

KAWA MODEL AND ITS EFFECTIVENESS ON RESILIENCE IN PEDIATRIC  
OCCUPATIONAL THERAPY PRACTITIONERS

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

by

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## **Abstract**

Many occupational therapy practitioners (OTPs) are facing and are at risk for burnout, which can significantly impact their physical and mental health (Shin et al., 2022). Pediatric OTPs, in particular, experience high levels of stress within the workplace and there is limited research regarding how the Kawa Model can address their burnout and increase resilience (Goffredo et al., 2024). Our research addresses the question: How does a needs assessment survey, based on the Kawa Model, assist future researchers in establishing an effective Kawa Model intervention to improve resilience in pediatric OTPs to burnout? We conducted our research via Google forms and utilized convenience sampling through LinkedIn and Instagram, resulting in a total of 9 pediatric OTP participants, all of whom have been working in this field for over a year. The findings of our survey indicate that a needs assessment survey based on the Kawa Model can be of assistance, as it can highlight characteristics that impact well-being, such as challenges, useful strategies, and beneficial traits. Understanding these characteristics can help pediatric OTPs better navigate their environments, leading to reduced burnout and increased resilience.

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## **The Kawa Model and Its Effectiveness on Resilience in Pediatric Occupational Therapy Practitioners**

The Kawa Model is an occupational therapy framework that uses a river as a metaphor to show that life is complex, and flows through time and space, similar to a river (Gregg et al., 2015). Different factors can affect the river's flow, such as rocks, riverbanks, and driftwood. These factors represent various areas of life- rocks representing obstacles and challenges, riverbanks representing the environment, and driftwood representing personal assets and liabilities. As part of the process, clients draw their own river and the completed drawing would be a visual representation of their life flow. The Kawa Model process can be used as an assessment tool and intervention for clients, as it can identify areas of life and determine how individuals can enhance their life flow.

### **Statement of Problem**

Our research question is: How does a needs assessment survey, based on the Kawa Model, assist future researchers in establishing an effective Kawa Model intervention to improve resilience in pediatric occupational therapy practitioners (OTPs) to burnout? The Kawa Model plays a significant role in determining the factors impacting an individual's life flow. Assessing an individual's life flow can assist in identifying variables related to burnout within the workplace. Ober et al. (2022) have found the Kawa Model to be an effective assessment and/or therapeutic tool in guiding occupational therapy practice to address mental health challenges. Burnout is one of the concepts that signifies psychological exhaustion prevalent in occupational therapists today. Currently, there is a lack of research regarding how the Kawa Model can directly

combat burnout to promote occupational performance among pediatric OTPs. In the fourth edition of the “Occupational Therapy Practice Framework,” “Achieving health, well-being, and participation in life through engagement in occupation” is the all-encompassing statement that characterizes the domain and process of occupational therapy; it defines the goals and values of occupational therapy (American Occupational Therapy Association, 2020, p. 5). Achieving health encapsulates the physical and mental soundness of life. Well-being embodies all domains of human life that come together to create a life that is considered good. Participation in life through engagement refers to involvement in life and takes into account the roles an individual has. Achieving these factors is important to support health and participation.

Recent research has emphasized many factors contributing to burnout in healthcare professionals, with OTPs being specifically susceptible to high levels of burnout (Shin et al., 2022). Given the prevalence of burnout among pediatric OTPs, it is evident that burnout can negatively affect their health, well-being, and participation and engagement in their desired occupations. According to Shin et al. (2022), structural issues within the workplace, such as income satisfaction or high work demands may also have a higher association with feelings of burnout. The authors also draw attention to internal influences on burnout, including professional lack of confidence and personal identity. Therefore, it is essential for strategies to be developed to combat and support resiliency to address appropriate adaptations and promote healthy functions. The aspects of the domain of occupational therapy specifically include occupations, context, performance patterns, performance skills, and client factors. As for the process of occupational

therapy, the aspects involved are evaluation, intervention, and outcomes. With the use of the Kawa Model, the process can address the domain aspects.

In addition, the Kawa Model process can be used as an evaluation and intervention to obtain improved client outcomes. According to Goffredo et al. (2024), pediatric OTPs experience high levels of stress within the workplace, impacting their health and well-being. Experiencing occupational stress puts them at risk for developing multiple psychological and physiological concerns, as well as negative work perspectives and fatigue (Anyfantis et al., 2020; Park & Park, 2017; Wressle & Samuelsson, 2014). To combat these risks, the Kawa Model can be used as an efficient tool for understanding the perspectives of these workers (Ober et al., 2022). It can provide a “culturally relevant” and client-centered approach to combat these negative experiences (Ober et al., 2022, p. 2).

The Kawa Model focuses on the “contexts that shape and influence the realities and challenges of people’s day-to-day lives” (Iwama et al., 2009, p.1125). It will depict a visual image of an individual’s life. It accomplishes this by comparing life factors to the components of a river, such as water representing life flow and health, driftwood representing personal assets and liabilities, rocks representing life circumstances and problems, and river walls and floor representing physical and social environmental factors (Iwama et al., 2009). The elements contributing to these metaphors can be assessed during evaluation and used as a guideline to create interventions that will address the factors relating to burnout and improve pediatric OTPs’ overall occupational performance.

## **Literature Review**

### **Social Significance**

The topic of burnout in pediatric occupational therapists is significant because evidence suggests that due to severe occupational stress, healthcare professionals suffer from “emotional exhaustion, cynicism, and low personal accomplishment” (Poulsen et al., 2014, p. 2). It was found through early research that high emotional exhaustion was an element of burnout that was most experienced by OTPs. When individuals experience exhaustion, their ability to problem-solve creatively becomes diminished. This impacts clinical reasoning because it requires both problem-solving and creativity (Derakhshanrad et al., 2019). Communities and clients receive less effective interventions when occupational therapists are burned out. This establishes a relationship between occupational therapist burnout and the communities that are affected.

