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שם העבודה בעברית: ההשפעה של כלב טיפולי על סטודנטים לפיזיותרפיה לפני מבחן מעשי

שם העבודה באנגלית: The influence of a therapy dog on Physiotherapy students before Objective Structured Clinical Exams

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The influence of a therapy dog on Physiotherapy students before Objective Structured Clinical Exams (OSCE)

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Table of Contents

List of Tables and Figures	4
List of Appendices.....	5
Abstract.....	6
Introduction.....	7
Literature Review.....	8
Aims and Hypothesis.....	11
Materials and Methods.....	11
Results.....	15
Discussion and Conclusion.....	17
Limitations.....	18
Bibliography.....	20

List of Tables and Figures

Table 1: Demographic data of the participants.....	15
Figure 2: HR values of each student during the first intervention vs the second intervention.....	16
Figure 3: Students interest in using CT before OSCEs and other stressful situations.....	17
Figure 4: The Therapy Dog, Shvavi.....	37
Figure 5: Pulse Oximeter.....	37

List of Appendices

Appendix 1.....	27
Appendix 2.....	28
Appendix 3.....	36

Abstract

Background: Academic education is very stressful and challenging, a major part of it is due to the requirement of taking exams. Healthcare professions students are required to take the Objective Structured Clinical Exam (OSCE)- often leading to increased physiological stress and perceived anxiety.

Objective: To assess the impact of a canine therapy (CT) on Heart Rate (HR) of Physiotherapy (PT) students prior to an OSCE exam.

Subjects: Eight second-year PT students participated in this study.

Methods: A 15-20-minute intervention which either included a therapy dog or no therapy dog was performed prior to the students' OSCE. Following the intervention, HR was measured. Our goal is to increase the awareness of CT for students and examine how it can improve the students' well-being. The purpose is that Ben-Gurion University will consider offering CT to students, alongside different types of therapies.

Results: The study found that the HR was significantly lower in the intervention that the therapy dog was present compared to the HR during the intervention that the therapy dog was not present. This indicates that exposure to a therapy dog had a positive effect on reducing HR.

Discussion and Conclusion: The findings of this research suggest that utilizing animal-assisted interventions, such as therapy dogs, may be effective in lowering anxiety levels for PT students before taking an exam.

Introduction

Anxiety is a prevalent issue, with estimates suggesting that it affects between 10-30% of the population (Ozen et al., 2010). University students are particularly at risk, with 15.6% reporting experiencing depressive, stress, or anxiety disorders due to factors such as academic performance, fear of failure, finances, and poor work-life balance (Eisenberg et al., 2007; El-Ghoroury et al., 2012). Stress can negatively impact students' enjoyment of their academic experience and make it a burden (Kumari & Jain, 2014). Additionally, test anxiety is a common issue among university students, with 38.5% (30.0% of males and 46.3% of females) reporting experiencing it during their degree (Gerwing et al., 2015). Test anxiety can lead to high levels of worry and physical discomfort and disrupt the ability to think, perceive, and learn (Cohen, Ben-Zur & Rosenfeld, 2008; Ozen et al., 2010). Healthcare students are particularly vulnerable to the harm of test-induced stress due to the OSCE, which is conducted in an anxiety-provoking manner (Brand & Schoonheim-Klein, 2009).

Animal-assisted interventions, a practice in which therapy animals are brought to college campuses by volunteers, are becoming increasingly popular as a way to alleviate stress and anxiety among students. Research has shown that interacting with therapy animals can lead to reduced stress and anxiety levels, as well as other positive health outcomes (Cipriani et al., 2013; Barker et al., 2015; Young, 2012; Marcus, 2013; Nepps et al., 2014; Goddard & Gilmer, 2015).

This study aims to examine the potential benefits of animal-assisted interventions for physical therapy (PT) students, as there is limited research on this topic. Previous studies have shown that PT students experience higher levels of stress and anxiety compared to their peers (Frank & Cassady, 2015; Rehman & Khanzada & Khan, 2016). Given the positive effects of animal-assisted interventions in various settings, it is hypothesized that a 15–20-minute animal-assisted intervention prior to taking an OSCE may reduce stress and anxiety in PT students. The study aims to measure this by assessing changes in HR, measured by an Oximeter. It has been established that HR is a trustworthy indicator of stress, with higher levels of anxiety corresponding to elevated HR. As such, reducing anxiety levels also results in a decrease in HR (Pittig et al., 2013).

Literature Review

University students, compared to the general population, have been found to have higher rates of psychological distress (Eskin et al., 2016; Stallman, 2010). With the entry of students to the university, the levels of stress and anxiety rise and do not return to their previous levels throughout their entire period in university (Bewick et al., 2010).

Students also commonly face emotional and social difficulties. A review of American college students found that 59% felt very lonely, 65% felt very sad, and 37% felt so depressed that they found it difficult to function (American College Health Association, 2016). Moreover, lower quality of social support causes students to have more depressive symptoms than others (Hefner & Eisenberg, 2009).

