freely, serving as a "study tool rather than an assignment or an assessment of any sort." Likewise, P15 shared, "It was nice that our professors allowed us to submit GoReacts for feedback on any of the skills or things that we were doing in preparation for an exam or for a practical."

Other

Six of the 15 participants attended the flex DPT program at the targeted university. This program consists of a hybrid format with online content through a

learning management system and weekend lab sessions on campus. A shared benefit of GoReact was its suitability for a hybrid or flex program. P10 felt that GoReact benefitted the flex students "since they're not always...on campus and...maybe they work during the week, so when they do their weekend classes, they get some time, but they're not always able to go in during lab." Similarly, P15 touted the benefits of GoReact for "flex students who aren't on campus." She explained, "They still need that feedback during the week, like being able to submit GoReacts can be helpful as well."

P6, who is married and worked full-time throughout his flex DPT program, stated that GoReact "helped me be more efficient, and I think that's a big...aspect of PT school because everything is all about efficiency and how...to process that information and the best way to learn it for the real world." P11 described using GoReact during the COVID-19 pandemic for distance learning, sharing that he felt it was "a better product than other interfaces that were used throughout my DPT curriculum."

Theme 4: Challenges

Participants also shared the challenges with GoReact during their DPT program.

The most cited challenge involved technical issues with using the software, such as internet access and bandwidth, recording environment, and video capture, while several participants listed feedback as a challenge.

Technology

Technology challenges included internet and Wi-Fi access, slow upload speeds to the GoReact platform, the need for quality hardware, and the inability to edit videos recorded directly with GoReact. P3, P6, P7, and P12 discussed issues with Wi-Fi

affecting the ability to use GoReact properly. P3 stated bluntly, "If your Wi-Fi is trash, you're out of luck." P3 also described other technical issues, such as "figuring out how to convert the files to upload it. Things like that kind of got in the way, but you figure it out, obviously, but it's always a little bit of a challenge at first." P6 said:

You need a good Wi-Fi connection, which sounds so intermediate, but it's true. Like, I can't go to a coffee shop if it doesn't have good Wi-Fi, and it has to be quality Wi-Fi. If there's ever, you know, this is really rare, but [if] there's a blackout at my house, I can't use it, and so that's really challenging.

P6 continued with a discussion of the hardware needed, stating, "There is a drawback to [GoReact] wherein the fact you have to be at a somewhat...entry level of technology." He recalled having some technical difficulties despite being computer literate, sharing, "If you struggle with technology like you know, some older individuals that may not be used to MacBooks and things like that, I think it's gonna be tough."

Likewise, P7 listed the "user's ability to get...quality internet access" and being "limited by the hardware that they're running" as challenges to using GoReact. He explained:

If someone's rockin' a really, really old computer, or has like a bad camera, that might take longer to save their video [and] upload things. Maybe quality or whatever they upload might be an issue just based on the hardware that they have.

P12 shared similar comments regarding technology issues, stating, "I think the biggest [challenge] is just...having the dedication to upload the videos and everything when it's electronic and things in the internet world aren't perfect." She clarified that "if you had

larger files to upload and such, GoReact might not like that, and it's not going to...it's not as great as processing all these videos." To avoid this, P12 said she sometimes recorded videos directly with the GoReact platform. However, she declared, "You cannot delete snippets of it" or edit videos once recorded in GoReact. She explained:

You'd have to go back all the way to the start and record it fully through. So, say that you're recording the subjective information and you got the subjective down, and you move onto the assessment portion and say that halfway through your assessment portion, you forgot something or left out something in that...like X amount, like a three-minute assessment, you're going back and you have to get rid of the whole assessment, unfortunately, starting from the end. You can't trim out certain parts of the clips.

Environment

Ten participants discussed the difficulty of finding an appropriate recording angle as a challenge with GoReact. P9 stated that "the challenge, no matter...the recording capabilities and set-up, is to really provide whoever's watching on the other side a full view of everything that they're doing." He discussed the "two-dimensional view" of a video and "just seeing [the performance based on] where the camera's placed" as potentially limiting an instructor's ability to evaluate a student's skill performance.

Conversely, in a classroom setting, the instructor can "look around and walk around and be able to see everything that's going on" (P9). P10 shared the same concerns, stating:

I think it's hard because...one of the things, I think, that I had the most difficulty with is, well, you're only shooting from one angle. So, that's really the only angle

that the professor gets to see, but...it might be good for the first part of what you're showing them, but as you're going through and you need to move your body now, you're kind of getting in the way of the camera so they don't get to see the rest of your work that you're trying to ask questions about or show them the skill that you think you have correct. I guess you could upload a second video, but I feel that's getting a lot more technical, and there's a lot more room for error when you're trying to give them multiple angles.

Likewise, P4 stated, "I think the hardest part was just finding sometimes the right angles of [recording the videos]" because "if only two people are [recording], it's hard to see everything." She also explained how recording GoReact videos was "time-consuming" but felt the "benefits outweighed the risks when it comes to the time-consuming part." P14 discussed using a third person to operate the camera during skills recording, describing it as "an easier way to maneuver and get the angles [filmed] correctly."

P5, P13, and P15 described challenges with finding ideal angles for recording skills but also discussed "getting the right lighting...getting the right height [of the treatment table]...resources within your own apartment, condo, house, wherever you live" (P5). P5 expressed concern that these challenges may affect the instructor's assessment and grading. He stated, "Well, I shouldn't be penalized for it because that's all I have [available in my environment]." P13 shared, "I think the challenges were...technical, like lighting, angles...you get commentary marked off for things...[that] just [weren't] seen [by the instructor], so it's not always 100% accurate to

evaluate off of." She continued, "It's hard knowing that you're going to be graded on something that's not perceived the same as what you did, you know, in real life."

Interestingly, P13 also mentioned recording in her home environment as a stressor. She stated, "I have anxiety, so to record myself almost felt invasive, and like, you're in my personal space, and I have to talk about myself, or I have to do this. It just is a little...daunting." P15 expressed concern that her recording technique "might not be all-encompassing" and affect instructor feedback, explaining:

If I have to put my laptop on a ledge and then point it down, you might be able to see like 80% of what I'm doing...That was always a challenge, I think, when we did GoReact videos where we would have to try to find the right angle to show what we're doing.

P7 also discussed challenges with "space that the user has available" for filming GoReact videos. He stated that the environment "...could limit...how they could recreate the scenario [for skills demonstration] or do whatever technique that they wanted to. Not everyone's going to have a big enough living room or a treatment table available." Furthermore, P7 commented on how the lack of adequate "lighting or just like the peace and quiet [of a distraction-free environment]" may hinder the ability to record quality videos.

Feedback

A shared challenge with GoReact involved feedback on skill performance. P2 discussed "having to wait so long for the feedback [as] a disadvantage." Likewise, P7 said, "I guess if it's [a situation] where instant feedback would be helpful, then there's

always that limitation." P3 preferred the "physicality" of in-person instruction and feedback. He stated:

I learn more in the moment being there. I had those ortho courses where the professor directly was like, no, like this, you know, they use their hands, or they take your hands and put it there...It's in the moment. It's physical, and I remember it better that way.

Similarly, P8 expressed that since physical therapy is "very hands-on...there's only so much that we can do when we're observing." He valued the "validation with palpation" that in-person guidance, demonstration, and feedback provided, which also helped him understand what might "exacerbate [patient] symptoms or trigger symptoms."

Other

An interesting challenge discussed by two participants is the possibility of student cheating while filming GoReact videos for skills assessment. P9 stated:

Because it's a video software, you can be lying when you're doing stuff. You can tell your...tell the video that I'm feeling this or if I'm in this spot, but your examiner looking through the video can't really know whether you're feeling...anything. So...it also allows for deception.

Likewise, P1 felt that because GoReact videos do not show a 360-degree view, "students can be able to cheat" by gesturing or whispering to their partner to include an aspect of the skill they may forget during the recording.

Only one participant (P11) discussed the challenge of GoReact as a replacement for in-person learning. While he described GoReact as a "better product than other

interfaces that were used throughout my DPT curriculum," he also felt that the success of GoReact "depends on your learning style" and may not be appropriate for all students or "for every individual it's going to...look a little different."

Another unique response came from P7, who discussed video submission issues, such as uploading the wrong video for feedback or assessment. He said laughingly, "I don't know if we were able to upload multiple things, but say it's like, oh hey, upload your practical one video, and it's like, oh shoot, I uploaded my Beowulf essay instead." He continued, "I'm sure that probably doesn't happen very often."

Theme 5: Suggestions

Study participants offered helpful suggestions for using GoReact in a DPT curriculum. Most recommendations supported GoReact as a tool for soliciting instructor feedback rather than for virtual practical skills testing. For example, P10 felt that GoReact was "helpful when used the right way," such as for "smaller skills…like one manipulation or…one measurement or one assessment." She continued, "I think that it's helpful, but…also, there's a limit to how much it can be beneficial in the classroom" and suggested that instructors use the option to upload images or videos of correct skill performance to optimize student learning. Similarly, P2 and P11 shared that GoReact is helpful for the confirmation or correction of skills performance in a hybrid DPT program. P2 explained:

We were only going to campus twice a month. You're at home studying, and you're like, I really don't know how I feel about this. You can record yourself doing something and still get some kind of feedback before you're having to wait

two weeks before you see your professor again, and by then, you've practiced it incorrectly, or, you know, you haven't practiced it at all because [you] didn't know where to start.

However, P2 felt that GoReact should be optional "for those areas where you're just not 100% sure...rather than making it a requirement to use because it may not always be helpful for everybody." P11 thought GoReact is a valuable supplemental tool as programs learn more about student performance outcomes and knowledge translation "from classroom to clinic," especially in a hybrid DPT program.

P12 shared that GoReact boosted her online learning experience, especially amid concerns over learning hands-on skills during the COVID-19 pandemic. As a result, she felt that GoReact is a helpful adjunct to in-person interactions and recommended its use for students to get valuable instructor feedback and progress checks throughout the curriculum. Similarly, P13 suggested that GoReact continue to be a platform to "communicate back and forth...especially for feedback" with instructors.

P7 and P8 suggested that GoReact software developers consider an option where a scenario can be changed in real time for a more spontaneous student response. P8 appreciated "the difficulties of patients who just didn't act in the way that you would expect," which forced him to contemplate how he might respond in authentic clinical situations. P7 provided a more detailed suggestion, stating:

Maybe there's a...I don't know...maybe they can slide in a video snippet or something [where] you're doing this procedure, and then they don't know what's

coming up, and boom! Hit him with [an unexpected patient reaction] while you're doing this technique, like what would you do?

Lastly, P6 felt that innovations such as GoReact indicate the physical therapy profession's future and suggested that students and licensed physical therapists be receptive to this new technology. He stated:

GoReact opened the door for some of us...you have to be open to change, and even in the hybrid program...a lot of our stuff is video-based, and...it was good for me to learn that concept because I think PT is leaning toward more technology-based [care]. I'm a firm believer [that] if you're not going to adapt to that, you may just be left behind a little bit, and that's on the student, that's on the clinician that doesn't want to learn those new things.

Summary

In this chapter I detailed the study setting, participant demographics, data collection and analysis methods, and study results. I developed themes inductively to answer the study's research question: What are the perceptions of Doctor of Physical Therapy 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? The themes which emerged included positive work readiness, negative work readiness, benefits, challenges, and suggestions. In Chapter 5, I summarize and interpret key study findings, discuss the limitations of this study and recommendations for further research, and describe the social change implications of this study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this basic 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. Using the six concepts developed by Padley et al. (2021) to explore and frame interview questions regarding professional clinical preparedness through GoReact video assessment software, I aimed to learn about DPT graduates' experiences, opinions, and perceptions consistent with a basic qualitative study approach (see Percy et al., 2015). Data were collected from semistructured interviews with physical therapy graduates working as licensed physical therapists who used GoReact video assessment software during their professional physical therapy education and transcribed, coded, and analyzed using inductive thematic analysis. Key concepts and themes were identified regarding the perceptions of GoReact use and professional work readiness, with participants reporting an overall positive opinion of GoReact as it related to their preparedness for professional physical therapy practice.

Interpretation of the Findings

The findings of this study include four themes related to DPT graduates' perceptions of GoReact use and professional work readiness. First, 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 (e.g., 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 include resiliency, self-awareness, communication and organizational skills, commitment to lifelong learning, and professionalism (O'Brien et al., 2020; Sole et al., 2012). These studies reinforce 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.

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 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. Their findings support the idea that technologies such as GoReact must be used to maximize the beneficial influence on professional work readiness. 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.

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.

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 the difficulty finding adequate recording angles that might 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.

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 (e.g., 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 of the Study

I identified several potential limitations of this study. 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. I mitigated this limitation by receiving access to the program's alumni directory, which gave me access to nearly 2000 DPT graduates across four campuses. I received responses from 21 interested individuals and interviewed 15 participants. 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. I addressed this limitation by reviewing and discussing course content, assignments, and assessments at the beginning of the interviews to stimulate more recollection of GoReact and subsequent 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. During data collection and analysis, I focused on separating my professional and scholarly roles to maintain objectivity for a more dependable study.

Transferability was not a limitation of this study. I avoided this limitation by providing rich, thick descriptions of the participants, setting, methods, and results of the study for the reader to understand, compare, and possibly apply the findings to their

situation and context (see Amin et al., 2020; Korstjens & Moser, 2018). By studying DPT graduates' perceptions of GoReact use in various didactic courses, programmatic settings such as residential and hybrid programs, and across multiple contexts as it related to their professional work readiness, I allowed a richer understanding of the study phenomenon (see Shenton, 2004).

Recommendations

Recommendations for further research emerged from the strengths and limitations of this study. Since my study focused on the perspectives of DPT graduates from a single targeted CAPTE-accredited university, I recommend additional studies to investigate GoReact use at other DPT and health professions programs. 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, since study participants reported GoReact feedback and self-reflection as primary contributors to professional work readiness, future studies on innovative practices to facilitate these components serve to improve DPT and health professions education and outcomes (see van Kessel et al., 2018). Lastly, based on recommendations from Chesterton et al. (2022), further research on innovative video assessment and feedback tools in relation to digital literacy, clinical performance, and employability is warranted as employers seek the most qualified and well-rounded graduates for their clinics (see Nof et al., 2019; O'Brien et al., 2020; Sole et al., 2012; Wells et al., 2021).

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 (e.g., Forbes et al., 2018; Hartstein et al., 2022; Martin et al., 2020; Ødegaard 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 (see 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. My 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 physical therapy and other health professions education programs. Negative opinions of GoReact use and work readiness primarily involved the lack of in-person tactile feedback on psychomotor skills and technical challenges 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.

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Institution Walden University

Expected

presentation Nov 2023 date

Figure 1 on page 6 (Conceptual model of work readiness of medical graduates) will be used as a reference for my conceptual framework based on Padley et al.'s six work readiness concepts

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Appendix B: Permission Email to Use Alumni Directory for Recruitment

RE: question about DPT alumni research
Crabtree Mon 12/12/2022 8:30 AM
To: Jacqueline Moore
Yes, I will be able to provide you with an email list. Please let me know when you are ready for the list. Please include the format you will need. I can supply you with name, email, and degree year.
My best,
CRABTREE (She/her/hers) Director, Alumni Engagement
From: Jacqueline Moore Sent: Monday, December 12, 2022 11:27 AM To: Crabtree Subject: [EXTERNAL] question about DPT alumni research
Hello, Ms. Crabtree:
I am a Ph.D. student at Walden University and a core DPT faculty member . I am developing a study involving DPT graduates for my dissertation research. Would I be able to get access to the DPT Alumni Directory to help with recruiting? The focus of the study is on graduates from December 2020 to present.
I appreciate your time and consideration.
Thank you, Jacqueline Moore Walden University Ph.D. student, Learning, Instruction, and Innovation

Graduate Date and Beyond

Seeking Doctor of Physical Therapy Graduates!

Did you graduate PT school in December 2020 and beyond?

Did you use GoReact video assessment software during your PT program?

My study is titled, "Physical Therapy Graduate Perceptions of the Didactic Use of GoReact Video Assessment Software and Work Readiness" and can help Physical Therapy program faculty develop and use innovative teaching, learning, and assessment practices to best prepare their students to become successful licensed Physical Therapists.

For this study, you are invited to share your experiences using GoReact video assessment software during your DPT education and how it may have prepared you for clinical practice.

This research is part of a doctoral study for Jacqueline Moore, a Ph.D. candidate at Walden University.

About the study:

- Complete one 45 to 60-minute Zoom interview and a 10 to 15-minute follow-up Zoom interview (if needed)
- Your confidentiality will be maintained throughout the study
- You will be compensated for your time with a \$10 Starbucks gift card

Volunteers must meet the following criteria:

- Be a graduate of a CAPTE-accredited Doctor of Physical Therapy program
- Be currently working as a licensed Physical Therapist in a clinical setting
- Have experience using GoReact video assessment software during their DPT program

To confidentially volunteer, please click here

Appendix D: Inclusion Criteria Google Form Screening Questionnaire

Link to questionnaire:

https://docs.google.com/forms/d/e/1FAIpQLSfY5dh7cg6OmbfvbBJr_cIHhX1r2k_abnC V5VrJSPieTM6hoA/viewform?usp=sf_link

GoReact and Work Readiness Study Inclusion Criteria Questionnaire

Thank you for your interest in my study on GoReact use and physical therapy work readiness. Please complete this questionnaire to determine eligibility for participation.

* Required			
1.	Are you a graduate of a Doctor of Physical Therapy (DPT) program in the United States? *		
	Mark only one oval.		
	Yes	Skip to question 2	
	No	Skip to section 4 (Untitled Section)	
	Untitled Section		
2.	Did you use GoReact video assessment software for any of your coursework (assignments virtual practical exams, instructor feedback, etc.) during your DPT program?		
	Mark only one oval.		
	Yes	Skip to question 3	
	◯ No	Skip to section 4 (Untitled Section)	
	Untitled Se	ection	
3.	3. Are you currently working as a licensed Physical Therapist in a clinical setting? *		
	Mark only one oval.		
	Yes	Skip to section 5 (Untitled Section)	
	No Skip to section 4 (Untitled Section)		
	Untitled Section	Thank you for responding. Based on the inclusion criteria, you are not eligible for participation in this study. Please click Submit to exit the questionnaire.	
	Untitled Section	Thank you for responding. You meet the inclusion criteria for this study and will receive a link to schedule an interview appointment soon. Please click Submit to complete the questionnaire. Your time and participation are much appreciated!	

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Appendix E: Interview Guide

Topic

Interview questions and script

Introduction and demographic information

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.

Do you consent to being recorded today?

Thank you. Let's begin with a few basic questions about your DPT education.

- 1. What term and year did you start your DPT education program?
- 2. What month and year did you graduate from your DPT program?
- 3. In which courses do you recall using GoReact video assessment software?
- 4. With what type(s) of assignments or assessments do you recall using GoReact?

Script: 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.

Work readiness theme: Confidence

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.

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?

Work readiness theme: Capability

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.

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?

Work readiness theme: Reflexivity

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.

Topic

Interview questions and script

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?

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?
- 12. What, if any, challenges did you encounter in using GoReact during PT school?

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

Topic	Interview questions and script
	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!

Appendix F: Google Form Response to Volunteers Not Meeting Inclusion Criteria