It is important to determine what factors are affecting burnout in pediatric occupational therapists specifically, as this work population has limited research involving burnout. Resilience must be developed to combat burnout, which means having the ability to bounce back from adversity and keep pushing forward (Waterworth & Grace, 2021). From knowing what factors are associated with burnout, it can be determined what strategies can decrease burnout and increase resilience for pediatric occupational therapists. In turn, decreased burnout and increased resilience can lead to better, effective care, which would benefit communities.

### **Common Theme #1: Income, Satisfaction and Lack of Resources**

Several studies addressed dissatisfaction with low income levels as a factor of burnout in occupational therapists. In a study by Poulsen et al. (2014), low-income

satisfaction was one of the factors that correlated with burnout and work engagement among occupational therapists in Queensland. Low-income satisfaction can lead to less job satisfaction, resulting in decreased work engagement. Conversely, occupational therapists who had high-income satisfaction experienced less burnout and more work engagement. A similar result was found in another study that focused on OTPs in the United States, which established that income satisfaction correlated to less burnout (Shin et al., 2022). It was reported that those with income satisfaction experienced lower emotional exhaustion. The ability to negotiate higher salaries assisted in preventing burnout based on the intrinsic motivation for higher pay.

Poulsen et al. (2014) and Shin et al. (2022) each conducted a cross-sectional study by distributing surveys to a sample of occupational therapists. Poulsen et al.'s study consisted of a larger sample size of 951 participants from an occupational therapist's database, while Shin et al.'s study consisted of 178 participants due to specific inclusion criteria needed to participate in the study. Their specific criteria consisted of providing direct patient care for at least 50% of their time on the clock, having worked in their job position for more than 6 months, and being required to have practiced in the United States. While both studies examined different populations, the results were consistent with each other in that low-income satisfaction correlated to feelings of burnout in occupational therapists. Low income is an institutional problem by not giving enough resources for supervisor support or negotiation for higher pay.

The Kawa Model can be utilized as a method to shift negative perspectives. In a study by Gregg et al. (2015), an occupational therapist used the Kawa Model as an intervention to promote client-centered care among an active-duty army males affected

by combat and stress. The perspective of the client, the army male, was more positive post-intervention, compared to the initial evaluation. For instance, he expressed his mother was one of the rocks as a component of the Kawa Model; during the initial evaluation, he seemed to put anger and blame towards her, but post-intervention, he expressed the realization that he could not change her and had more acceptance. This suggests that using the Kawa Model can cultivate acceptance and reframe negative thoughts, even if stressful situations cannot be stopped and seem uncontrollable. With this in mind, the occupational therapist was a resource for the army soldiers to reframe his thoughts. While occupational therapists can be used as a resource and can offer resources, they are in need of support too.

Korhonen and Komulainen (2023) have also addressed the lack of resources provided for health professionals to prevent burnout. Although health professionals have a significant influence over their clients' lives, they are also "controlled by the health authorities and institutional procedures and practices" (Korhonen & Komulainen, 2023, p. 805). The overwhelming demands of their work impact their psychological wellness, creating a constant risk of developing a mental illness. To prevent this from occurring, additional finances are required by financial officers to implement workplace strategies to mitigate this issue, or higher income must be provided to health professionals to seek help outside the workplace - both of which are not in the health professionals' control.

### **Common Theme #2: Burnout in Work Environment**

Another common theme found within other articles discusses how exposure to a stressful work environment contributes to burnout among healthcare professionals.

Waterworth and Grace (2021) offered ways to improve resiliency for pediatric nurses at a

children's hospital in New Zealand through interpersonal and structural workplace changes. They observed that increased levels of patient-to-staff ratio in conjunction with work requirements are major contributors to burnout within this population. Similarly, a study conducted by Ridremont and Boujut (2023) compared French pediatric healthcare workers' incidence and factors predicting burnout during the COVID-19 pandemic. The researchers concluded that workplace conditions, such as high workload and job demands, and limited supportive relationships from supervisors and coworkers strongly predicted burnout. Additionally, they examined changes healthcare professionals can benefit from, relating to supportive work culture and organization. Shin et al. (2022) predicted that individuals with lower scores of burnout had greater support from their supervisors. This study focused on burnout amongst occupational therapists, and the results were found to be similar to those of the previous studies mentioned about the causes of burnout. These results demonstrate feelings of dissatisfaction towards income, high demand of time, and feelings of overload at work.

These risk factors can be found across multiple studies also addressing burnout. In a study conducted by Judd et al. (2017), the research concluded that workers experienced stress due to their environment/workplace resulting in a "cycle of exhaustion and poor performance" (p. 1110). Additionally, Sibeoni et al.'s (2021) research findings demonstrated that many of the participants experienced stress in their workplace contributing to feelings of burnout or pre-burnout.

### **Remaining Gaps in Evidence**

Based on the research, there are remaining gaps in evidence that can be identified to better prevent and treat burnout among healthcare practitioners. As Judd et al. (2017)

state, their data was collected based on self-reported experiences of burnout, which makes it “possible that understandings of what constitutes burnout may differ between participants” (p. 1116). Participants having differing interpretations of burnout has created a statistical bias in data collection among the responders (Poulsen et al. 2022). Without a direct definition of burnout, a baseline for burnout could not be assessed to specify how and when burnout occurs. Additionally, the literature accounted for a limited set of factors that could influence the feeling of burnout. As Ridremont and Boujut (2023) and Waterworth and Grace (2021) stated, personal life stressors and interactions amongst colleagues were not accounted for. By excluding possible factors leading to burnout, it fails to address how work engagement impacts burnout.

Many of these studies used a cross-sectional design, limiting the causal effect of burnout. The lack of longitudinal data inhibited a clear representation of the effects of burnout that would potentially help identify the main source of burnout. Data sets used at one particular point in time eliminate the evolution of burnout to be studied. Small sample sizes collected within these cross-sectional studies were also not significant enough to be generalized to a larger population.

Waterworth and Grace (2021) collected their participants through a convenience sample for nurses who only worked directly with childcare and Sibeoni et al. (2021) focused on doctors, inhibiting subgroups from being investigated. Comparatively, Shin et al. (2022) had specific inclusion criteria among OTPs, which limited a wider range of populations from being investigated. Research studies consisting of larger sample sizes would be sufficient to draw descriptive statistics for a particular population instead of concluding using inferential statistics that may not accurately represent the population.

Furthermore, studies were conducted in specific regions, which inhibits their findings from being generalizable to other populations. Environmental factors and structure-related issues in the workplace may vary depending on the medical system based on the country's economy (Sibeoni et al., 2021).

There is a lack of research that supports the development of strategies that will prevent and treat burnout among OTPs. Research has provided psychological, emotional, and physical factors that contribute to burnout, such as income satisfaction and stress within the work environment but have yet to expand the knowledge on how to avoid burnout from initially occurring (Shin et al., 2022). The factors that may lead to experiencing burnout have not been addressed to promote the overall well-being of OTPs to optimize occupational performance inside and outside of the workplace. Conversely, Ridremont and Boujut (2023) and Waterworth and Grace (2021) identified prevention strategies to combat burnout among pediatric physicians and nurses, such as providing structure, creating efficient strategies for workflow, incorporating clinical support teams and cultural humility within the work environment, and redesigning the patient to staff ratio to reduce burnout. The Kawa Model can be used as a team-building tool to address performance issues and challenges by improving employee satisfaction and retention, and promoting management support to reduce occupational stress. Similarly, Korhonen and Komulainen (2023) suggested that hybrid types of interventions can attempt to address burnout by “tak[ing] care of [the brain] through healthy life habits” through the use of naps, routines, and meditation among health professionals (p. 800).

### **Argument About Clinical Significance of the Evidence**

Studies conducted by Poulsen et al. (2014), Ridremont and Boujut (2023), and Shin et al. (2022) found evidence of causes leading to burnout, but not many have studied solutions against burnout. Judd et al. (2017), demonstrated supplemental research on workplace stress that may have not been addressed by supervisors. Waterworth and Grace (2021) conducted a study on addressing burnout through resilience-based plans, but more research is needed to demonstrate the impact these strategies have on preventing or treating burnout. Due to limited studies, further investigations must be done to further investigate strategies to combat burnout, while encouraging resiliency.

We believe that an exploration of effective strategies and interventions, such as the Kawa Model can benefit healthcare professionals to remain resilient to burnout. Previous research highlights resources and work environments significantly impacting burnout. However, further research should address additional stressors for occupational therapists contributing to burnout beyond those related to work. We believe that the Kawa Model can target all potential stressors and formulating a universal definition for burnout provides a substantial effect on resilience for healthcare professionals.

### **Statement of Purpose**

Our PICO question is: How does a needs assessment survey based on the Kawa Model, compared to other methods, assist future researchers in establishing an effective Kawa Model intervention to improve resilience in pediatric OTPs to burnout? The population is pediatric OTPs experiencing burnout. The intervention is the needs assessment survey based on the Kawa Model. The comparison would be the standard or existing methods of assessing needs to improve resilience. Lastly, the outcome is an

improvement in resilience. Our PICO question helped us to develop our statement of purpose. The purpose of our study is to investigate how effective the Kawa Model process is at assisting pediatric OTPs in identifying factors contributing to burnout. As researchers, we expect to gain an occupational outlook, explore context and personal evaluations, and create opportunities for developing strategies to prevent burnout and increase resilience, which will support well-being and sustainability.

### **Theoretical Framework**

#### **The Kawa Model: Foundations and Concepts**

The experience of burnout is prevalent among pediatric OTPs working in high-stress environments, which affects their occupational performance and puts them at risk for developing physical and psychological disorders (Anyfantis et al., 2020; Park & Park, 2017; Wressle & Samuelsson, 2014). The Kawa Model has been found to be an effective and therapeutic tool in combating burnout; however, there is limited research on the implementation of this process among pediatric OTPs.

The Kawa Model was developed due to the need for a more culturally sensitive approach to occupational therapy. The main creator of the model, Dr. Michael Iwama, drew inspiration from when he observed the holistic and community-based approach taken with patients in Japan. Because of the inclusive nature of the Kawa Model, it aligns with the values of occupational therapy. The core concept of the Kawa Model is to assess individuals' life journey through the metaphorical use of a river. The river is used to explore social, cultural, and environmental contexts to enhance their overall well-being. It can promote resiliency among pediatric OTPs by identifying the work-related factors contributing to feelings of burnout. By including the context of their

work and personal life in their own Kawa Model, occupational therapists can identify the factors causing burnout and create interventions specifically targeting the factors that disrupt their work-life flow.

### **Relevance of the Kawa Model for Pediatric OTPs**

Several studies have established that many healthcare professionals experience burnout and OTPs are particularly vulnerable to heightened levels of burnout (Shin et al., 2022). Considering the high occurrence of burnout among pediatric OTPs, it is clear that this phenomenon can detrimentally impact their health, well-being, and occupational balance. To build resilience and combat burnout, the Kawa Model can be used as a supplemental tool. The Kawa Model provides a holistic approach as it aims to understand the complex interplay between occupation, environment, and personal factors of individuals; thus, what encompasses the whole person is looked at, rather than just a certain part. The Kawa Model has been applied to healthcare settings before to increase collaboration. In a study by Ober and Lape (2019), the Kawa Model was used by an acute care rehabilitation team throughout a five-week intervention to address components of team building. Post-intervention, the team agreed that they could clearly communicate and effectively collaborate. Another study found that for a healthcare team in a skilled nursing facility, using the Kawa Model helped to create a common language for interprofessional collaboration (Lape et al., 2019). When there is more collaboration or support in the workplace, this can help in the decrease or management of burnout experienced by pediatric OTPs. A study with a population of physicians and nurses similarly found that when the team was less isolated and worked more efficiently and

collaboratively, this was associated with a reduced chance of experiencing burnout (Lu et al., 2023).

### **The Kawa Model as an Intervention for Resilience to Burnout**

Based on the previous studies, using the Kawa Model as a main intervention has beneficially impacted the individuals involved. The implementation of the Kawa Model on pediatric OTPs allows them to visualize their life as depicted in their own personal river. As a result, the Kawa Model can guide pediatric OTPs to build resilience by addressing challenges faced at the individual level in order to mitigate burnout (Siddique et al., 2024). Through its contrasting philosophy from Western concepts, the Kawa Model's approach to viewing individual life experiences as a whole, fosters balance between all the factors affecting the individual (Naidoo et al., 2023). Balancing life factors signify the connection between the Kawa Model and its use for building resilience in pediatric OTPs through increased self-awareness and mindfulness in visualizing what can be controlled.

### **Integrating the Kawa Model Into Addressing Burnout**

As previously discussed, the Kawa Model is used to assess an individual's life flow. It compares an individual's life into four components of a river: water, driftwood, rocks, and river walls and floor. To apply this model among pediatric OTPs, pediatric OTPs can visualize their own river by identifying work-related and personal factors to understand variables contributing to burnout or variables that put them at risk for developing burnout.

The water within a river will represent the interdependencies of all the river components to shape the pediatric OTPs' work-life flow (Iwama et al., 2009). The

driftwood, rocks, and river walls and floor play a vital role in how the water seamlessly, or not so seamlessly, travels through the river to assess the current state of their life journey. Depending on the contexts of the overall river, “an optimal state of well-being can be metaphorically portrayed by an image of strong, deep, unimpeded flow,” whereas a weakened water flow would indicate a state of disharmony and concern (Iwama et al., 2009, p. 1129).

Since driftwood represents personal assets and liabilities, pediatric OTPs can include their income, resources, work relationships, any specialized equipment used while working, and personal attributes, such as the values they hold within their role and the character and personality traits they display in the workplace (Iwama et al., 2009). Additionally, they can include the knowledge, experience, and skills they have acquired during direct patient care and working with interdisciplinary teams that positively or negatively affect their circumstances.

Pediatric OTPs can include discrete circumstances that obstruct their work-life flow to represent the rocks within their river (Iwama et al., 2009). Examples would include physical or psychological impairments that affect their occupational performance when working. These could be congenital conditions, neurological conditions, physical disabilities, and emotional challenges that may disrupt performing their duties as a pediatric OTP. These rocks may be seen as temporary or permanent and vary in size, depending on the severity of these conditions.

The river walls and floor would explain the structural context of the physical and social environment that pediatric OTPs are experiencing, both inside and outside the workplace (Iwama et al., 2009). It shapes their experiences and influences how

they perceive and conduct themselves. In a work setting, this would include how accessible the environment is for them, the various or limited resources provided to them, and their positive or negative interactions with administrators, management, colleagues/other service providers, clients, and clients' families.

As effective as the Kawa Model is in depicting an image of an individual's life journey, there are potential challenges and considerations when implementing it into practice (Iwama et al., 2009). To gain the most comprehensive outlook of an individual's life flow, individuals must be able to understand how to properly complete their river by including all the appropriate life factors under each river component. An individual's uncertainty and/or inability to disclose relevant and important information due to fear or shame can negatively influence the effectiveness of the Kawa Model (Carmody et al., 2007). Therefore, the Kawa Model must be thoroughly explained to all clients before intervention to ensure its proper use and effectiveness.

Additionally, it is possible for therapists to misinterpret their clients' river due to perceived misconceptions. Since perceptions may differ between the therapist and client from a simple drawing, creating direct and appropriate interventions for treatment may be difficult (Carmody et al., 2007). The Kawa Model can serve as a baseline to understand the perspectives and priorities of clients, but should be used in conjunction with additional tools for a more comprehensive evaluation (Ober et al, 2022).

**Theoretical Alignment: Kawa Model and Desired Outcomes**

The Kawa Model is used as a reflective tool in order for the individual to display their emotions and lifestyles creatively. The Kawa Model uses features of a river to identify specific aspects of an individual's life, what may impede it, and what are supportive factors. These specific aspects that are addressed by the model allow the individual to visualize what can be done to improve their work-life including what factors need to be changed to combat burnout with resilience. By using the Kawa Model to identify factors that cause stress and burnout, and preventing resiliency, individuals can improve their behaviors and possibly prevent burnout through resilience. Having the individual identify their barriers and factors that slow the flow of their life can also help in creating treatment plans. These treatment plans would be able to direct individuals toward resources that would enhance occupational well-being. This practice can be applied to occupational therapists working in pediatric settings who are experiencing burnout to identify possible causes of their work-related stress. This intervention tool can be used to recognize factors of the clinician's lifestyle that promote comfort/happiness to combat burnout.

The Kawa Model is a theoretical framework that can be used as a significant intervention to enhance resilience in pediatric OTPs against burnout. Implications for the Kawa Model used for pediatric occupational therapy settings include a holistic approach to identifying strengths, encouraging self-reflection and social support, promoting health and well-being, and fostering meaning and purpose. While this study aims to target burnout in pediatric OTPs, future research should explore the application of the Kawa Model as an intervention in different settings and diverse

populations. This can facilitate a culturally sensitive, strengths-based perspective and approach for many individuals.

## **Methodology**

### **Background and Rationale**

The topic of burnout in pediatric occupational therapists raises concern because evidence suggests that due to severe occupational stress, healthcare professionals suffer from “emotional exhaustion, cynicism, and low personal accomplishment” (Poulsen et al., 2014, p. 2). High emotional exhaustion was an element of burnout that was most experienced by occupational therapists. When individuals experience exhaustion, their ability to problem solve creatively becomes diminished (Derakhshanrad et al., 2019). This impacts clinical reasoning because it requires both problem solving and creativity. Communities and clients receive fewer effective interventions when occupational therapists are burnt out. This supports a connection between OTP burnout and the need to address their condition. It is important to determine the factors leading to burnout in pediatric OTPs because there is limited research involving building resilience to burnout. Resilience must be developed to combat burnout, which means having the ability to bounce back from adversity and keep pushing forward (Waterworth & Grace, 2021). Our study focuses on what factors are associated with burnout and resilience so that employers at pediatric clinics have effective strategies to decrease burnout and increase resilience for their staff. In turn, decreased burnout and increased resilience can lead to better, effective care, which would benefit the employer, the clients, and their communities. Our study explored how the Kawa Model is perceived by OTPs as a tool or

technique to increase their workplace resilience by determining a customized approach to viewing and managing their life or “Kawa” flow.

### **Definitions**

To further define important concepts, the Kawa Model was developed as an alternative to the Western models of rehabilitation (Iwama et al., 2009). It focuses on the “transactional quality of human-environment dynamics and the importance of inter-relations of self and others through the metaphor of a river’s flow” (Iwama et al., 2009, p. 1125). It gathers information regarding the “contexts that shape and influence the realities and challenges of people’s day-to-day lives” (Iwama et al., 2009, p. 1125). Applying this model to pediatric OTPs allows us to identify work-related factors that influence their work-life flow, specifically factors contributing to burnout.

Based on the eleventh revision of the *International Classification of Diseases*, burnout is a “syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: feelings of energy depletion or exhaustion, increased mental distance from one’s job, or feelings of negativism or cynicism related to one’s job; and reduced professional efficacy” (World Health Organization, 2019). Feelings of burnout will be evaluated with questions related to self-efficacy, work stress, and social problem-solving and be measured by the Maslach Burnout Inventory to address emotional exhaustion, depersonalization, and personal achievement within the workplace.

According to the American Psychological Association, Albert Bandura proposed self-efficacy as “an individual’s subjective perception of their ability to perform in a given setting or to attain desired results” (American Psychological Association, n.d-a.).

Measuring one's self-efficacy assists in determining their functional performance and the coping strategies they use to carry out within their roles. The World Health Organization (n.d.) describes work-related stress as the "response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and challenge their ability to cope". These feelings of stress can be physically and emotionally harmful, indicating their emotional response to their work environment. Social problem-solving refers to the "process by which individuals identify and enact solutions to social life situations in an effort to alter the problematic nature of the situation" (D'Zurilla & Nezu, 1999, p. 199). By identifying pediatric OTPs' ability to engage in social problem-solving with their colleagues, we can understand their perceptions and behaviors in achieving their desired outcomes when faced with stressful situations.

For our methodology, gathering data regarding self-efficacy, work stress, and social problem-solving helped identify factors relating to burnout. To combat these feelings of burnout, we needed to assess pediatric OTPs' resilience, "the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands" (American Psychological Association, n.d-b.). The Work Resilience Scale (ReWoS-24) was used to determine their ability to withstand and recover from difficulties within the workplace, which could positively influence their ability to meet the demands of their job and prevent burnout from developing (Sweetman et al., 2022).

The Kawa Model demonstrates promise as an intervention tool for pediatric OTPs to combat burnout. Employing the metaphor of a river to address an individual's life

factors offers a holistic approach to understanding and managing stressors in pediatric OTPs. With its application, they can enhance their resilience and overall quality of life. With our methodology employing this, we hope to attain and observe this outcome as a result of our study.

### **Research Design**

We utilized a descriptive survey design to understand the characteristics and experiences of pediatric OTPs relating to burnout and resilience. This was done by observing, collecting, and analyzing the responses from our participants. The survey included self-made questions and the ReWoS-24. The self-made questions revolved around the Kawa Model and experiences of pediatric OTPs. The ReWoS-24 was used to examine how employees experience aspects of resilience in the workplace.

### **Material and Methods**

Our study employed a mixed methods approach to evaluate qualitative, open-ended questions, in combination with obtaining quantitative data based on the results of the assessments we will be providing. We utilized convenience sampling through social media platforms to recruit participants, with emphasis on LinkedIn and Instagram. A thesis member posted a flyer on these social media platforms with their contact information attached so that potential participants could inquire about taking the survey.

We summarized the values by calculating their frequency distribution, showing how often each value occurs as a number or percentage. This allowed us to understand the percentage of individuals that selected a particular answer on our survey. We did a qualitative analysis to create codes based on the participants' response to draw conclusions. We generated codes by categorizing commonly seen patterns to create

themes that accurately represent the data. This data would help explain the social phenomena of burnout among pediatric OTPs to understand how burnout develops in the workplace. This inductive approach used specific contexts and interpretations of the participants' own rivers to form generalizations appropriately related to our hypothesis.

### **Participants and Recruitment**

The target population of our research was 50 pediatric OTPs working in any setting. All participants must have been an OTP of at least 18 years of age, working in a pediatric setting for at least one year. They also must have seen the recruitment flyer posted on the Stanbridge Student Occupational Therapy Association Orange County (SSOTAOC) Instagram profile, Stanbridge University's LinkedIn media page, or Dr. Jenna Mele's public post on her personal LinkedIn profile. We contacted these sites to obtain permission to post our flyer on their platforms to recruit participants. To contact them, we emailed Dr. Jenna Mele and Stanbridge University Media and sent a direct message to the Instagram of SSOTAOC. We first messaged them by explaining our research study, asking what procedures were needed to share the flyer on their platform, and asking if anything else was necessary other than an ethics approval. When they responded back with their approval, a research site agreement form was sent to them for their signature. Once all forms were signed, they were emailed to the Stanbridge University program director and the vice president of instruction for their signatures. The completed research site agreement forms were added to the Stanbridge University Institutional Review Board (IRB) application and sent to the IRB for approval to conduct the study and recruit participants.

Participants must have access to a computer or electronic device that can access the survey and fill it out completely, answering the questions to the best of their ability. Additionally, participants needed to be able to withstand screen time for about 15-20 minutes. Participants who did not complete the entire survey were not counted. If one survey was not fully completed, that participant was not counted as part of the study. Since the survey was administered online, participants who are visually impaired were excluded. Although there were demographic exclusions, demographic questions, such as age, workplace setting, and years of experience were included in the survey to differentiate the participants during data collection and protect personal identifiable information.

Informed consent was obtained in order to notify participants of what information will be shared throughout the study. Due to the minimal risk presented in this study, participants' electronic signatures are accepted. Participant identifiers were also confidential and under password protected emails that only one member of the research team had access to. IRB approval of the study was also obtained for information collected from the participants as well as to protect the participants' rights, welfare, and privacy. As our study used a mixed methods approach, collecting both quantitative and qualitative data, this helped to gain a more comprehensive understanding of our topic. From the quantitative research involved, subjective numeric data can be collected quickly, making it convenient, and generalizations can be formed. Data can also be easily replicated for future research. As for the qualitative research involved, this allows attitudes in the workplace to be captured and enables a deeper understanding of complex experiences and

opinions. Altogether, employing a mixed methods approach was advantageous in identifying themes and patterns.

### **Possible Limitations**

A limitation of our study was that our anticipated sample size of 50 participants was small. With our small sample size, the data may not be significant enough to be generalized and applicable to the overall pediatric OTP population. This can possibly create a selection and measurement bias. A selection bias is when a sample is not representative of a population. As for measurement bias, it is when the instruments or methods used in a study may not be reliable across a broader population.

In addition, due to our survey being online, there are different limitations that can arise. Firstly, not all individuals have access to the internet or digital devices. Due to this, certain demographics may not be included, such as low-income groups. Secondly, our survey may have lower response rates. This is because of the lack of personal interaction; having face-to-face interviews would possibly make individuals more willing to participate. Finally, although precautions and protection methods have been taken, there is a risk of data breaches. This can raise concerns about data security and privacy.

### **Ethical and Legal Considerations**

A curated email specifically made for data collection was created and can only be accessed by one member of the research team and the principal investigator. To ensure the privacy and anonymity of participants involved in our research study, all personal data collected was de-identified. There were no questions in our survey related to current workplace names and we had a password-protected database. No identifiers were attached to the data. All data will be destroyed after three years, and no personal

identifiers will be made public, presented, or published. To protect vulnerable populations, such as children and individuals with disabilities, we established certain inclusion criteria for our participants, which are that they must be an OTP of at least 18 years of age, are working in a pediatric setting for at least one year, have access to an electronic device to complete the survey, and can withstand screen time for about 15 to 20 minutes. They also must have seen the recruitment flyer posted on the SSOTAOC Instagram profile, Stanbridge University's LinkedIn media page, or Dr. Jenna Mele's public post on her personal LinkedIn profile. Additionally, participants who were visually impaired and/or did not thoroughly complete the survey will were excluded from our study.

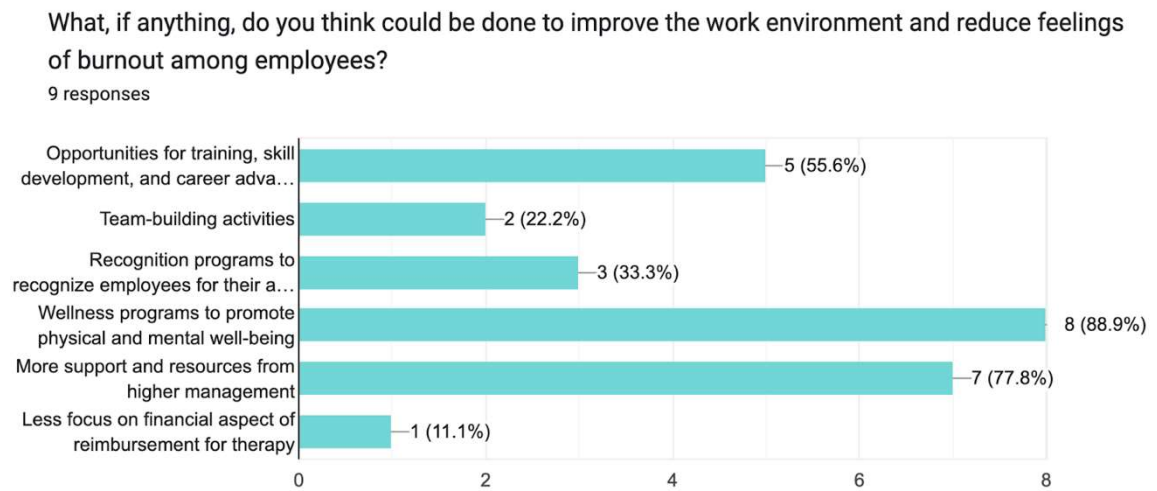
To facilitate our research, we obtained ethical approval from the administrators of the social media groups we intend to utilize, and we received consent from Dr. Jenna Mele to post our recruitment flyer on her personal LinkedIn account. Since Instagram and LinkedIn were our primary sources, we contacted the administrators of SSOTAOC account on Instagram and Dr. Jenna Mele to gain approval via private messaging. When we received IRB approval, we obtained all participants' informed consent, providing them with information regarding the description, time involvement, and risks and benefits of our study before they complete the survey. Additionally, we included the participants' rights and the protective measures being taken to ensure participant protection throughout our study. Furthermore, we have gained approval via email to use the Work Resilience Scale (ReWoS-24) incorporated in our survey to collect quantitative data from our participants (Sweetman et al., 2022). The remaining questions in the survey were

originally curated by the members of the research team to gain qualitative data from participants.

## Results

### Figure 1

#### *Results from Participant Survey (Riverbanks)*



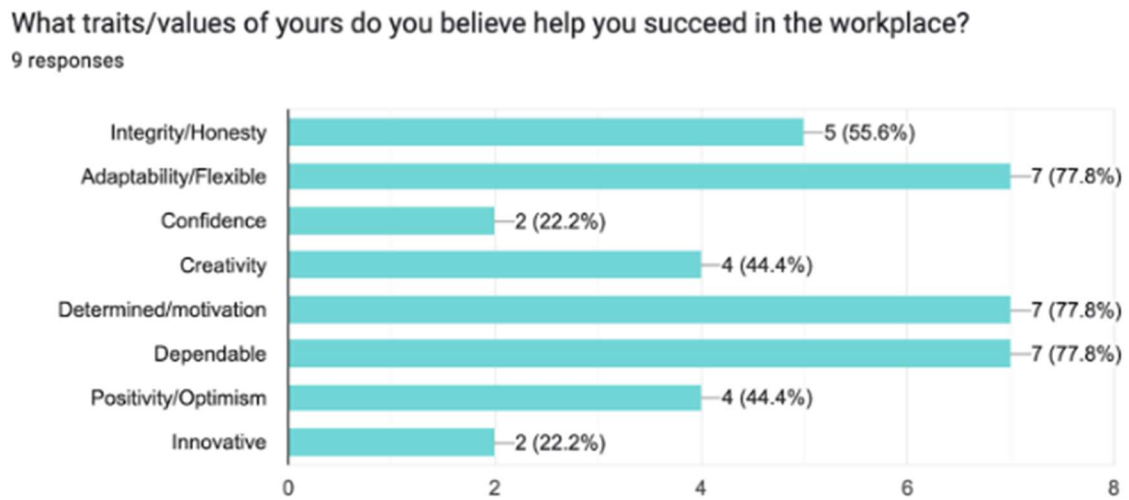
**Figure 2**

*Results from Participant Survey (Driftwood)*



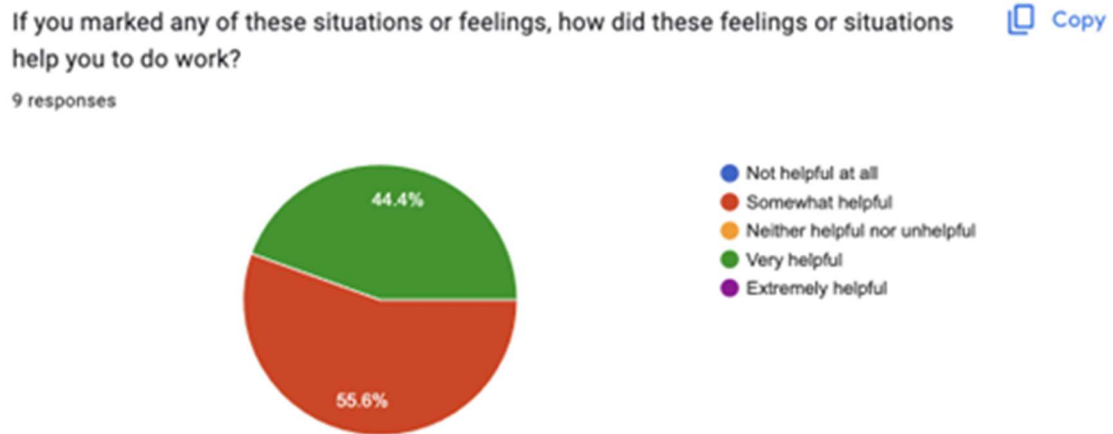
**Figure 3**

*Results from Participant Survey (Driftwood)*



**Figure 4**

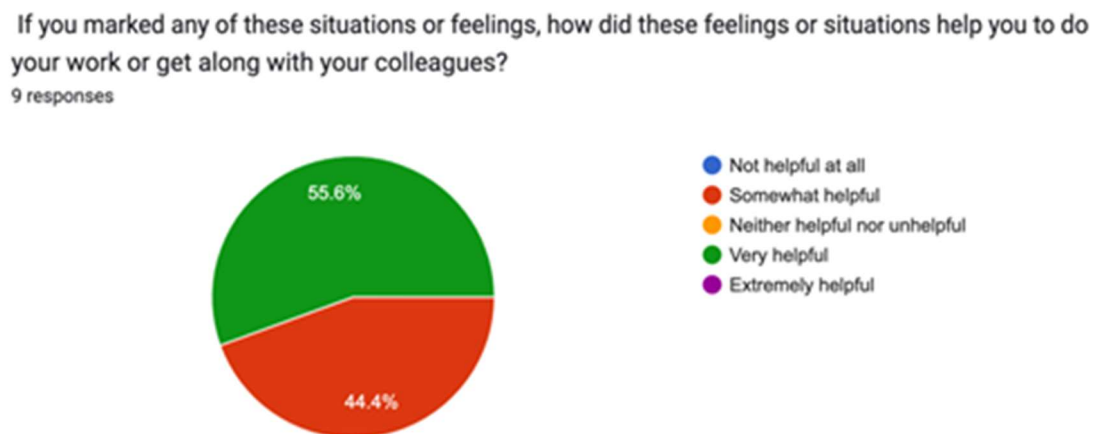
*Results from Participant Survey (Individual ReWoS-24)*



*Note:* Among the participants who completed the ReWoS-24 scale, highlighting individual resilience factors, majority found it to be somewhat helpful when navigating work-related stressors.

**Figure 5**

*Results from Participant Survey (Team ReWoS-24)*



*Note:* Among the participants who completed the ReWoS-24 scale, highlighting team resilience factors, majority found it to be very helpful when navigating work-related stressors.

To examine the coping strategies of pediatric OTPs, a survey was sent out to gather both qualitative and quantitative data. Of the participants that filled out the survey, four participants ranged from 31-40 years old, and five participants were 21-30 years old. 66.7% of these participants identified as female and 33.3% identified as male. Seven participants were currently working as registered, licensed occupational therapists, while two participants were working as certified occupational therapy assistants. 66.7% worked in pediatric outpatient clinics, while 33.3% worked in pediatric inpatient clinics. Their years of experience varied from five participants working for 1-3 years, two participants working for 5-7 years, and one participant working for more than 7 years.

Based on the qualitative data collected, participants experienced similar work factors, influencing their life flow. Regarding participants' rocks and challenges, common themes were identified as a) OTPs experience stress and exhaustion due to high work demands; b) OTPs experience a decreased social life and no motivation to engage in meaningful occupations, causing a poor work-life balance; and c) OTPs experience difficulties with patient care, such as unmotivated patients to adhere to treatment or home care plans, effective communication with patients and their families, and pressure to make a difference in their patients' lives. Common themes concerning participants' riverbanks, or physical and social environments, included a) All pediatric OTPs included in this study receive strong support from their colleagues. They work together with their colleagues to delegate tasks if they are experiencing heavy workloads, have clear effective communication during team meetings, offer verbal support and encouragement, and go on walks in-between clients for mental breaks; b) Half of the participants do not feel supported due to lack of communication, feeling overlooked while handling a full

caseload and dealing with the intense pressure of demands assigned to them; and c) There is a positive impact on pediatric OTPs when they feel supported by their managers, such as having mental health check-ins, being provided with resources, and cultivating healthy and strong professional relationships. The common themes relating to participants' driftwood or personal resources were a) Half of the participants do not believe they have a healthy work-life balance due to feeling stressed and fatigued from work; b) High stress levels cause participants' to experience exhaustion and fatigue, inhibiting them to engage in meaningful occupations outside of work; and c) A healthy work-life balance can be achieved with more years of experience due to enhanced time management and self-awareness. Traits that were found to contribute the most to success in the workplace were adaptability, determination, and dependability. To cope with stress and build resilience, engaging in hobbies, seeking social support, and taking personal time off to relax were found to be of utmost importance.

The figures above represent quantitative data that identify traits and strategies that could be implemented to further build resilience and succeed in the workplace. Figure 1 addresses beneficial tactics that can be incorporated in the work environment to reduce feelings of burnout among employees. The top tactics that were chosen among our participants include wellness programs to promote physical and mental well-being and more support and resources from higher management. Figure 2 shows quantitative data on what strategies OTPs find most helpful to build resilience, which are taking time off to relax with family/friends and making time to exercise or engage in hobbies. Figure 3 represents personal traits and values that help participants succeed in the workplace. Out of the eight choices we provided, adaptability/flexible, determined/motivation, and

dependable were the top three chosen traits and values. Figure 4 shows how specific traits or situations related to resiliency at an individual helped an individual do work. Results depicted in Figure 4 reveal that five out of the nine participants found specific traits somewhat helpful to work. Figure 5 represents the characteristics of resilience within a work team that allow an individual to feel satisfied at work. Results show that five out of nine participants think that these characteristics are very helpful to work.

### **Discussion**

The results of our survey provide an understanding of common stressors and possible interventions for future researchers to investigate other facets that help combat burnout in pediatric OTPs. Based on these results, it can be suggested that the Kawa Model and its components can inform better strategies to support OTPs in managing stress and maintaining their well-being.

The survey suggests a trend amongst participants feelings of stress when faced with challenges resulting in the need for wellness programs to support an individual's overall welfare. Conversely, feeling unsupported and overwhelmed connects to a lack of communication. This emphasizes the need for peer and managerial support so that a healthy work environment can be formed, which would enhance the well-being and professional satisfaction of pediatric OTPs. Driftwood indicates that the stress and fatigue caused by work inhibits their ability to engage in meaningful occupations, suggesting that high productivity in the workplace has a significant impact on their emotional and physical abilities to participate in leisure activities, hobbies, etc. However, a healthy work-life balance can be achieved through time as individuals learn to adapt to the demands of their work, prioritize their personal interests, and seek social support inside

and outside the workplace. Overall, all the common themes found from our needs assessment survey based on the Kawa Model display the need for supportive environments and personal resources so that pediatric OTPs can better navigate challenges, reducing their burnout and building resilience.

The ReWos-24 scale is used as a measure to indicate if resilience is present within an individual or team. Implementing this scale within our study allowed us to target individual needs and provide insight into their personal resilience levels. The Kawa Model can be used in future research as a tool to collect data on what specific traits correlate to resiliency. Future research is needed to implement more specific questions that focus on certain factors within an individual's life to broaden the scope of how effective the Kawa Model can be to prevent burnout.

### **Limitations**

We encountered limitations throughout the duration of our study. Due to a delay in the dissemination of our survey, we only had a 2-week period to collect participant information, preventing the amount of data needed for a more accurate representation of the OTP population in regard to burnout. As part of our survey, we did not include questions regarding the frequency of workdays and hours a week for our participants, limiting our understanding of if our participants work full time, part time, or per diem. This confounding variable may have affected the type of workload participants may face within a day, including if they have other jobs with extra workload, leading to potential biases in the interpretation of our results. