EFFECTIVENESS OF PODCASTING IN CONTINUING EDUCATION

A Thesis submitted to the faculty at Stanbridge University in partial fulfillment of the

requirements for the degree of Master of Science in Occupational Therapy

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Certification of Approval

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Abstract

There has been minimal research into the effectiveness of podcasts as a primary form of education. Podcasts have the potential to be another means of transmitting information and educating individuals remotely. In the current climate of COVID-19, remote access is especially important for education and for current occupational therapists (OT) to access continuing education (CE) courses. Remote access and podcasts would benefit occupational therapists since the availability of CE courses offered for practitioners is limited. It is essential that OTs can access effective CE courses to maintain competency in their knowledge base and refine their clinical reasoning skills. For the purposes of our study, we designed and recorded an ethics-based podcast remotely to determine the effectiveness of podcasts as a method of CE for OTs, Certified occupational therapy assistants (COTA), and OT students. We hypothesized that podcasts are an effective form of education for an ethics course. During our study, we sent pretests to four OT students, distributed the podcast to these OT students via email, and followed up with posttests. After the study, data was collected from pretests and posttests and analyzed to determine the effectiveness of this podcast design. After distribution of the podcast and data analysis, findings suggest that an ethics-based podcast paired with a visual aid may be an effective method for teaching a CE course. Since there were limited participants and the study was completed with OT students, further research is needed to understand the feasibility of a CE podcast with current OT practitioners as well as if podcasts alone are effective in CE.

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Effectiveness of Podcasting in Continuing Education

The healthcare profession is constantly evolving and discovering new approaches, so it is critical that occupational therapists (OTs) keep up to date with developments within their field. Indeed, if clinical excellence is to be maintained over time, participating in quality continuing education (CE) courses is an essential part of an OT's job. CE courses—which are offered through various outlets (e.g. lectures, virtual classes, in person workshops)—not only present opportunities for professional development, but also educate practitioners on how to improve patient care and maximize their clinical skills. As technology and health care advance, different avenues of CE also emerge.

One form of online professional development that has recently emerged is the use of podcasting. A podcast is a digital media file that is distributed over the Internet for listeners to playback on portable media players and personal computers. Podcasts are often used as a supplemental tool to in class teaching methods (Drew, 2017; Koppelman, 2013; Laing & Wootton, 2007). To ensure podcasts are a feasible form of education, additional research is required.

There is a limited amount of research on the effectiveness of podcasts as a central component of an educational course. Most research uses a podcast as a supplement to a traditional lecture course. There is also little to no research in ethics courses for practicing school-based OTs; therefore, educational professionals suggest the need for more research in these areas. Multiple studies suggest future research focus on podcast use from specific subject areas, and podcast users' preferences for podcasts to be designed for specific needs (Drew, 2017; Koppelman, 2013). Due to limited access and availability of CE courses for practicing OTs, we found the urge to develop an ethics

course accessible via podcasting for the OT profession. We seek to determine whether or not podcasts can be effective for professional development for practicing OTs as a main form of education.

Literature Review

History of School-Based OT

To fully grasp the evolution of the role of the OT within the school-based setting and the depth of their duties, it is imperative that a brief history be explored. With this new role of working within the school setting came a different set of challenges. One of these new sets of challenges involved the idea of ethics. *Brown v. Board of Education of Topeka* was a historic decision by the Supreme Court which ultimately ruled racial segregation within the public school system as unconstitutional. *Brown* also held that separate but equal racial segregation was also unconstitutional, even if segregated schools were equal. These rulings made a huge impact on the social, economic, and political development of OT in school settings. Clark, Chandler, Dunn & Rourk (2013) have explained that this case helped to push the OT profession from a medical model with an emphasis on rehabilitation to a more holistic and occupational based model with a more intense focus on the client. The OT practice model that emerged in the school setting is the same model used today (Clark et al., 2013). As one can see, *Brown v. Board of Education* had a huge impact on school-based OT, shaping what it is today.

Clark et al. (2013) have traced the path that occupational therapy took following the passing of *Brown v. Board of Education*. In 1973, The Rehabilitation Act was passed that revised and increased the scope of authorizations of grants for vocational rehabilitation services for those with severe disabilities. According to the Rehabilitation

Act (1973), it expanded research and training programs within the Department of Health, Education, and Welfare. However, the most important aspect of the Rehabilitation Act of 1973 was contained in its 504 section. Within this section (1973) the act states, "No otherwise qualified handicapped individual in the United States, as defined in section 7 (6), shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." This essentially meant that programs receiving federal funding could no longer discriminate against individuals with disabilities in terms of employment, education, or any other setting. This act laid the foundation for future bills regarding equality for individuals and children with disabilities.

In 1975, Congress passed the Education for All Handicapped Children Act (1975) which led to the inclusion of more OTs being hired in schools because this act allocated more funds for the public school system to provide more assistance for children with disabilities. Before the Education for All Handicapped Children Act of 1975 (EHA), OTs only worked with children with acute or chronic illnesses in the hospital setting (Clark et al., 2013). Ultimately, the passing of the EHA mandated that public school systems provide free and accommodated education for children with disabilities from age 3 to 21 (EHA, 1975). Millions of children with disabilities who had previously attended special schools, home schools, private schools or had not been enrolled at all, now began entering the public school system (Clark et al., 2013). OTs entering the schools had nothing to guide them into this new setting except professional OT standards and past experiences (Clark et al., 2013).

In 1990, Congress then passed the first edition of the Americans with Disabilities Act (ADA). The ADA forced state and local governments to provide equal opportunities and services for all individuals, including those with disabilities in all aspects of society from the workplace to the classroom (ADA, 1990). Congress then passed updated versions of the ADA with further inclusions and allocations of funds in 1997, and 2004 (Clark et al., 2013).

Then in 1997, Congress passed the Individuals with Disabilities Education Act (IDEA) that required every state to have in place policies that ensured a free and appropriate education for children with disabilities (Clark et al., 2013). In 2004, Congress went a step further and passed the Individuals with Disabilities Education Improvement Act (IDEIA) with some improvement in standards, outcome measures, and wording (Renner, 2019). The IDEIA of 2004 ultimately sought to improve the equity of public education for children with disabilities by ensuring that they had the same opportunities as children without disabilities (Renner, 2019). IDEIA still remains relevant and useful today with regards to children in public schools receiving the services that they need and deserve.

The IDEIA of 2004 (2004) also now required states to establish new performance goals for children with disabilities that were more closely aligned with their peers without disabilities (Renner, 2019). For example, the new IDEIA Act of placed a new emphasis on post school activities including vocational education, adult education, independent living, and assisted employment (Renner, 2019).

Within the school-based OT setting, Individualized Education Programs (IEP) are when the student's performance throughout the school year was discussed, their

weaknesses and strengths are identified, goals are put forth, and decisions are made about support services, collaborations, and location of specific services (Clark et al., 2013). It was also important to note that the OT was a crucial member of this educational team; therefore, their presence at these IEP meetings was essential to success and absence required a written justification along with input and notes for the IEP team and parents on recommendations (Clark et al., 2013).

Another additional section to the updated version of IDEIA included specifics on the issue of IEP's with new wording (2004), "appropriate measurable postsecondary goals based upon age appropriate transition assessments related to training, education, employment, and, where appropriate, independent living skills" (para. 35). In order to fulfill the goal of IDEIA of providing equity based educational assistance, services and assistance based programs were implemented to bridge the gap between school and post-school employment to increase a student's chance to achieve independence as demonstrated by this subsection within IDEIA (2004), "the academic, developmental, and functional needs of the child." This new wording contributed new ideas involving appropriate and independent living skills which are equally as important as educational skills. The additional wordings and the subsequent updates to the new pieces of legislation played a large part in influencing the constantly evolving role of the OT in the school-based setting.

Role of School-Based OT

With the implementation of IDEA, Section 504, and the ADA, schools all over the U.S. now had school-based OT practitioners providing services to children in the school setting. School-based services were provided both in public and at private

facilities (Clark, Jackson, Polichino, & Delany, 2011). OTs in these settings not only supported academic achievement but also worked on school participation by promoting occupation within all school routines in the classroom, at recess, and in the cafeteria (American Occupational Therapy Association [AOTA], 2019); Artale-Morgante & Seruya, 2017). Although OTs played a critical role in the support of children who qualify under the IDEA, Section 504, and the ADA, they also supported the needs of all students throughout the school.

OT services included evaluation, intervention, and documentation of outcomes (AOTA, 2019; Clark et al., 2013; Clark et al., 2011). During an evaluation, the OT sought to gain an understanding of the child's priorities and difficulties when engaging in occupations and activities (Clark et al., 2011). Both the evaluation and intervention addressed factors that included the child's performance skills, performance patterns, context and environment, activity demands and client factors (Clark et al., 2011). The pediatric client factors described were slightly modified from adults to also include an evaluation of the mental, sensory, visual, perceptual, neuromuscular, cardiovascular, and integumentary structures and/or functions (Clark et al., 2011). OTs observed and documented the student's work, social participation, and behavior in the context of educational activities, routines, and environments (Artale-Morgante & Seruya, 2017; Clark et al., 2011). The OT then conducted interviews with instructional personnel, family members, and the student to gather additional information. Not only did OTs work to ensure that all efforts were directed toward helping the child perform to their highest potential, they also conducted assessments and collected data that was presented in the individualized education program (IEP) meetings alongside the parents and other

professionals involved in the child's academic setting ; Clark et al., 2011).

Documentation and data collection focused on identifying the academic, developmental,

and functional needs of the child (Clark et al., 2011).

OTs in this setting were responsible for providing services to children in the least

restrictive environment by fulfilling their roles as students and preparing the children for

college, their future career, and community integration (AOTA, 2019; Clark et al., 2013).

They identified skills of the student, demands of the environment, and appropriate

solutions for intervention (Clark et al., 2011). They helped to ensure that all efforts were

directed toward enabling the student to participate in activities and school work related to

the child and curriculum by utilizing prevention, promotion and intervention strategies as

well as providing the guidance, modifications, and adaptations required to enable the

child's maximum performance (AOTA, 2019; Clark et al., 2013; Clark et al., 2011).

School-based OTs not only supported academic achievement, but also non-

academic outcomes such as social skills, behavioral management, self-help skills,

transportation, and more (AOTA, 2016; Clark et al., 2013). OTs focused on the student's

strengths to assist in designing and implementing programs that helped to improve

inclusion and accessibility for the child (AOTA, 2016; Clark et al., 2013). OTs in this

setting played a critical role in the education team by collaborating and educating parents,

educators, school staff and administrators (AOTA, 2016; Clark et al., 2013; Clark et al.,

2011)

While OTs helped students develop self-advocacy and self-determination skills to

improve their performance through adaptations and accommodations, they also supported

parents in their engagement with school activities and assisted in homework management

issues by monitoring stress levels and volume of work (AOTA, 2016; Clark et al., 2013). OTs also helped educators and other school staff by offering modifications to support diverse learning abilities and safety precautions within the school environment (AOTA, 2016). In addition, OTs assisted school administrators in providing training and implementation of programs such as anti-bullying and stress management for students, staff, and parents, while also providing recommendations for school equipment and modifications to allow access to all (AOTA, 2016).

School-based OTs were expected to know the mission statement and the curriculum of the school in which they were employed (Clark et al., 2013). They also served to assist teachers and aides in implementing recommendations for specific children (AOTA, 2016; Clark et al., 2013). Because OT practitioners had specific knowledge and expertise in activity and environmental analysis, they were obligated to use evidence-based practice when working towards making recommendations to improve the child's fit for greater access, progress, and participation (AOTA, 2016; Clark et al., 2013; Clark et al., 2011). This was accomplished by implementing strategies to reduce barriers and providing assistive technology to support the child's success (AOTA, 2016; Clark et al., 2013; Clark et al., 2011). They provided interventions including sensory techniques to help students manage stress within the classroom (Artale-Morgante & Seruya, 2017) and they assisted to develop other strategies used to help students achieve long-term goals for appropriate post-school outcomes while addressing both mental and physical health (AOTA, 2016). While the need for occupational therapy within the school based setting had been established through an extensive expertise in sensory integration,

knowledge of assistive technology, and competence in stress management strategies, it was clear that the need for OT had never been more justified.

Ethical Considerations of School-based OT

As mentioned previously, the role of the OT within the school setting was constantly evolving and changing; however, the eight ethical principles put forth for clinicians by the AOTA have remained constant. The first four of these ethical principles define the standard for professional behavior and these principles are: beneficence, nonmaleficence, autonomy, and procedural justice (AOTA, 2015a). The second set of these principles involves confidentiality, social justice, veracity, and fidelity (AOTA, 2015a). Another aspect of being an OT in the school-based setting was the issue of conflict with administrators. Clark et al. (2013) have explained that most ethical conflicts within the school-based setting involved administrative decisions regarding how the OTs services would be allocated. Conflicts between administrators and OTs have occurred for a few reasons. First, often the role of the OT was not thoroughly understood by all members of the school staff or school district administrators due to a constant evolution of the role of the OT in the school setting (Clark et al., 2013). The researchers found this has regularly caused confusion regarding duties, responsibilities and, subsequently, the expectations of the OT (Clark et al., 2013). One solution proposed was to include job descriptions and expectations during annual reviews between OT employees and their administrative supervisors (Clark et al., 2013).

The second source of conflict between administrator and OT was found to occur because rules and policies were written from an upper management standpoint with little to no input from the employees under them (Clark et al., 2013). The solution proposed to

help combat this was to inform administrators of the ethical obligations and standards set for OTs by providing them with AOTA's Code of Ethics which outlined the OT's obligation to education, research, and clinical practice (Clark et al., 2013).

Finally, Clark et al. (2013) found billing to be the third area of ethical conflict in the school setting. They found that as school systems sometimes billed different entities for services provided depending on the way in which student services were classified. This created conflicts of interest as the administrative billing department asked for reimbursement codes a certain way while the OT was used to billing a different way. It was the OT's responsibility to research, seek out and document using the correct codes in conjunction with the school's expectations.

Continuing Education Requirements for OTs

Licensed occupational therapists were required to participate in activities that promoted continuing competency, which was the ongoing process where practitioners maintained the knowledge, skills, and abilities to perform professional responsibilities (AOTA, 2018). In the United States, every state has particular requirements for continuing competence. For example, in California, obtaining one continuing education unit (CEU) was equivalent to 10 professional development units in California[PDU; AOTA, 2018]. According to the National Board for Certification in Occupational Therapy, attending an approved one-hour lecture, webinar, professional conference, or online course qualifies as one PDU. To remain a nationally registered OT, every three years an OT is required to obtain 36 PDUs for renewal. OT practitioners may participate in professional development activities and programs that were sponsored by the AOTA or the state occupational therapy associations. PDUs may be accessed through professional

presentations at workshops and conferences, structured mentoring, and article publications. Other forms of professional development activities needed to meet specific criteria in order to be accepted as PDUs. AOTA (2018) states that the program or activity needed to directly relate to occupational therapy practice, contribute to professional knowledge and skill, and the hour(s) involved could be objectively measured.

Yuen, Stippler, Burke, McClellan, and Dudgeon (2017) interviewed eight state OT associations on their perspectives on continuing education offerings and conferences. The state associations that participated in the study addressed how they each met the need to provide professional development for the field. They suggested offering more accessible and affordable continuing education opportunities (Yuen et al., 2017). Some associations offered online courses in the form of webinars and live or recorded one hour continuing education sessions for rural and remote areas (Yuen, 2017). To increase access to low-cost CE opportunities, recorded online courses such as podcasts related to OT practice could be distributed as a mode of education.

Podcasts in Education

Effectiveness. A trial conducted at the School of Computing, Engineering and Information Sciences at Northumbria University in the United Kingdom used podcasts to reinforce concepts and issues that were raised in lectures (Laing & Wootton, 2007). Students from this trial welcomed the approach and provided positive feedback on the learning experience (Laing & Wootton, 2007). Drew (2017) stated that podcasts from outside educational institutions are highly successful in reinforcing knowledge by providing additional resources for content review. Podcasts have challenged the norms of traditional education by offering an alternative method to access educational content. A

study conducted by Bensalem-Owen, Chau, Sardam and Fahy (2011) found that podcasting is as effective as didactic training. A systematic review conducted by Kay (2012) found that the key benefits of podcasting included positive affective and cognitive attitudes, control over learning, improved study habits, and increased learning performance. Thiyagu (2014) stated that podcasts were effective in developing a student's abilities to understand, think reflectively, attain knowledge, confidence in decision-making, reduction in anxiety, and an increase in posttest scores. Thiyagu (2014) also found that the flexibility of video podcasts—meaning the ability to watch the content whenever the student pleased—led to the students to be highly motivated to learn. A study conducted by Kennedy et al. (2016) found that participants who learned using podcasts scored significantly higher on declarative knowledge and application measures than those who learned using more traditional text-only teaching methods. The same students also reported higher levels of positive motivation, which included constructs of intrinsic motivation and identified regulation (Kennedy et al., 2016). It is clear from the numerous research studies cited that podcasts have been proven an effective and reliable teaching method, thus rendering them an appropriate instruction medium for teaching ethics to occupational therapists in the school setting.

Preference for using Podcasts. Podcasts have been found to provide an equal opportunity for learning regardless of time, space, and the person, and also to allow students to efficiently manage their time (Koppelman, 2013; Laing & Wootton, 2007; Kennedy et al., 2016). In the research reviewed by Kay (2012), students used video podcasts to prepare for class, self-check for understanding, assist in note taking, and obtain a global overview of chapters read; however, it is worth noting that the number

one reason video podcasts were used was for review of tests and examinations (Kay, 2012; Laing & Wootton, 2007). Students from a pilot study conducted at the Royal Melbourne Institute of Technology at the University of Australia also used the podcasts to catch up on missed lectures and gain a better understanding of difficult material (Laing & Wootton, 2007). In a study conducted by Koppelman (2013), students preferred podcasts because it helped them study efficiently by providing explanations of hard topics, illustration of subject matter, and feedback on assignments. Participants in a study conducted by Schreiber, Junaid, and Gordon (2010) appreciated the convenience of the podcast and the ability to stop, review, and repeat the material being covered. A randomized comparative trial examined the difference in knowledge acquisition and usage conditions between podcasts and blog posts amongst undergraduate medical students (Lien, Chin, Helman, & Chan, 2018). The study administered an exit questionnaire that asked the students about their experiences with each media type, the activities they engaged in while using the media, and their overall preference. The results revealed that participants preferred the advantages of using podcasts to learn novel concepts. The students emphasized the convenience of learning through a podcast by listing common activities they were able to perform simultaneously, such as driving, eating, and exercising.

Segment podcasts. In a qualitative study conducted to gain insight into the experiences and preferences of potential uses of educational podcasts in distance education, Koppelman (2013) found that short podcasts were preferred that focused on specific topics. As a result, Koppelman (2013) suggested breaking podcasts into smaller segments. Drew (2017) suggested that researchers consider signposting to help divide

podcasts. Drew (2017) also mentioned that podcasts that are 15 minutes or less fail to encourage students to engage in higher order thinking. Abate (2013) recommended that podcasts should be no shorter than 30 minutes.

Content. In a systematic review of research on video podcasts, Kay (2012) found that researchers suggested focusing on the quality and design of podcasts, and for educators to consider thoroughly describing content, length, and number of podcasts in the description of each podcast they produce and provide. Drew (2017) recommended that personality be injected to avoid monotony. Friendly and informal tones helped to keep students listening to the end (Drew, 2017).

Limitations. Although numerous researchers have found podcasts to be an effective form of education, Schreiber et al. (2010) found that undergraduate medical students preferred live lectures due to podcasts being a less engaging teaching method. It is also important to point out that students from the studies reviewed by Kay (2012) felt that the podcasts were too repetitive. Other concerns included the preference of some students for lectures and reduced class attendance (Kay, 2012). A few common concerns among various studies included the insufficient descriptions of podcasts and technical problems encountered by users (Kay, 2012; Laing & Wootton, 2007). Another limitation found with using podcasts as a form of education was that it discriminates against people who are deaf or hard of hearing (Laing & Wootton, 2007).

Methods of Comprehension After Educational Course

Pretest and posttest surveys were often used as methods to check for comprehension after completing an educational course online or in-person (Dinc, 2015; Barton, Dietz, & Halloway, 2001; DeMella et al., 2017; Kay, 2012; Manspeaker, Donoso

Brown, Wallace, DiBartola, & Morgan, 2017; Wood, Marks, & Jabour, 2005; Baykara, Demir, & Yaman, 2015; Goldie, Schwartz, McConnachie, & Morrison, 2001). The pretest and posttest course design are an effective tool to measure students' understanding in continuing education courses when the questions in the survey were geared toward the course objectives and content (Barton et al., 2001; Dinç, 2015).

Incorporating Likert scale questions into a pre and posttest questionnaire was also a useful method of determining a student's perception of the course, their knowledge, and overall course effectiveness (DeMella et al., 2017). Wood et al. (2005) developed a reliable participant questionnaire which includes 9 items to rate on a 7 point-Likert scale. The results of this study suggested that having as little as 8 evaluations or "items" per course would produce reliability in testing the course effectiveness (Wood et al., 2005). Baykara et al., (2015) also used a 7 point-Likert scale. This scale was used to determine the differences in perceived moral sensitivity and knowledge before and after taking the course (Baykara et al., 2015). Manspeaker et al., (2017) used a 20-question pretest which included demographics and 5 Likert scale questions which rated students' confidence related to the workshop objectives.

In addition to Likert scale questions, some researchers also included open-ended questions in the posttest to show learning outcomes (Woods et al., 2005; Manspeaker et al., 2017; Goldie et al., 2001; Dinç, 2015; Kay, 2012). Posttest survey questions were the same as those in the pretest, however there were also open-ended questions and/or additional Likert scale questions. Manspeaker et al. (2017) used an additional Likert scale question in the posttest to have students rate how the workshop helped them understand ethical responsibility of healthcare professionals. The posttest within this study also

included qualitative questions asking students to describe how their personal experiences impacted their decision-making, how they gained a better understanding as a result of the activity, and how they would change their approach to future ethical dilemmas (Manspeaker et al., 2017). Dinç (2015) had students rate the level of importance of each topic using a Likert scale, and then answer open-ended questions about their perceptions of their learning outcomes.

Another method of comprehension for student understanding was a pretest and posttest survey which asked students to select multiple-choice answers to various scenario questions, and then to use their critical thinking skills to state their reasoning for their answer choice (Goldie et al., 2001). Their answers were then compared to an informed professional at the end of the course (Goldie et al., 2001). This was done to measure if their reasoning moved toward the consensus of an informed professional toward the end of the course (Goldie et al., 2001).

Students also gave suggestions about the course length, content, and teaching method (Dinç, 2015; Woods et al., 2005). Woods et al., (2005) included two open ended questions into the posttest survey asking the students what two aspects that they liked most about the course and which two aspects that they would change.

Ethics Course Content

In a University-based short course in public health ethics designed by Schröder-Bäck, Duncan, Sherlaw, Brall, and Czabanowska (2014), researchers implemented a framework that focused on 7 principles of the AOTA ethics framework discussed above: non-maleficence, beneficence, health maximization, efficiency, justice, respect for autonomy, and proportionality. The course was broken up into phases which consisted of

interactive lectures, group discussions, and presentations. Within the group discussions, students were expected to solve case studies which involved identifying ethical challenges and conflicts, phrasing dilemmas into ethical language, and developing ethical judgement based on ethical argument (Schröder-Bäck et al., 2014).

    A study conducted by DeMella et al. (2017), evaluated students' ethical reasoning skills after implementation of a series of online modules containing ethical content. The online ethics course consisted of four modules that included: reading journal articles; reflective essays; online lectures that defined medical ethics and summarized ethical principles and moral reasoning; ethical dilemmas; quizzes; and modules in which students were expected to describe decisions, factors that were most important, and what stage of Kolhberg's Theory of Ethical Development their decision was based on (DeMella et al., 2017). Although the study failed to produce statistically significant increases in ethical thinking ability, students indicated in the posttest survey that they benefited from participating in the course.

    Dinc (2015) conducted a qualitative study that offered an ethics course during a doctoral nursing program, one that intended to provide the knowledge and skills necessary to manage ethical dilemmas encountered by nurses. The course covered basic information on the following; ethical concepts and the scope of bioethics, major ethical theories, the social and cultural context of ethics, moral development theories, philosophical foundations of nursing and nursing code of ethics, ethical problems in healthcare and nursing practice, and ethical decision-making in nursing practice (Dinc, 2015). At the end of the study, Dinc (2015) found that the most preferred teaching method involved the use of case analysis. Case study analysis promoted active learning

and helped students develop critical thinking and ethical decision-making skills (Dinc, 2015). In addition to allocating more time to case studies and class discussions, students suggested an increase in encouraging active student participation and incorporating feminist ethics into the course content (Dinc, 2015). The main criticism of online learning within this study was the lack of real-world application which created a potential limitation (Dinc, 2015).

Overall, in each of these studies, students expressed satisfaction with ethics modules, and indicated they had an improved understanding regarding the repercussions of actions, confidence, and their ability to consider other perspectives when dealing with medical ethical dilemmas (DeMella et al., 2017; Dinc, 2015; Malcolm, 2018). Students liked being exposed to dilemmas they may encounter in practice and stated that it was thought provoking to articulate their reasoning behind decision-making (DeMella et al., 2017; Dinc, 2015). Some students wanted more practice with ethical dilemmas, smaller groups, and increased time for group discussions (DeMella et al., 2017; Dinc, 2015). Allowing students to discuss real life scenarios enables the students to gain more confidence in their ability to deal with ethical dilemmas in the actual practice setting.

Researchers highlighted the importance of incorporating case studies into ethics courses (DeMella et al., 2017; Dinc, 2015; Schröder-Bäck et al., 2014) Case studies were used to aid in the process of teaching and learning which aimed at building the capacity of moral awareness and discrimination (Schröder-Bäck et al., 2014). It also allowed for interdisciplinary dialogue (Schröder-Bäck et al., 2014). Because of the complexity of the topic of ethics (Dinc, 2015; Schröder-Bäck et al., 2014), Dinc (2015) suggested that the inclusion of the socio-cultural context of ethics should be considered in order for the

topic to be covered thoroughly and completely. This point of cultural inclusion was strongly considered in the development of our course.

Statement of Purpose

OTs and certified occupational therapy assistants (COTAs) are expected to engage in the ongoing process of professional development by maintaining the knowledge, performance skills, and ethical reasoning skills to provide quality care for their clients. To maintain continuing competency, OT practitioners can participate in CE courses and other professional development activities (AOTA, 2018).

The profession of occupational therapy is diverse in its workforce, serving different populations in various settings, including hospitals and schools. Therefore, it is important for practitioners to be well-informed on the strategies for analyzing and resolving ethical dilemmas in every workplace setting. School-based OTs work on interdisciplinary teams and encounter ethical conflicts when providing services for their students. It would be beneficial for school-based OTs to learn the essentials of ethical health care service delivery by enhancing their clinical judgment and confidence in decision-making.

The objective of this study was to build a curriculum-based ethics course, and then distribute this course via podcast to practicing OTs, COTAs, and OT students to determine its effectiveness. We hypothesized that podcasts would be an effective form of a continuing education ethics course for this population. Potential participants included practicing OTs, COTAs, and OT students. Data was then collected and analyzed to determine the effectiveness of the podcast design.

At the start of the study, we developed the following research questions: (a) what

are the main benefits and potential barriers in using podcasts and webinars for continuing education? (b) can podcasts be effective for professional development for practicing OTs? (c) how do OTs currently receive their continuing education units? (d) are podcasts an effective method of education? (e) what is the content of current medical professional ethics courses? And (f) what types of evaluation methods are used in current ethics courses within medical professions?

Theoretical Framework

The Person-Environment-Occupation (PEO) frame of reference is an OT based model that examines the dynamic interactions between an individual, the environment, and an occupation (Law, et al., 1996). The environment includes physical, social, cultural, and temporal aspects that can either hinder or facilitate occupational performance. The physical environment encompasses the natural and built surroundings, while the social environment includes the common interests and attitudes of a society. Cultural factors refer to beliefs, customs, and routine practices of a particular community or population. The temporal environment includes the sequence, timing, and length to complete different tasks. According to the PEO framework, the environment is easier to change than the person (Law et al., 1996). When the aspects of the environment are altered, the occupational performance of a person is either enabled or constrained.

The PEO defines "occupation" as a self-directed, meaningful task that a person engages in over their lifespan. These occupations consist of activities that make up everyday life. Throughout the span of a person's life, the engagement in meaningful activities varies, especially in self-care, leisure, and education. The interaction between the person, environment, and occupation determines an individual's occupational

performance (Law, et al., 1996). These three domains mutually influence each other and represent a transactional relationship.

In the PEO model, a person is not only defined as an individual, but also the experiences that the person brings into a situation. The intrinsic factors of the person include personality traits, overall health, and current roles. This model focuses on the behaviors of the person; these behaviors are determined by a person's motivation, such as their interests and cultural relevance to the occupation. The PEO model views the person holistically, so a person's mind, body, and spirit are all taken into account. Throughout a person's lifespan, the roles of an individual fluctuate in importance and differ depending on the context and time. The framework assumes that the individual is motivated and must constantly adapt to their environment. The interactions between the person and the environment are influenced by the attributes that define the person. These qualities also determine how the person executes their occupational performance (Law, et al., 1996).

For the purpose of our study, we incorporated the PEO framework by emphasizing the effects of changing the environment. According to this model, altering the environment will ultimately impact OT practitioners' occupational engagement. Continuing education courses typically take place within a classroom. By distributing a CE course through a podcast, the environment changes from the confines of a classroom to the computer, leading to more universal access. Areas that do not have access to participate in professional development courses in person would be able to learn the material electronically through a podcast. The roles, health, and characteristics of practitioners do change across their lifespan. These unexpected changes impact the practitioners' ability to carry out their meaningful occupations. Podcasts can be accessed

through various mobile devices and can benefit practitioners who are physically

incapable to obtain CEUs in a formal setting. By changing the learning environment, OTs

and COTAs can engage in the occupation of continuing education and increase their

competency when providing their services in the field.

Methodology

Design

We designed the ethics course using pre and post tests to measure comprehension

and retention, as explained earlier. The test design relied on many different methods

determined to be reliable from the reviewed research. These measurement scales relied

on the actual podcast course that we created, and the participants listened to.

The ethics course is based around one 30-minute podcast that participants listen to

at their own pace. In the first half of the podcast, we discussed the issue of ethics and

related topics. To expand on the topic, we first present the concepts related to ethics and

depict the standards of behaviors found in the OT profession. The course material goes

more in depth by explaining some ethical considerations to be aware of, such as

highlighting that an illegal action or situation is always unethical.

The structure of the podcast shifts from describing ethical considerations to

defining the core values occupational therapists must adhere to. During this podcast

segment, we begin to elaborate on terms such as altruism, or the demonstration of

concern for the well-being of others (AOTA, 2014). Equality is defined within the

context of occupational therapy, which means treating all clients and family of clients

equally, impartially, and free from bias (AOTA, 2014). Freedom as a core value is

elaborated on, which means the client has complete and total choice over their treatment

(AOTA, 2014). Next, justice as an OT value translates to advocacy for inclusivity and

opportunity to participate in society (AOTA, 2014). The following core value is dignity,

which in the OT profession equates to treating all clients with the same amount of respect

in all interactions (AOTA, 2014). The core value of truth is also stressed, which means

providing accurate information in oral, written, and electronic forms (AOTA, 2014).

Finally, the term prudence is defined as the capacity for decision-making based on ethical

reasoning, sound judgement, and reflection (AOTA, 2014).

   After all core values are introduced, the podcast transitions into the seven pillars

that define the AOTA Code of Ethics. This section begins with defining beneficence,

which according to AOTA (2014) means that OT personnel shall demonstrate a concern

for the well-being and safety of the recipients of their services. AOTA (2014) defines

nonmaleficence as the idea that OT personnel shall refrain from actions that cause them

harm. Within this segment, upholding autonomy is described as the OT personnel shall

respect the rights of the individual to self-determination, privacy, confidentiality, and

consent (AOTA, 2014). The course continues with the concept of ensuring justice, which

means the OT should promote fairness and objectivity in the provision of OT services

(AOTA, 2014). According to AOTA (2014), the term veracity is referred as the means in

which the OT shall provide comprehensive, accurate, and objective information when

representing the profession. Finally, the podcast covers the ethical principle of fidelity,

which according to AOTA (2014) is the principle that an OT should always treat clients,

colleagues, and other professionals with respect, fairness, discretion, and integrity.

   The next podcast segment focuses on the major categories of conflict that

frequently arise within the OT profession. During this portion, the course presents

hypothetical situations and ethical dilemmas that OTs would commonly face, specifically within a school setting. It is discussed how issues with supervision can be resolved through consistent communication regarding duties and responsibilities as a school-based OT. Dilemmas involving billing and reimbursement are described, as well as the importance of not allowing stakeholders to influence the needs and frequency of OT services. The content then connects resolving ethical dilemmas to three different value choice theories. After each theory is described, an example within the school setting is presented to show the listeners how each theory influences ethical decision-making. The first theory that is described is consequence-oriented theory, which determines the rightness of a decision based on the predicted outcome (Judson & Harrison, 2018). In contrast to the consequence-oriented theory, the deontological theory or duty-oriented theory guides decisions by the rightness or wrongness of an act and not the consequence (Judson & Harrison, 2018). Lastly, virtue ethics is depicted as making decisions based on an individual's past experiences.

The final segment of the course discusses the importance of moral reasoning, and proposes solutions to ethical dilemmas by modelling the ethical decision-making process. According to Schell, Gillen, and Scaffa (2014), moral reasoning is a term used to describe the process of reflecting on ethical issues. This concept is rather important, so the course content breaks it down into norms and values, ideas of right and wrong, and how OTs make decisions in the professional realm (Schell, Gillen & Scaffa, 2014). The podcast moves on to demonstrate examples that moral reasoning is also a reflective process that leads to ethically supported actions and a manifestation of moral character and mindful reflection (Schell, Gillen & Scaffa, 2014). Throughout this segment, it is

conveyed to the listener that as OTs, we use moral reasoning to think critically about the meaning and values of a variety of situations. For instance, OTs use such reasoning during therapeutic relationships; in the context of practice situations; and when involved in the institutional, cultural, and societal influences on the provision of health care (Schell, Gillen & Scaffa, 2014). Three ethical dilemmas that school-based OTs face are disclosed and summarize the content of the course by incorporating the ethical decision-making steps and the Code of Ethics. Within this portion, there is an emphasis on how moral reasoning and ethical decision-making are closely linked to effective OT practice (Schell, Gillen & Scaffa, 2014).

After listening to the 30-minute podcast, participants were emailed a link to complete the posttest within 48 hours for their results to be accepted. The posttest is identical to the pretest because research has shown this method to be effective and reliable measurements of comprehension (Malcom, 2018; Thiyagu, 2014).

The pre and posttest incorporates various styles of questions, including: true or false, Likert scale, and free response. The questions presented to participants required knowledge of OT ethical principles, AOTA ethical guidelines, and critical thinking skills used to answer situational questions. The test begins with three true or false questions regarding topics discussed within the course. It then moves onto three free response questions asking participants to develop a course of action based on a scenario within the school setting. Next, participants were asked to rate their familiarity with topics discussed using a Likert scale ranging from 1-5; 1 being that the participant strongly disagrees, and 5 meaning they strongly agree. Lastly, participants were asked to share what they liked or disliked about the course.

Recruitment process

Initially, our plan for the recruitment process included various forms of outreach. We proposed to recruit participants with a snowball email method to identify members within the community who would be eligible participants. The email would have started with members of our OT student community, then be sent out to include our OT administrators, professors, advisors, colleagues, and other OT professionals within our network. Within the email, we wanted to ask each recipient to pass along the email to anyone in their professional network who may meet the study criteria until we had hit our desired number of participants.

In addition to the snowball email method, we proposed to utilize various social media mediums to send out our recruitment message. We wanted to start with Facebook and find groups within the network that are based upon school-based OT and possibly any group affiliated with OT if need be. Then, send out the study explanation and instructions to as many members of these groups as possible until we hit our desired number.

We also wanted to use Reddit.com to expand the reach of our survey and find more people who fit our recruitment criteria. Lastly, we planned to use Twitter to reach users on the platform who met the criteria. We proposed reaching Twitter users through hashtags and reposts that involve anything OT based, and OT school based to reach our participants.

However, due to time constraints we were unable to complete the recruitment process as expected and proposed. The anticipated amount of time needed to create our

course content exceeded our expectations, therefore, the recruitment process was limited in scope and time.

We developed the course after extensive research into the history of school-based occupational therapy, ethical considerations within the school-based setting, the role of the OT in the school setting, and current continuing education requirements of OTs. We used the research to design a course consisting of a podcast and visual slides presentation.

Participants

A total of 4 participants were recruited to participate in the study. Participants consisted of current OT students who have not taken an ethics course within the past 2 years. Participants must not be avid podcast users, meaning that they listen to podcasts no more than 5 hours per week. Of the 4 participants that were recruited, all 4 participants completed the eligibility survey and met the inclusion criteria, 1 participant completed the study, and 2 completed the first part of the study (pretest).

Data Collection

Participants were given 2 weeks to complete the entire course, where they were asked to submit pre- and posttests accordingly. Participants were sent reminder emails every 2-3 days after each phase of the study if it was not yet completed. We collected pre and posttest scores via email sent to a Google drive where they input data onto a separate document on the Google drive.

Procedure

The pre- and posttest surveys were distributed via Survey Monkey. After completing the pretest, participants were emailed a link to the podcast and the slides via Dropbox so that it was not public to everyone. Participants were asked to notify us once

they had completed the course. Once the participants confirmed that they had completed the course, the posttest was immediately distributed. Participants were then given 7 days to complete the posttest in order for the results to be considered.

Data Analysis/Measures

Prior to the start of the course, participants were distributed a pretest survey which was completed and sent back to us via SurveyMonkey. After completion of the course, participants were emailed a link to complete a posttest via SurveyMonkey. We then compared pretest and posttest scores narratively and compared subjective responses to draw conclusions on effective and ineffective teaching methods. To identify common themes, we compared participants' pretest to pretests and an individual participant's pretest to posttest scores. We intended to analyze and compare posttest results of all participants, but only one participant completed the course and posttest.

Ethical and Legal Considerations

With regards to the ethical and legal considerations of the study design, a number of issues were addressed. First, the names of the participants were changed to conceal anonymity. We also obtained informed consent from all participants. Participants also had the option to withdraw participation at any time during the study if they changed their mind. Everything pertaining to the study was completed within the comfort of the participants' own home or place of study. The information broadcasted on the podcast episodes can be used, modified, and shared as long as it is not for profit or personal gain, and credit is given to the creators of the material. Also, there was no negative nor derogatory language at any time during the podcast. The podcast episode was culturally and linguistically sensitive at all times. The data collected was password encrypted for

security concerns. Lastly, it is important to note that the thesis advisor also hosts a

podcast that profits from the sales of continuing education. More importantly, the thesis

advisor has not received any financial compensation from the podcast study. These

conflicts of interest are addressed in the IRB process.

Results

All 4 participants were sent the pretest survey where 3 participants responded and

were given a respondent number. Respondent #1 completed all three components of the

course which included the pretest, podcast course, and the posttest. Respondent #2 and #3

completed the pretest and were sent the podcast along with the supplementary visual

slides presentation. All participants were asked to notify the research team once they had

completed the course. After sending two reminder emails, the remaining participants did

not respond within the time frame laid out for the study, so their posttest results were not

included for data analysis.

Respondent #1 and #2 answered all three true or false questions that referenced

prior knowledge from the podcast correctly in the pretest. Respondent #3 answered the

first and second true or false questions correctly but failed to correctly respond to the

third question indicating that respondent #3 had partial knowledge of the topics discussed

within the podcast. Tables 1, 2 and 3 show pre and posttest questions and responses.

Given a Likert scale ranging from 1-5; 1 being that the participant strongly disagrees, and

5 meaning they strongly agree, respondent #1, #2, and #3 gave a scale score of 2

(disagrees) with the statement that they are familiar with regulations, rules, or policies

that restrict their choices/ actions when working in schools prior to the course.

Respondent #1 and #3 stated that they also disagreed with the statement that they are

familiar with ethical guidelines for COTAs and OTs. Respondent #2 stated that he/she was neutral in his/her knowledge of ethical guidelines for COTAs and OTs. Upon completion of the course, respondent #1 gave a scale score of 4 (agrees) for the same questions. After completing the course, respondent #1 answered the free response questions using specific ethical principles and terminology.

When asked what the participants liked about the course, respondent #1 stated that he/she liked that the examples given depicted real ethical dilemmas in a school setting. Respondent #2 stated that he/she liked the variety of the questions, and respondent #3 did not answer the question to the pretest. When asked what the participants disliked about the course, respondent #1 felt that the ethical code was repetitive. A common theme found through analysis of pretest results was that participants did not have knowledge of the topic of ethics prior to taking the course.

Discussion

According to the results, all three participants stated they were not well versed in the rules and policies that regulate their actions within the school setting prior to taking the course. After completing the course, respondent #1 stated he/she was familiar with school-based policies and OT ethical guidelines. The information discussed within the podcast, with the addition of supplemental visual slides material, appeared to facilitate increased awareness of ethical guidelines and regulations within the school setting.

In the pretest, the free response question regarding what appropriate actions to take after witnessing a teacher constraining a student, respondent #1 answered *"Confront the teacher and explain to them that constraining the student is not ethical even if they are having behavior problems."* Respondent #1 identified the actions of the teacher in

this scenario as unethical, which demonstrated their practical knowledge of school-based ethics before completing the course. After finishing the course, respondent #1 answered the same question by mentioning the dilemma addressed the principle of beneficence. By incorporating ethical terminology within the free response answers, this indicates this participant's new familiarity to OT ethical guidelines after listening to the podcast. Although respondent #1 demonstrated improvement when comparing pretest and posttest short answer responses, there is a probability of copying the information presented in the visual slides presentation supplement to answer the questions correctly. The visual slides material listed each ethical dilemma and provided an ethical principle to uphold to guide the decision-making process for each situation. Respondent #1's free response answers are organized in the same way—first identifying the ethical principle, then detailing the steps to resolve the dilemma. Participants of the study had access to the visual slides material while completing the questions to the posttest. The posttest did not explicitly ask participants whether or not they referred back to the podcast audio and/or the visual slides when answering the free response questions. Therefore, we were unable to determine if participants were able to retain and retrieve the content solely from their memory. It is evident that if participants reviewed or referred back to the visual slides, it is beneficial for visual and auditory learners to be provided with a podcast that includes additional resources such as visual slides.

The data showed that during the pretest, only one participant answered a true or false question incorrectly. The participants identified as OT students and claimed they were not familiar with policies that restrict a school-based OT's choices. Their results from the true or false pretest questions demonstrated the ability to identify unethical

behaviors. All participants' free response answers also identified unethical behaviors within each dilemma, but did not elaborate on the proper steps and protocols a school-based OT would follow. When analyzing participants' pretest free responses, it is assumed that their lack of exposure to ethics-based information within their education and inexperience as a practicing OT affect their ability to make ethical and appropriate decisions within a school setting. It would be beneficial for OT students and practicing OTs and COTAs to be educated in ethical decision-making to be competent professionals within their field.

In response to the question, "What did you like and dislike about the course?" respondent #1 stated he/she found the ethical dilemma scenarios within the podcast to be enjoyable, but felt the definitions of the Code of Ethics were repetitive. Before completing the course, respondent #2 expressed liking the variety of questions within the pretest. By analyzing the answer of respondent #1, we assume that when distributing an ethics-based podcast, it is important to maintain listeners' interest and attention by including a variation of real-life examples when discussing terminology and novel concepts.

Limitations

Regularly listening to podcasts is a relatively new experience and thus research is just starting to occur. Another potential limitation in this study is the length of time participants needed to complete the study. Since participation in the study was voluntary, there was a lack of incentive to dedicate time and participate in the course. Typically, there would be a natural incentive for occupational therapy practitioners to complete a continuing education course to receive credit towards their licensure. Additionally, since

we did not provide participants with monetary incentive, this may have limited the

number of participants interested in completing the study. We were only able to recruit 4

participants, none of which were OT practitioners. These 4 participants were all recruited

from the same cohort of occupational therapy students which could be a potential bias.

Since all participants knew each other, they could have potentially discussed the podcast,

as well as the questions. Due to our small sample size, and the fact that only 1 participant

completed the course and all the required pretest and posttest questions, we were unable

to derive consistent common themes in the data. It is also possible that participants

accessed the visual slides during the quiz, which would impact their answers and not be

an accurate measure of the knowledge they retained from the podcast. Another limitation

in this study was the technological skills of participants, which may have resulted in

difficulties in accessing the podcast and course evaluation. We were also concerned with

the amount of time in-between completion of the course and posttest because it may have

affected the retention of material as well as participant scores. Lastly, we emailed

participants the podcast and course materials using the participants university-issued

email with identifiable emails. Therefore, the respondents' pre and posttest answers were

not anonymous to the us.

Conclusion

The purpose of this study was to assess the effectiveness of an ethics-based

podcast as the primary medium for continuing education for practicing OT practitioners

and OT students. Our results may suggest that educational podcasts are an effective

method for teaching ethics. However, since we only had one participant complete the

study, more research is needed to confirm our results. If research is conducted with more

participants showing an increase in knowledge after completing a podcast based course, this can help enhance future development of educational podcast courses. While extremely limited, we feel that the comparative pretest and posttest data collected from our lone participant may suggest that podcasts are an effective medium for education. However, there is still much more data needed to state with certainty that podcasts are an effective means of education.

Our research reveals that after listening to the podcast, participant #1 was able to correctly identify unethical behavior by use of terminology in the posttest which was shown in the free response question, something the participant was not able to do in the pretest section. However, it is unclear whether the participant used the visual slides while completing the posttest or if they truly developed a deeper understanding of the ethical material presented. The study's findings provided a beginning to understanding the effectiveness of podcasts in teaching ethics in school-based occupational therapy, but there were numerous limitations that must be overcome in future studies. Further research should also be conducted comparing educational podcasts paired with a visual aide to podcasts alone to determine if the visual aide influenced the podcasts educational value. Future studies should also increase the length of time and expansiveness of the ethics based podcast course for OTs. This would include expanding the course from one podcast to four or five. A study this comprehensive could dive deeper into the topic of ethics elaborating on many more topics to help the consumer to gain more knowledge. If future research into podcasts deems them sufficient, this could open the door to other educational topics and subjects being taught through this method. This especially holds true now that COVID-19 has driven many to rely on distance learning tools. Future

researchers should increase the number of participants to gain more insight into the strengths, weaknesses, and opinions regarding how to develop the most effective ethics based podcast. We also suggest using participant's feedback on preferences of methods used to assist to aid in designing a future course.

Future Implications

Occupational therapy practitioners should be continually learning and pursuing educational opportunities to better serve clients in various settings. Although continuing education is required among practitioners, there are limited courses available across different mediums. The results of this study may provide implications for the future of occupational therapy CE courses. Podcasts may be useful within the realm of OT to broaden occupational therapists' understanding of various specialized topics as well as provide more platforms for practitioners to effectively learn. When used in conjunction with visual material such as visual slides, podcasts may have the potential to be an effective means of education.

References

Abate, K. S. (2013). The effect of podcast lectures on nursing students' knowledge

    retention and application. *Nursing Education Perspectives, 34*(3), 182–185.

    doi:10.1097/00024776-201305000-00010

American Occupational Therapy Association. (2014). Enforcement procedures for the

    occupational therapy code of ethics and ethics standards. *American Journal of*

    Occupational Therapy, 68(Suppl. 3), S3–S15. doi:10.5014/ajot.2014.686S02

American Occupational Therapy Association (2015a). *Occupational therapy code of*

    ethics. Retrieved from https://www.aota.org/Practice/Ethics/code-of-ethics.aspx

American Occupational Therapy Association. (2015b). Standards for continuing

    competence. *American Journal of Occupational Therapy, 69*(Suppl. 3),

    6913410055. doi:10.5014/ajot.2015.696S16

American Occupational Therapy Association. (2016). *Occupational therapy in school*

    settings (Fact Sheet). Bethesda, MD: AOTA Press.

American Occupational Therapy Association. (2017). Continuing professional

    development in occupational therapy. *American Journal of Occupational*

    Therapy, 71(2), 1–5. doi:10.5014/ajot.2017.716S13.

American Occupational Therapy Association (2018). *Occupational therapy profession-*

    *continuing competence requirement*s. Retrieved from

    https://www.aota.org/~/media/Corporate/Files/Advocacy/Licensure/StateRegs/Co

    ntComp/Continuing-Competence-Chart-Summary.pdf

American Occupational Therapy Association. (2019). School-based practice. Retrieved

    from https://www.aota.org/Practice/Children-Youth/School-based.aspx

Americans with Disabilities Act of 1990 (42 U.S.C. § 12101) (1990)

Artale-Morgante, M., & Seruya, F. M. (2017). Developing inclusive school communities:

An expanded role for school-based occupational therapy. *American Journal of*

Occupational Therapy, *71*, 49. doi:10.5014/ajot.2017.71S1-PO3091

Barton, T., Dietz, T. & Halloway, L. (2001). Using a pretest-posttest design to evaluate

continuing education programs. *Professional Development: The International*

Journal of Continuing Social Work Education, 4 (1), 32. Retrieved from

https://www.profdevjournal.org/articles/41032.pdf

Baykara, Z. G., Demir, S. G., & Yaman, S. (2015). The effect of ethics training on

students recognizing ethical violations and developing moral sensitivity. *Nursing*

Ethics, 22(6), 661–675. doi:10.1177/0969733014542673

Bensalem-Owen, M., Chau, D. F., Sardam, S. C., & Fahy, B. G. (2011). Education

research: Evaluating the use of podcasting for residents during EEG instruction.

Neurology, 77(8), e42-e44. doi:10.1212/WNL.0b013e31822b0017

Brown v. Board of Education of Topeka, 347 U.S. 483 (1954)

Clark, G. F., Chandler, B. E., Dunn, W., & Rourk, J. D. (2013). *Best practices for*

occupational therapy in schools. Bethesda [Md.: AOTA Press.]

Clark, G. F., Jackson, L., Polichino, J., & DeLany, J. V. (2011). Occupational therapy

services in early childhood and school-based settings. *American Journal of*

Occupational Therapy, *65*, S46–854. doi:10.5014/ajot.2011.65S46

DeMella, C., Donohoe, K., Morgan, L., Phipps, L., Drisaldi, A., & Forder, M. (2017).

Implementation of an online ethics course into a pharmacy curriculum. *Currents*

in Pharmacy Teaching & Learning, *9*(5), 835–840. doi:10.1016/j.cptl.2017.05.00

Dinç, L. (2015). *Implementation and evaluation of a nursing ethics course at turkish doctoral nursing programs. Journal of Academic Ethics, 13*(4), 375–387. doi:10.1007/s10805-015-9243-5

Drew, C. (2017). Edutaining audio: An exploration of education podcast design possibilities. *Educational Media International*, *54*(1), 48–62. doi:10.1080/09523987.2017.1324360

Education for All Handicapped Children Act of 1975, S. 1400, 94th cong. (1975). Retrieved from https://www.congress.gov/bill/94th-congress/senate-bill/6.

Goldie, J., Schwartz, L., McConnachie, A., & Morrison, J. (2001). Impact of a new course on students' potential behaviour on encountering ethical dilemmas. *Medical Education*, 35, 295–302. doi:10.1046/j.1365-2923.2001.00872.x

Individuals with Disability Education Act Amendments of 1997. (1997). Retrieved from https://www.congress.gov/105/plaws/publ17/PLAW-105publ17.pdf

Individuals with Disabilities Education Improvement Act of 2004, S. 1400, 108th cong. (2004). Retrieved from https://www.congress.gov/bill/108th-congress/house-bill/1350

Judson, K., & Harrison, C. (2018). *Law & ethics for health professions* (8th ed.). New York, NY: McGraw Hill.

Kapoulitsas, M., & Corcoran, T. (2017). School psychologists and ethical challenges. *The Educational and Developmental Psychologist, 34*(1), 48-61. doi:10.1017/edp.2016.21

Kay, R. H. (2012). Exploring the use of video podcasts in education: A comprehensive review of the literature. *Computers in Human Behavior*, *28*(3), 820–831. doi:10.1016/j.chb.2012.01.011

Kennedy, M. J., Hirsch, S. E., Dillon, S. E., Rabideaux, L., Alves, K. D., & Driver, M. K. (2016). Using content acquisition podcasts to increase student knowledge and to reduce perceived cognitive load. *Teaching of Psychology, 43*(2), 153–158. doi:10.1177/0098628316636295

Koppelman, H. (2013). Using podcasts in distance education. Open University of the Netherlands. Retrieved from https://files.eric.ed.gov/fulltext/ED562304.pdf

Laing, C. & Wootton, A. (2007). Using podcasts in higher education. *Health Information on the Internet*, (60), 7–9. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=ccm&AN=105722849&site=ehost-live

Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., & Letts, L. (1996). The Person-Environment-Occupation model: A transactive approach to occupational performance. *Canadian Journal of Occupational Therapy, 63*(1), 9–23. doi:10.1177/000841749606300103

Lien, K., Chin, A., Helman, A., Chan, T. M. (2018). A randomized comparative trial of the knowledge retention and usage conditions in undergraduate medical students using podcasts and blog posts. *Cureus, 10*(1), e2065. doi:10.7759/cureus.2065

Malcom, D. (2018). Teaching and assessing clinical ethics through group reading experience and student-led discussion. *Currents in Pharmacy Teaching and Learning, 10*(5), 602–610. doi:10.1016/j.cptl.2018.01.009

Manspeaker, S.A., Donoso Brown, E.V., Wallace, S.E., DiBartola, L., & Morgan, A.

    (2017). Examining the perceived impact of an ethics workshop on

    interprofessional values and teamwork. *Journal of Interprofessional Care, 31*(5),

    628–637. doi:10.1080/13561820.2017.1336992

Mediakix (2017). *The 10 podcast statistics every marketer should know*. Retrieved from

    https://mediakix.com/blog/top-10-podcast-statistics-growth-market-demographic/

Mendes, S.A., Nascimento, I.M., Abreu-Lima, I.M., & Almeida, L.S. (2016). A study of

    the ethical dilemmas experienced by school psychologists in Portugal. *Ethics &*

    Behavior, 26(5), 395–414. doi:10.1080/10508422.2015.1029047

National Board for Certification in Occupational Therapy. (n.d.). *NBCOT Certification*

    Renewal Activities Chart. Retrieved from https://www.nbcot.org/-

    /media/NBCOT/PDFs/Renewal_Activity_Chart.ashx?la=en

Rehabilitation Act of 1973, S. 701, 93rd cong. (1973). Retrieved from

    https://www.congress.gov/bill/93rd-congress/senate-bill/7

Renner, R. (2019). *The Classroom*. Retrieved from

    https://www.theclassroom.com/similarities-differences-between-idea-ideia-

    8397136.html

Schreiber, B.E., Junaid, F., & Gordon, F. (2010). Live lecture versus video podcast in

    undergraduate medical education: A randomised control. *Medical Education,*

    10(68) 1–6. doi:1472-6920/10/68

Schröder-Bäck, P., Duncan, P., Sherlaw, W., Brall, C., & Czabanowska, K. (2014).

    Teaching seven principles for public health ethics: Towards a curriculum for a

short course on ethics in public health programmes. *BMC Medical Ethics*, *15*, 73.

doi:10.1186/1472-6939-15-73

Schell, B.A.B., Gillen, G., & Scaffa, M.E. (2014). *Willard & Spackman's occupational*

therapy (12th edition). Philadelphia, PA: Lippincott Williams & Wilkins.

Thiyagu, K. (2014). Effectiveness of video podcast in learning psychology among

bachelor of education students. *Journal on School Educational Technology, 10*(1),

36–43. Retrieved from https://eric.ed.gov/?id=EJ1097634

Wood, T.J., Marks, M., & Jabour, M. (2005). The development of a participant

questionnaire to assess continuing medical education presentation. *Medical*

Education, 39, 568–572. doi:10.1111/j.1365-2929.2005.02174.x

Yuen, H. K., Stippler, W. W., Burke, K. B., McClellan, V. T., & Dudgeon, B. J. (2017).

Continuing education offerings and conferences among state occupational therapy

association. *International Journal of Health & Allied Sciences*, *6*(4), 222–227.

doi:10.4103/ijhas.IJHAS_160_16

Appendix A

Respondent's Pre and Posttest Measures

Respondent #1

Question	Pretest	Posttest
1.Respectful interdisciplinary collaboration best reflects AOTA's ethical principle of fidelity.	1. True	1. True
2.As an OT, I am allowed to use my personal phone and record the student during a treatment session.	2. False	2. False
3. During an IEP meeting, the child's parent states that they would like you to address feeding, eating, and swallowing. I would include this in my treatment plan.	3. False	3. False
4. A student with behavioral problems is having difficulty remaining in her seat. The OT finds out that the teacher is using another student's positioning chair to restrict the student's mobility during class. What should the OT do next? (AOTA code of ethics, 2015).	4. Confront the teacher and explain to them that constraining the student is not ethical even if they are having behavior problems.	4. This addresses beneficence. Document what happened. Then talk to the teacher to give them alternatives
5.What course of action should an OT take if parents demand continued intervention for a child who based on your clinical judgement, no longer requires services?	5. The OT should explain to the parents why the child no longer needs services. Just because a parent requests it doesn't mean that in reality services are necessary. If the parent can justify why they need services and the OT find it fit then perhaps services can be requested.	5.This addresses veracity. Report accurately what is happening to the family. If child has plateaued or met their goals then they should stop receiving services. Be truthful with the family. We don't want to bill when services aren't

		needed.
6.Other staff members disagree with your evaluation and recommendations for a student. What is your course of action?	6. Explain to the staff members why I made the decisions I made. Then discuss in an interdisciplinary team what they would recommend and their justification for it. Perhaps the other staff members have observed something that I may have not. Otherwise, I would stick with my initial course of action.	6. This addresses fidelity. Respect all staff members even if you don't agree. Address differences before an IEP meeting. Utilize Therapeutic listening then restate what others said and give your own input to communicate effectively.
7.I am confident in my ability to make the right decision when dealing with an ethical dilemma at work.	7. Agree	7. Agree
8.I am familiar with ethical guidelines for COTAs and OTs.	8.Disagree	8. Agree
9.I am familiar with regulations, rules, or policies that restrict my choices/ actions when working in schools.	9.Disagree	9. Agree
10.What did you like and dislike about the course?	10. (Skipped)	10. I enjoyed many of the examples given that are real depictions of ethical dilemmas in a school setting. I did think the definitions of each ethical code was a bit repetitive

| | | but overall good. |
| | | |

Respondent #2

Question	Pretest
1.Respectful interdisciplinary collaboration best reflects AOTA's ethical principle of fidelity.	1.True
2.As an OT, I am allowed to use my personal phone and record the student during a treatment session.	2. False
3. During an IEP meeting, the child's parent states that they would like you to address feeding, eating, and swallowing. I would include this in my treatment plan.	3. False
4. A student with behavioral problems is having difficulty remaining in her seat. The OT finds out that the teacher is using another student's positioning chair to restrict the student's mobility during class. What should the OT do next? (AOTA code of ethics, 2015).	4. Take action by contacting and reporting to the appropriate authorities.
5.What course of action should an OT take if parents demand continued intervention for a child who based on your clinical judgement, no longer requires services?	5. Provide them with an explanation and evidence of why you believe their child no longer requires services.
6.Other staff members disagree with your evaluation and recommendations for a student. What is your course of action?	6.To continue to use your best clinical judgment and be confident in your abilities.
7.I am confident in my ability to make the right decision when dealing with an ethical dilemma at work.	7.Strongly Agree
8.I am familiar with ethical guidelines for COTAs and OTs.	8. Neutral
9.I am familiar with regulations, rules, or policies that restrict my choices/ actions when working in schools.	9. Disagree
10.What did you like and dislike about the course?	10.I liked the variety of questions. There isn't anything I disliked.

Respondent #3

Question	Pretest
1.Respectful interdisciplinary collaboration best reflects AOTA's ethical principle of fidelity.	1.True
2.As an OT, I am allowed to use my personal phone and record the student during a treatment session.	2. False
3. During an IEP meeting, the child's parent states that they would like you to address feeding, eating, and swallowing. I would include this in my treatment plan.	3. True
4. A student with behavioral problems is having difficulty remaining in her seat. The OT finds out that the teacher is using another student's positioning chair to restrict the student's mobility during class. What should the OT do next? (AOTA code of ethics, 2015).	4. The OT should get another chair this student
5.What course of action should an OT take if parents demand continued intervention for a child who based on your clinical judgement, no longer requires services?	5. OT should educate the parents on the goals achieved
6.Other staff members disagree with your evaluation and recommendations for a student. What is your course of action?	6.OTs can collaborate with staff members and ask for input but ultimately recommendations are based on their observations
7.I am confident in my ability to make the right decision when dealing with an ethical dilemma at work.	7. Agree
8.I am familiar with ethical guidelines for COTAs and OTs.	8. Disagree
9.I am familiar with regulations, rules, or policies that restrict my choices/ actions when working in schools.	9. Disagree
10.What did you like and dislike about the course?	10. (Respondent did not answer)

Appendix B

Visual Slides

Course for Podcast

Ethics

– *Standards of behavior*, developed as a result of one's conduct of right and wrong.

Raise the standards of competence

- It is the standard of BEHAVIOR not competence
- Because it is ethical, it does not mean it is legal
- Unethical situation could be legal
- Illegal situation is ALWAYS unethical
- Morality is the foundation for ethics

7 Core Values Overview

1. Altruism
2. Equality
3. Freedom
4. Justice
5. Dignity
6. Truth
7. Prudence

Altruism

1. **Altruism**- demonstrating concern for the welfare of others
   a. This concept is reflected in actions and attitudes of dedication, commitment, understanding, caring, and responsiveness.

Equality

2. **Equality**- treating all people impartially and free of bias

   a. Requires that we perceive that all have the same fundamental human rights and opportunities.
   b. Equality is demonstrated by an attitude of fairness and impartiality.
   c. Respecting all individuals and understanding that they may have differing beliefs, values, or lifestyles.
   d. This value is practiced in many professions, and is particularly important in everyday interactions with clients who receive OT

Freedom

3. **Freedom**- freedom and personal choice are paramount in a professional where values and desires drive interventions.

   a. allows individuals to exercise choice and to demonstrate initiative, self-direction, and independence.
   b. individuals are both internally and externally motivated toward action
   c. Freedom to choose purposeful activity plays a major role in developing and exercising initiative, self-direction, and interdependence to the world.
      i. Activities affirm an individual's ability to adapt, and they also establish a balance between autonomy and societal membership.
   d. Ultimately, freedom of choice in pursuing goals has both a personal and social meaning.

Justice

4. **Justice**- advocacy for inclusivity and opportunity for participation in society.

   a. upholding moral and legal principles like equity, fairness, objectivity, an truthfulness.
   b. This means aspiring to provide occupational therapy services for all individuals who are in need of services and ensuring that we maintain a goal-directed and objective relationship with our clients
   c. Practitioners should also have respect for and be knowledgeable about the legal rights of individuals receiving services.
   d. In addition, occupational therapy practitioners should understand and abide by the local, state, and federal laws governing professional practice.

Dignity

5. **Dignity**- treating all our clients with respect in all interactions.

   a. The importance of valuing the innate worth and uniqueness of each person.
   b. Dignity is demonstrated by having an attitude of empathy and respect for others as well as yourself.
   c. Each individual has a unique combination of traits, sociocultural heritage, and life experiences.
   d. OT views individuals holistically, and respects the unique interaction of the mind, body, and physical and social environment.
   e. We believe that dignity is nurtured and develops from the sense of self worth and competence which is linked to the person's ability to perform valued and relevant activities.
   f. In occupational therapy we highlight the importance of dignity by helping clients build on their unique attributes and resources.

Truth

6. Truth- provide accurate information in oral, written, and electronic forms.

- a. requires that we be loyal to facts and reality.
- b. Truthfulness or veracity is displayed by being honest, accountable, accurate, and authentic in all of our attitudes and actions.
- c. There is an obligation to be truthful with ourselves, as well as to those who receive OT services, colleagues, and a greater obligation to society.
- d. One way that truthfulness is exhibited is by maintaining and upgrading professional competence. This happens, through a commitment to inquiry, learning, self-understanding, and to the development of an interpersonal competence.
- e. Truthfulness is also demonstrated through accurate documentation of services performed.

Prudence

7. Prudence- capacity for decision making based on ethical reasoning, sound judgement, and reflection

- a. The ability to use reason to govern and discipline oneself
- b. To be prudent is to value vigilance, judiciousness, discretion, moderation, care, and circumspection in the management of one's affairs
- c. Prudence is also required in making judgments and responding on the basis of intelligent reflection and rational thought.

7 Core Values Summary

- Beliefs and values underlie the core of OT and the professional interactions of each practitioner
- These values describe the professions philosophy and provide the basis for defining purpose
- The emphasis that a practitioner gives to each value can change as one's professional career evolves
- Although we all have basic values that cannot be violated, the degree to which certain values will take priority at a given time is influenced by the specific situation and environment in which it occurs
  - At one time, dignity may be higher than truth; in another prudence may be chosen over freedom
  - As we process info and make decisions, the weight of the values that we hold change
  - When practitioners face dilemmas because of conflicting values, they may have to deliberate to determine where the priority lies

7 Core Values Summary Continued

- The challenge is to know what we value, be able to make logical choices in situations of conflict, and be able to clearly articulate and defend our choices. At the same time, it is essential that all practitioners be committed to a set of common values.
- This commitment to a set of values and principles that govern our practice can provide a foundation for clarifying expectations between clients and the OT practitioners.
- Shared values not only empower the profession, but also help build trust among ourselves and with others.

AOTA Code of Ethics

1. **Beneficence** — OT personnel shall demonstrate a concern for the well-being and safety of the recipients of their services.
2. **Nonmaleficence** — OT personnel shall refrain from actions that cause them harm.
3. **Autonomy** — OT personnel shall respect the rights of the individual to self-determination, privacy, confidentiality, and consent.
4. **Justice** — OT personnel shall promote fairness and objectivity in the provision of OT services.
5. **Veracity** — OT personnel shall provide comprehensive, accurate, and objective information when representing the profession.
6. **Fidelity** — OT personnel shall treat clients, colleagues, and other professionals with respect, fairness, discretion, and integrity.

Beneficence

1. **Beneficence** — OT personnel shall demonstrate a concern for the well-being and safety of the recipients of their services.
   - a. The term connotes acts of mercy, kindness, and charity
   - b. Beneficence requires taking action by helping others, or, by promoting good, by preventing harm, and by removing harm.
     - i. Examples: protecting/defending the rights of others, preventing harm from occurring to others, removing conditions that can cause harm to others, helping persons with disabilities, and rescuing individuals in danger

Nonmaleficence

2. Nonmaleficence — OT personnel shall refrain from actions that cause them harm.

- The principle also includes an obligation to not impose risks of harm even if the risk does not have malicious or harmful intent.
- This principle is often examined under due care
  - The standard of due care "requires that the goals pursued justify the risks that must be imposed to achieve those goals"
    - Example: in OT practice, this standard applies to clients who might feel pain from a treatment; however, the acute pain is justified by potential longitudinal, evidence based benefits

Autonomy

3. Autonomy — OT personnel shall respect the rights of the individual to self-determination, privacy, confidentiality, and consent

- Within the boundaries of standards of care, practitioners have a duty to treat the client according to the client's desires and to protect the client's confidential information.
- Respecting a person's autonomy goes beyond acknowledging a person as a mere agent and also acknowledges one's right to have views, to make choices, and to take actions based on these values and beliefs
- Individuals have the right to make decisions regarding their care
  - If a person lacks decision-making capacity, his or her autonomy should be respected by involving an authorized agent or surrogate decision maker.

Justice

4. **Justice** — OT personnel shall promote fairness and objectivity in the provision of OT services.

- Relates to the fair, equitable, and appropriate treatment of an individual
- Occupational therapists should relate in a respectful, fair, and impartial manner to individuals
- OTs should respect the applicable laws and standards related to their area of practice.
- Justice requires the unbiased consideration and consistent rule following to create unbiased decisions and promote fairness.
- As occupational therapy practitioners, we work to uphold a society where all can have an equal opportunity to achieve occupational engagement as an essential component of their life.

Veracity

5. **Veracity** — OT personnel shall provide comprehensive, accurate, and objective information when representing the profession.

- Veracity is based on honesty, truthfulness, and candor, and respect owed to others
- The Principle refers to comprehensive, accurate, and objective communication as well as facilitating that one understandings the information being provided
- In communicating with others, occupational therapy practitioners implicitly promise to be truthful and not deceptive.
  - When entering into a therapeutic relationship, the client has a right to accurate information.
  - In addition, transmission of information is incomplete without **also ensuring** that the client **understands** the information provided.
- Veracity must be carefully balanced with other potentially competing ethical principles, cultural beliefs, and company policies.
- Means to establish trust and strengthen professional relationships. Thus, adherence to this Principle also requires thought of how full disclosure of information may affect outcomes.

Fidelity

6. **Fidelity** — OT personnel shall treat clients, colleagues, and other professionals with respect, fairness, discretion, and integrity.

- Fidelity refers to the duty one has to keep a commitment once it is made
- This commitment refers to promises made between a practitioner and a client based on an expectation of loyalty, staying with the client or patient in a time of need, and compliance with a code of ethics.
- These promises can be implied or explicit.
- The duty to disclose information that is meaningful in making decisions is an obligation of the moral contract between an OT practitioner and a client
- Professional relationships are influenced by the complexity of the environment where the practitioner works.
  - Must consistently balance their duties to service clients and other professionals as well as to organizations that may influence decision making and professional practice.

Categories of Conflict in School Based OT

- Supervision
- Rules and Policies
- Billing

Moral Reasoning

- Moral reasoning is a term used to describe the process of reflecting on ethical issues.
- It is about the norms and values, ideas of right and wrong, and how practitioners make decisions in professional work.
- It is a reflective process that leads to ethically supported actions.
- It is a manifestation of moral character and mindful reflection.
- We use our moral reasoning to think critically about the meaning and values of a variety of situations including, but not limited to, the therapeutic relationships; the context of practice situations and the institutional cultural, and societal influences on the provision of health care.
- Effective moral reasoning and ethical decision making are closed linked to effective practice.

Value Choices Theories

1. **Consequence-Oriented Theory**
   a. Judges the rightness of a decision based on the outcome/predicted outcome of the decision
2. **Deontological/Duty-Oriented Theory**
   a. Focuses on the rightness or wrongness of an act, not the consequence
3. **Virtue Ethics**
   a. Focuses on personal traits, characteristics, & virtues a moral person should have

Steps in Ethical Decision Making

1. Gather relevant information.
2. Identify the ethical problem.
3. Use ethical theories or approaches to analyze the problem.
4. Explore the practical alternatives.
5. Complete the action.
6. Evaluate the process and outcomes.

Ethical Dilemma 1

When addressing common ethical dilemmas, refer back to the AOTA Code of Ethics.

1) Witnessing school staff (teacher, paraeducator, etc.) inappropriately restraining a child.

A student with behavioral problems is having difficulty remaining in her seat. The OT finds out that the teacher is using another student's positioning chair to restrict the student's mobility during class. What should the OT do next?

- *Addresses beneficence*

Solutions:

To uphold the AOTA Code of Ethics,

1. The OT personnel should demonstrate a concern for the well-being and safety of the student.
2. Directly address your observations and concerns about the student with the teacher.
3. Suggest alternative strategies to address the student's inappropriate classroom behaviors.

Ethical Dilemma 2

2) Continuing to provide OT services for students who no longer make gains, benefit from OT, has plateaued, or demonstrate they are inappropriate for OT services.

What course of action should an OT take if parents insist/demand continued intervention for a child who based on your clinical judgement, no longer requires services?

- *Addresses veracity*

Solutions:

#1 The OT must follow the code of **veracity** - to report accurate information & use honest communication.

#2 A student does not benefit from OT services in the school setting if he/she meets their goals or plateaus over time.

#3 During a meeting with the parents, confidently explain why their child no longer benefits from OT services.

- Make sure to have evaluations, assessments, and reports to back up your statements.

Ethical Dilemma 3

2) Having a difference of opinion between the members of the interdisciplinary team.

Other staff members disagree with your evaluation and recommendations for a student. What is your course of action?

- *Addresses fidelity*

Solutions:

Difference of opinions amongst colleagues is common, but the OT must adhere to **fidelity** - treat other professionals with fairness & respect.

- Address the differences BEFORE an IEP meeting.
- Explain your results, clinical observations, & recommendations.
- Use active listening skills when asking the team members their suggestions.

Conclusion

- Wrap up 7 Core Values
  - **Altruism, Equality, Freedom, Justice, Dignity, Truth, Prudence**
- AOTA Code of Ethics
  - **Beneficence**- concern for the well-being and safety
  - **Nonmaleficence**- do no harm
  - **Autonomy**- rights of the individual
  - **Justice**- fairness and objectivity
  - **Veracity**- accurate, truthful, and objective
  - **Fidelity**- respect, fairness, discretion, and integrity.
- Ethical dilemmas