While there are students who suffer from stress, it has been found that university students and medical students particularly are subjected to high levels of psychological distress (Dyrbye et al., 2006). Nearly two-thirds of medical students experience symptoms of depression, and nearly one in three experience suicidal thoughts (Dyrbye et al., 2006; Thompson et al., 2010). This distress continues after graduation and transitions into residency, affecting work performance as well as mental health (Collier et al., 2002).

One of the reasons for higher psychological distress among students is the requirement of taking exams as part of their higher academic phase. It is well known that exams are a major cause for stressful experiences among university students. It was found that 38.5% of students (30.0% of males, 46.3% of females) self-reported that they suffered from some level of test anxiety throughout their academic degree (Gerwing et al., 2015). A person who's suffering from test anxiety is associated with increased stress and depression (Gilbert et al., 1996), low academic performance (Ng et al., 2003), and low expectations of their grades (Austin et al., 2010). Furthermore, anxiety has negative consequences on general health and well-being such as compromised immunity (Frank & Cassady, 2015; Kiecolt-Glaser et al., 1984) and risk of developing hypertension and coronary heart disease (Charnetski et al., 2004; Markovitz et al., 2001; Sparrenberger et al., 2009)

Healthcare students are required to take the OSCE during their degree. This exam's purpose is to assess the students' clinical skills and knowledge, usually in simulated conditions (Fidment, 2012). It has been found that OSCEs are a source of anxiety and stress among many students, and it has been rated as more anxiogenic and requiring more preparation than

other forms of evaluation (Brand & Schoonheim-Klein, 2009). Zhang & Walton showed in their study that students for Master of Physical Therapy find OSCEs quite anxiogenic, and the triggers range from performance anxiety through fear of the unknown and logistical and operational elements (Zhang, N., & Walton, D. M., 2018).

A way to deal with exam anxiety is AAT. For most of human history, animals have been used for various healing purposes (Serpell, 2010). More recently, animals have been applied into AAT (Halm, 2008) programs to help improve human well-being (Ein, et al., 2018; Serpell 2010). AAT is commonly defined as an interaction among an individual and certified animal for therapeutic purposes to help improve human physical and psychological functioning (Halm, 2008). These programs encourage individuals to sit, touch, play, groom, and/or talk with the therapy animal. Research has found that the presence of these therapy animals can relieve the symptoms associated with physiological and psychological distress and provide social support (Barker et al., 2015; Polheber & Matchock, 2014; Stewart et al., 2014).

Within the fields of human–animal interactions and AAT, canine therapy (CT) is considered as a complementary therapeutic approach – not meant to stand on its very own as a comprehensive treatment but rather a way of offering support to clients in addition to other available services (Marcus, 2013; Nepps et al., 2014; Nimer & Lundahl, 2007; Rossetti & King, 2010; Yorke et al., 2013). Such CT programs generally bring certified therapy canines and community volunteer handlers to campus in order to allow students opportunities to interact with the dogs and fellow students as a method of reducing their stress (Binfet et al., 2018).

AATs has various positive effects such as improving mood and health (C. Williams et al., 2018), reducing stress (Tsai et al., 2010), depression, heart rate, anxiety and pain (Le Roux & Kemp, 2009; Nepps et al., 2014). In addition to that it has been found that AATs increase the incidence of achievements of resilience goals (Rondeau et al., 2010), and increase social interactions (O’Haire et al., 2013).

The vast majority of preexisting research on AAT examines clinical populations (Hoffmann et al., 2009); nevertheless, there is a growing body of evidence that indicates that animals can have a beneficial influence on well-being, and quality of life, in non-clinical populations (Bachi et al., 2012; Friedmann & Thomas, 1995; McConnell et al., 2011; Siegel, 1990; Siegel et al., 1999).

One non-clinical group that has recently acquired a great deal of attention in the AAT literature is students, where the impact of animals, especially dogs, is reflected in increasingly popular CT within educational settings, particularly higher education (Binfet et al., 2018). Student's mental health, resilience, and well-being are key concerns for universities as they impact student performance generally, as well as students' ability to deal with the pressure of being away from home, the ability to integrate into a new environment, and to perform in exam situations, all of which are factors that can cause considerable stress and compromise mental health (Besser & Zeigler-Hill, 2014).

For university students, it is possible to use AAT directly within the campus programs, as group or individual activities, to reduce stress and increase happiness and energy levels (Ward-Griffin et al., 2018). It has been observed that even one CT can bring much greater benefits to students than looking at pictures of dogs (Crossman & Kazdin, 2015) or watching a video of a dog (Thelwell, 2019). CTs can have an impact on reducing homesickness, while living on campus and may increase students' well-being and satisfaction in life (Binfet & Passmore, 2016).

In a meta-analysis done by Ein et al, a statistically significant positive effect was found on HR after AAT interventions (Ein et al., 2018) however, the meta-analysis did not find a significant effect on blood pressure.

Aims and Hypothesis

Aims: To examine the influence of CT on HR among BPT students attending OSCE exams

Hypothesis: CT intervention among BPT students attending OSCE exams decreases HR

Materials and Methods

Study Design

A cross-section study.

Setting

The study took place at Ben-Gurion University of the Negev, in the The Recanati School for Community Health Professions on the ground floor of M8 building, in the same building as the physiotherapy practice rooms.

Subjects

Study population: 2nd year BPT students at Ben Gurion University

Inclusion criteria:

- Age between 18-35
- 2nd year Bachelor's Physical therapy (B.PT) degree students in The Recanati School for Community Health Professions in Ben-Gurion University of the Negev
- Fluent in reading and writing in the Hebrew language

Exclusion criteria:

- Dog allergy
- Being fearful of dogs
- Taking medication that effects: Blood Pressure, anxiety and anti-depressors medications
- History of mental illness

Sample size estimation

Convenience sampling was applied, 8 volunteers were recruited.

Recruitment

We recruited participants via WhatsApp messages and word-to-mouth.

Ethical considerations

The research was approved by “Ben Gurion University”. All patients signed an informed consent form after they have received an overall explanation about the study, according to the medical ethics and agree to participate in it. .

Outcome measures

Demographic data – name, age, gender, general health history (medications, dog allergy, history of mental illness), being fearful of dogs, phone number and Email address.

A significant relationship was found between changes in HR and perceived anxiety during Exam (Kwon et al., 2020).

Heart Rate (HR)- Heart rate was measured with a pulse oximeter. The pulse oximeter was indicated and validated with excellent (<90%) reliability for measuring peripheral heart rate (Losa-Iglesias et al., 2016).

A heart rate that is measured in the pulse oximeter is reliable only if there is a “wave” and the saturation is over 70%.

Post-interventions questionnaires - Whether the students would want to use CT prior OSCEs and other stressful situations as students in Ben-Gurion University (See Appendix 3).

Research procedure

Students who were found suitable to the research criteria have signed a written informed consent form and received via Google Forms a written introductory lecture document from the researcher explaining the research and its importance.

Two interventions were performed on the same students. The first intervention was at the beginning of the spring semester’s final exams period. The second intervention was close to

the end of that same semester. The interval between the intervention did not exceed one month.

Intervention #1

The students arrived 30 minutes prior to the OSCE exam, the intervention occurred before 1pm.

The students entered the classroom, without a therapy dog.

Intervention #2

The students arrived 30 minutes prior to the OSCE exam, the intervention occurred before 1pm.

The students entered the classroom, followed by a therapy dog.

The intervention

Student chairs (as the number of the participants) were in a semicircle in advance.

The students entered the classroom 30 minutes prior to the exam.

Once all the students were seated, a timer was set for 3 minutes with a purpose to reach the resting HR of the students. An assistant examiner asked the students to sit still and keep quiet and informed them “we will start the measurements soon”.

After 3 minutes the students’ HR were measured as follow:

Each student received a pulse oximeter (See picture- Figure 5) and the assistant examiner explained them how to use the device properly (start after the timer will go off)-

1. Place on your index finger
2. Turn on
3. Place your hand on the student chair’s desk and wait for the result until the assistant examiner writes it down

The assistant examiner wrote down the Heart rate that was shown in the pulse oximeter, only if there was a “wave” and the saturation was over 70%, if not- try the other index finger.

(Intervention #1- without a therapy dog- stopped here)

When the therapy dog entered the classroom, instructions were read (from the booklet- Appendix 2).

After the first HR measurement the students were allowed to interact with the therapy dog in a manner of their choice (petting, hugging, playing ball, brushing etc.). During this session, students were allowed to ask the handler only questions about the therapy dog.

The time that the therapy dog and the handler spent in the classroom was 20-30 minutes.

During the intervention the handler was present to observe the behavior and interaction between the students and the therapy dog to ensure that the interaction was a positive one and that the therapy dog was not demonstrating any signs of distress.

After 15-20 minutes of CT the second HR measurement was taken in the same manner it was taken prior the CT, without setting the 3 minutes timer that was purposed to reach the rest HR of the students.

The therapy dog

The therapy dog who took part in the intervention is called Shvavi. A four-year-old dog of a mix-breed and weights 11 kg. Shvavi is owned and was trained by Amit Amar Reinis (a physical therapy student who's his handler and was one of the examiners in this study). The dog and handler were certified through "Dogs for People" Israel, which requires that the animal demonstrates obedience, completes a specific therapy training course and passes a test.

The dog was cleared by a veterinarian to be in good health and appropriately groomed. The therapy dog had three years of experience prior to participating in this study which included visits to various sites, such as elementary schools, a summer camp in the United States, Ben-Gurion University and a rehabilitation hospital. (See picture- Figure 4).

Data collection

Data was collected via Google poll prior the interventions (Appendix 1); self-report questionnaires and the examiner's report of HR were filled during the interventions.

1. Demographic data – name, age, gender, general health history (medications, dog allergy, history of mental illness), being fearful of dogs, dog ownership, phone number and Email address.

2. Heart Rate measurements- that was collected by the assistant examiner during the interventions.

3. post-interventions questionnaires - were collected via Google forms. The students were asked whether they would want to use CT prior OSCEs and other stressful situations as students at Ben-Gurion University to reduce stress.

Statistical analysis

Statistical analysis was performed with SPSS software. Description statistics were used to characterize the study sample. To compare variables between case and control groups Mann-Whitney test will be used for continuous variables and chi square test for categorical variables. A value of $P < 0.05$ was considered significantly different.

Results

we recruited 8 students (3 males and 5 females), mean age 25.6 (23-28)

Table 1 shows the demographic data we collected from the students before the intervention.

Number	Age	Gender	Education	Family Status	Medication	Dog Ownership	Dog Allergy	Being Fearful of Dogs	Love For Dogs
1	27	F	During a degree	In a relationship	Iron	Family ownership	No	No	Yes
2	23	F	During a degree	In a relationship		No	No	No	Yes
3	26	F	During a degree	In a relationship	Birth-control	Yes	No	No	Yes
4	24	M	During a degree	In a relationship		Family ownership	No	No	Yes
5	28	M	During a degree	Married		No	No	No	No
6	26	M	During a degree	In a relationship		No	No	No	No
7	26	F	During a degree	In a relationship		Yes	No	No	Yes
8	25	F	During a degree	In a relationship		No	No	No	Yes

Table 1: Demographic data of the participants

The outcome measure of this study was HR measured in beats per minute (BPM).

Figure 1 presents a comparison of HR values of each student during the first intervention VS the second intervention.

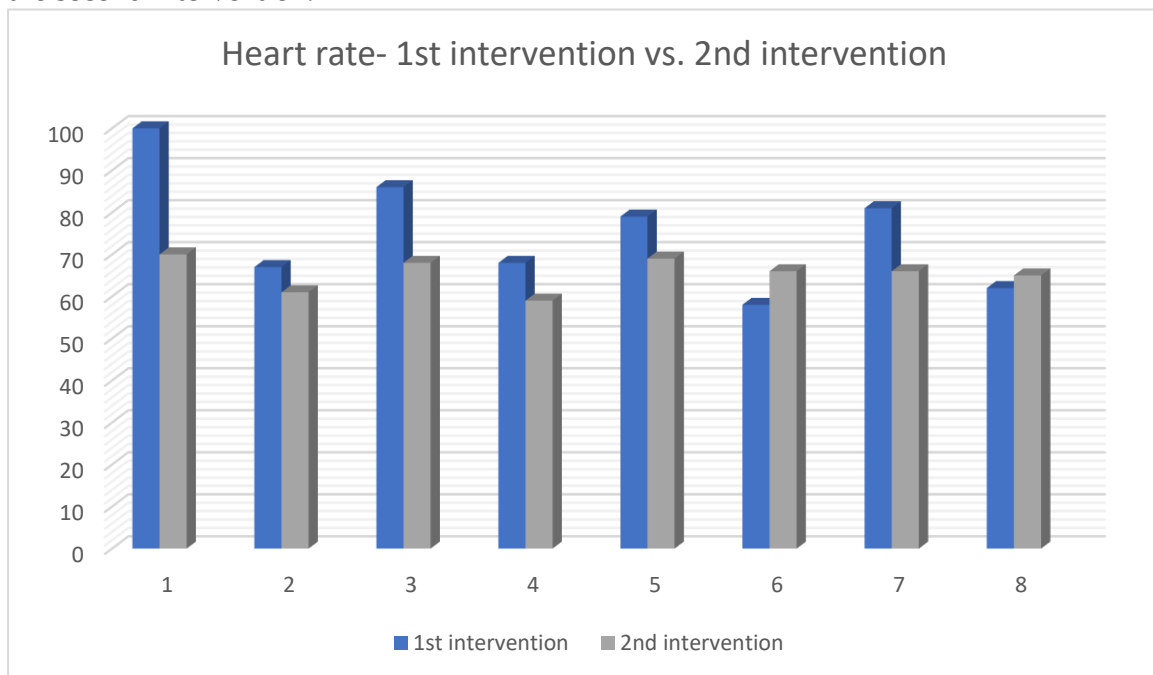


Figure 2: HR values of each student during the first intervention vs the second intervention

Wilcoxon test was conducted to compare HR values during the first intervention vs. the HR values during the second intervention. The results of Wilcoxon test show a significant difference in HR values between the first and the second intervention ($z = -1.96$, $p\text{-value} = 0.05$).

In the post-interventions questionnaires, the students were asked whether they would want to use CT prior OSCEs and other stressful situations. Figure 3 present their answers:

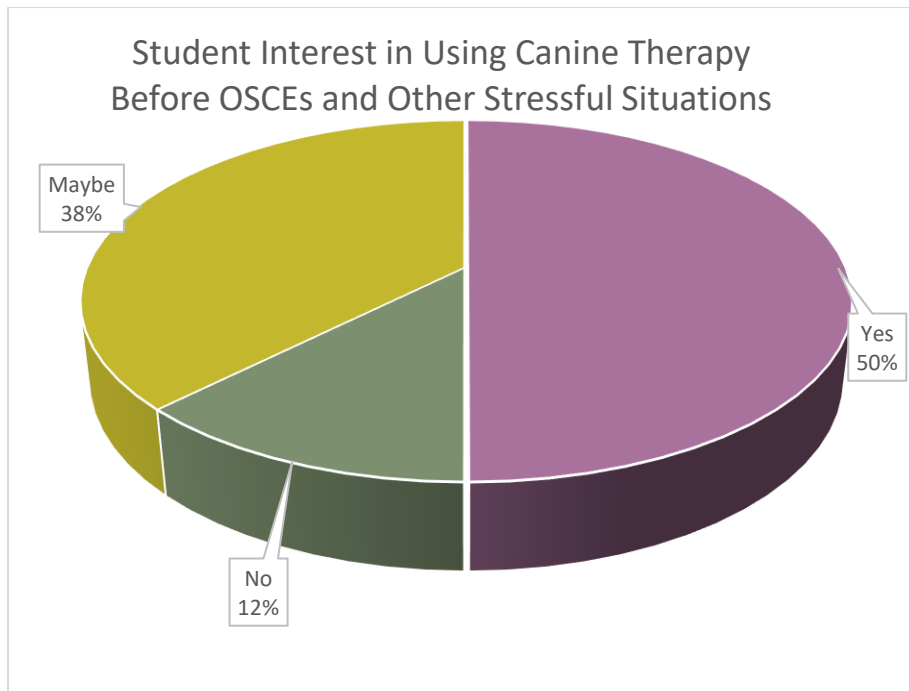


Figure 3: Students interest in using CT before OSCEs and other stressful situations.

Discussion and Conclusion

The purpose of this study was to assess the influence CT on stress and anxiety levels among PT students before OSCE exam. We measured stress levels by measuring HR. HR was found to be a reliable measurement for stress- It is known that higher levels of anxiety are related to elevated HR, hence- reduction anxiety levels are related to reduction of HR (Pittig et al., 2013). Our hypothesis was that CT interventions will reduce stress and thus reduce HR. The results of this study support this hypothesis.

Statistical significance was achieved in this study for a reduction in HR prior to an OSCE, as measured by an Oximeter, after the second intervention (in which the therapy dog was present).

Previous studies investigating the effects of CT interventions on HR have reported mixed results. Studies such as Nepps et al. (2014) and Allen et al. (1991) found a significant reduction in HR in mental health patients and otherwise healthy individuals respectively, following an interaction with a therapy dog. However, other studies such as Braun et al. (2009) and Polheber & Matchock (2014) did not find a significant reduction in HR following

a CT intervention in children in an acute care pediatric setting and otherwise healthy individuals respectively.

Therefore, we expected to see a decrease in anxiety levels measured by HR when comparing between the first and the second intervention (with and without the CT).

Reducing anxiety in PT students is important given that undergraduate PT students might suffer from high levels of anxiety, stress and depression during their degree (Syed et al., 2018). One potential reason that physiotherapy students experience higher levels of anxiety is likely by the clinical tasks as OSCE and practical skills of a healthcare students are tested in oral or practical formats with open-questioning and these types of exam situations produce higher levels of anxiety compared to a multiple-choice type of examination (Núñez et al., 2016). Finding ways to reduce anxiety before the OSCE exams in students is highly necessary in the physiotherapy educational setting, because a high level of test anxiety may impair the ability of the student to learn from the test (Retegui, 2006). In addition, examination anxiety and stress may lead to a variety of negative repercussions such as low self-esteem, reduced sleep quality and depression (Steinmayr, 2015).

Limitations

Fortunately, even though we assessed only 8 second-year PT students, we still had enough statistical power to demonstrate a change in the HR results. Given that the sample was convenience sampling and was limited to second-year PT students only, there certainly are limitations related to generalizability to students in the other years of the program because they may not be as affected by anxiety prior to an OSCE exam as the second year. Furthermore, the results from this study reflect changes that occur at a specific time and therefore cannot predict the long-term effects of decreasing stress levels prior to an OSCE. Future research may want to include following a study group of students in a longitudinal study to examine the long-term effects of having a CT as part of PT studies.

In addition to the small sample size, the participants in this study were mainly female students. The fact that females tend to demonstrate greater levels of anxiety compared to males (Toews et al., 1997), may have had an effect on our results and therefore future studies

may want to further examine gender differences on anxiety outcomes. Another limitation to this study is that activity prior to the intervention was not controlled, such as exercising, consuming caffeine, smoking or other activities that can cause an increase in heart rate (Al-Safi, 2005). Future studies may want to control pre-intervention activity levels.

Another limitation was the fact that each course in PT studies has one term- the interventions occurred before two different course examinations. Future researchers may want to hold the interventions before the same examination and include exam performance to provide another insight into the potential benefits of CT interventions on college and university campuses.

It has already been discussed that university and college studies are highly stressful and will be even more stressful in the future given the fact that the prerequisites are increasing and becoming more demanding each year. Therefore these academic programs should include any services that may improve the mental health and well-being of their students.

The present study aimed to raise awareness about the potential benefits of CT for university students. Our findings suggest that Ben-Gurion University should consider incorporating CT into their services for students. For instance, the University could offer students the opportunity to participate in 1-hour group sessions with therapy dogs during times of high stress, such as final exams. Additionally, the University could encourage faculty and students who are certified as therapy dog handlers and own therapy dogs to bring them to campus and provide opportunities for students to interact with the dogs.

In the post-intervention questionnaires, students were asked if they would be interested in using CT as a therapeutic tool before OSCEs and other stressful situations. 50% of the students responded positively, indicating a level of interest and demand for this type of therapy among the student population.

In conclusion, our research suggests that CT may be an effective intervention for PT students prior to an OSCE exam. The results indicate that the presence of a therapy dog may have a positive impact on students' anxiety levels and overall well-being. Further research is necessary to fully understand the extent of CT's benefits and to evaluate its effectiveness in different populations.

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Appendix

Appendix 1

ההשפעה של כלב טיפולי על סטודנטים לפיזיותרפיה לפני מבחן מעשי

שלום!

אנחנו שיר רובנר-פלדמן ועמית עמר, סטודנטיות בשנה ג' בחוג לפיזיותרפיה באוניברסיטת בן-גוריון. במסגרת סמינר המחקר אנחנו מבצעות תרגיל מחקר בנושא "ההשפעה של כלב טיפולי על סטודנטים לפיזיותרפיה לפני מבחן מעשי". מטרת המחקר היא לגלות האם לכלב טיפולי יש השפעה על מדדים פיזיולוגיים (דופק) ומדדי חרדה לפני מבחן מעשי. המידע שנאסף בסקר זה ישמש אותנו לכתיבת עבודת מחקר במסגרת הסמינריון בנושא פיזיותרפיה של ד"ר אילן קורץ, במסגרת הפקולטה למדעי הבריאות באוניברסיטת בן גוריון, בהנחייתה של אסיה סטרינקובסקי.

במידה ותימצא/י מתאימ/ה לתרגיל המחקר, אנחנו נזמין אותך להשתתף בשתי התערבויות הכוללות כלב טיפולי שיתחילו כחצי שעה לפני שני מבחנים מעשיים בסמסטר ב' (הקרוב). ההתערבויות יכללו מילוי שאלון דמוגרפי ומילוי שאלון חרדה או מדידת דופק באמצעות מד-סטורציה (באופן לא פולשני).

זהות ממלאי השאלונים נשמרת אנונימית ומטרתה איסוף מידע לצורכי מחקר בלבד.

תודה על ההיענות,
שיר ועמית

שאלון פרטים אישיים

* שם מלא

Your answer

* האם את/ה סטודנט/ית בשנה ב' לפיזיותרפיה באוניברסיטת בן-גוריון

- ☐ כן
☐ לא

* גיל

Your answer

* מין

- ☐ זכר
☐ נקבה
☐ אחר

* האם את/ה אלרגי לכלבים או מפחד מכלבים

- ☐ כן
☐ לא

* האם את/ה נוטלת תרופות באופן קבוע

- ☐ כן
☐ לא

במידה וננית כן בסעיף הקודם, אנא פרטי/י אילו תרופות

Your answer

* האם התמודדת בעבר או הינך מתמודדת/ת עם מחלה נפשית

- ☐ כן
☐ לא

בלחיצה על הכפתור "שלח" אני מבין/ה ומאשר/ת את השתתפותי בשתי התערבויות הכוללות כלב טיפולי שיתחילו כחצי שעה לפני שני מבחנים מעשיים בסמסטר ב' (הקרוב).

- ☐ כן
☐ לא

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מספר נבדק

ההשפעה של כלב טיפולי על סטודנטים לפיזיותרפיה לפני מבחן מעשי

The influence of a therapy dog on Physiotherapy students before
Objective Structured Clinical Exams

תיק משתתף

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מספר נבדק

טופס הסכמה מדעת

אני החתום/ה מטה

שם פרטי ומשפחה:	מספר תעודת זהות:
כתובת:	כתובת Email:

- (א) מצהיר/ה בזה כי אני מסכים/מה להשתתף במחקר רפואי, כמפורט במסמך זה.
 (ב) מצהיר/ה בזה, כי אני לא משתתף בזמן חתימת מסמך זה, בניסוי רפואי אחר.
 (ג) מצהיר/ה בזה כי הוסבר לי על-ידי:

שם החוקר המסביר:

1. כי החוקר הראשי הוא יוזם המחקר.
 2. כי המחקר הנ"ל נערך בנושא: ההשפעה של כלב טיפולי על סטודנטים לפיזיותרפיה לפני מבחן מעשי
 3. כי אני חופשי/ה לבחור שלא להשתתף במחקר, וכי אני חופשי/ה להפסיק בכל עת את השתתפותי במחקר. כמו כן, סירובי להשתתף במחקר לא יגרור ענישה או פגיעה בזכות כלשהי הקשורה ללימודי האקדמיים וכי הסכמתי להשתתף במחקר לא תקנה לי כל זכות או הטבה שאינה נובעת מעצם השתתפותי במחקר.
 4. כי בעת מילוי שאלון, אני רשאי/ת שלא לענות על כל השאלות שבשאלון או על חלק מהן.
 5. כי מובטח לי שזהותי האישית תישמר סודית על-ידי כל העוסקים והמעורבים במחקר ולא תפורסם בכל פרסום, כולל בפרסומים מדעיים.
 6. כן מובטחת לי נכונות לענות לשאלות שיועלו על-ידי וכן האפשרות להיוועץ בגורם נוסף (לדוגמא רופא-משפחה, בני משפחה וכו'), באשר לקבלת החלטה להשתתף במחקר ו/או להמשיך בו.
 7. כי בכל בעיה הקשורה לניסוי הרפואי אוכל לפנות לאסיה סטרינקובסקי, מספר טלפון: 0544-759913 בכל שעות היממה.
- (ד) הנני מצהיר/ה כי נמסר/ה לי מידע מפורט על המחקר על פי הנושאים המפורטים להלן:
1. מטרת המחקר: להעריך את ההשפעה של כלב טיפולי על דופק לפני מבחן מעשי
 2. ישתתפו במחקר כ- 12 סטודנטים, והוא יארך עד חצי שעה בכל מפגש (שני מפגשים) לכל מטופל.
 3. המחקר כולל מילוי של שאלונים דמוגרפיים ומדידת דופק על ידי מכשיר אינו פולשני בשם Pulse oximeter.
- באחד משני המפגשים תיערך התערבות עם כלב טיפולי (שבבי) למשך כ-20 דקות.

(ה) הנני מצהיר/ה בזה, כי את הסכמתי הנ"ל נתתי מרצוני החופשי וכי הבנתי את כל האמור לעיל. כמו כן, קיבלתי עותק של טופס הסכמה מדעת זה, נושא תאריך וחתום.

(ו) עם חתימתי על טופס הסכמה זה, הנני מתיר ליוזם המחקר ולגוף המבקר (בי"ס למקצועות הבריאות ע"ש רקנאטי) גישה ישירה לתיק האישי, לשם אימות שיטות המחקר והנתונים הקליניים. גישה זו למידע זה שלי תבוצע תוך שמירת סודיות, בהתאם לחוקים ולנהלים של שמירת סודיות.

(ז) פירוט נוסף על נקודות הדק בדף הרצ"ב.

תאריך	חתימת המשתתף/ת במחקר	שם המשתתף/ת במחקר הרפואי

*חלק זה למילוי על ידי החוקרת בלבד:

הצהרת החוקרת:

ההסכמה הנ"ל נתקבלה על-ידי, וזאת לאחר שהסברתי למשתתפ/ת כל האמור לעיל וכן וידאתי שכל הסבריי הובנו על-ידו/ידה.

תאריך	חתימתו	שם החוקר המסביר

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מספר נבדק

טופס הסכמה לצילום בזמן המחקר

תאריך: _____

שם המשתתף/ת (שם פרטי ומשפחה): _____

אני _____ מאשר/ת לחוקרות (עמית עמר ושיר רובנר פלדמן) לצלם אותי

ת"ז _____ במהלך המחקר בתאריכים 29.6.22 ו-3.7.22 כחלק מתיעוד המחקר.

הנני מאשר/ת לחוקרות להשתמש בתמונות לצורך המחקר והצגתו בכנס הצגת העבודות.

_____ חתימה

_____ ת"ז

--	--

מספר נבדק

שאלון דמוגרפי לנבדק\ת

גיל: _____ מין: _____

משקל: _____ ק"ג גובה: _____ ס"מ BMI (ימולא על ידי הבודק): _____

רמת השכלה (נא להקיף): יסודית, תיכונית, במהלך תואר אקדמי, בוגר תואר אקדמי

מצב משפחתי (נא להקיף): רווק\ה, בזוגיות, נשוי\נשואה, גרושה, אלמנה

מספר ילדים: _____

ארץ לידה: _____ שנת עלייה (במידה וארץ הלידה אינה ישראל): _____

שפת אם: _____

ישוב מגורים נוכחי: _____ הישוב בו גדלת: _____

האם את\ה סובלת ממחלות רקע (פיזיות או נפשיות)? כן לא

במידה וכן- פרטי אלו: _____

האם את\ה נוטלת תרופות באופן קבוע? כן לא

במידה וכן- פרטי אלו תרופות: _____

האם יש בביתך כרגע חיית מחמד (נא להקיף)?

- כן, חיית מחמד בבעלות המשפחה שאני פוגש\ת לעיתים
- כן, חיית מחמד בבעלות השותפ\ה שלי
- כן, חיית מחמד בבעלותי
- לא

איזו חיית מחמד? _____

אנא הקפ\י בעיגול את התשובה הנכונה לגביך:

האם את\ה אלרגית לכלבים? כן | לא

האם את\ה מפחד\ת מכלבים? כן | לא

האם את\ה מגדיר\ה את עצמך כאוהב\ת כלבים? כן | לא

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מספר נבדק

תאריך: _____

מדידת דופק

התערבות מספר 1

מספר פעימות בדקה: <table border="1"> <tr> <td></td> <td></td> <td></td> </tr> </table>				תאריך ההתערבות: _____ שעת המדידה: _____ _____	1
מספר פעימות בדקה: <table border="1"> <tr> <td></td> <td></td> <td></td> </tr> </table>				תאריך ההתערבות: _____ שעת המדידה: _____ _____	2

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מספר נבדק

תאריך: _____

מדידת דופק

התערבות מספר 2

מספר פעימות בדקה: <table border="1"> <tr> <td></td> <td></td> <td></td> </tr> </table>				תאריך ההתערבות: _____ שעת המדידה: _____ _____	1
מספר פעימות בדקה: <table border="1"> <tr> <td></td> <td></td> <td></td> </tr> </table>				תאריך ההתערבות: _____ שעת המדידה: _____ _____	2

מהי מטרת המחקר?

לגלות האם לכלב טיפולי יש השפעה על מדדים פיזיולוגיים (דופק) לפני מבחן מעשי. המידע שנאסף במחקר זה ישמש אותנו לכתיבת עבודת מחקר במסגרת הסמינריון בנושא פיזיותרפיה של ד"ר אילן קורץ, במסגרת הפקולטה למדעי הבריאות באוניברסיטת בן גוריון, בהנחייתה של אסיה סטרינקובסקי.

איך נעשית ההתערבות?

משתתפי המחקר יחולקו באופן רנדומלי לשתי קבוצות וייקחו חלק בשתי התערבויות שאחת מהן תהיה בנוכחות כלב טיפולי.

שתי ההתערבויות יתקיימו לפני שני מבחנים מעשיים בסמסטר ב' הקרוב (המפורטים מטה). ביום ההתערבות תתבקש/י להגיע כ-30 דקות טרם המבחן המעשי לכיתה אליה שובצת ועל פי הקבוצה אליה את/ה משתייך/ת תתבקש/י:

- למלא שאלון דמוגרפי
- ילקח ממך מדד דופק באמצעות מד סטורציה (באופן לא פולשני)

באחד מהתאריכים המפורטים, בנוסף ללקיחת המדדים תהיה התערבות עם כלב טיפולי. במהלך ההתערבות תתאפשר אינטרקציה עם הכלב הטיפולי בכל אופן בה תבחר/י (ליטוף, חיבוק, משחק וכד') וכן תהיה אפשרות לשאול את בעלת הכלב הטיפולי (עמית) שאלות הקשורות אך ורק לכלב הטיפולי.

זהות ממלאי השאלונים נשמרת אנונימית ומטרתה איסוף מידע לצורכי מחקר בלבד.

מועדי ההתערבויות:

- | | | |
|--------------------|--------|------|
| 1. מבחן מעשי בקורס | בתאריך | בשעה |
| 2. מבחן מעשי בקורס | בתאריך | בשעה |

מהם הסיכונים בהתערבות?

היות ומדובר בהתערבות לא פולשנית אין כל סיכון בביצוע המחקר.

מהן זכויותך?

זכותך להשתתף במחקר, אם הינך מעוניין/ת בכך. כמו כן, זכותך שלא להשתתף במחקר או לפרוש בכל שלב וזאת מבלי שתיפגע זכות מזכויותיך. כמו כן - לא תהיה כל השפעה על מעמדך בתואר.

לפני שתחתמי/ על הסכמה להשתתף תקבלי/י מידע מלא מהסטודנטיות לפיזיותרפיה שיר רובנר פלדמן ועמית עמר, וכן ניתן יהיה לפנות אליהן בכל שאלה שתעלה.

בהצלחה!

Appendix 3

שאלון קצר לאחר ההתערבויות המחקריות

שלום!

לצורך השלמת פרטים נוספים

תרגיל מחקרי בנושא "ההשפעה של כלב טיפולי על סטודנטים לפיזיותרפיה לפני מבחן מעשי", נשמח שתענו על מספר שאלות.

זהות ממלאי השאלונים נשמרת אנונימית ומטרתה איסוף מידע לצורכי מחקר בלבד.

תודה על ההיענות,
שיר ועמית

 amit8n@gmail.com (not shared) [Switch account](#)

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שם מלא

Your answer

במידה וכלב טיפולי היה זמין לך ככלי, האם זהו כלי שהיית משתמש/ת בו לפני מצבי סטרס (מבחן, התנסות, עמידה מול קהל)?

☐ כן

☐ לא

☐ אולי

תודה על שיתוף הפעולה!

בהצלחה בהתנסויות,
שיר רובנר פלדמן ועמית עמר

Figures

Figure 4: The Therapy Dog, Shvavi



Figure 5: Pulse oximeter

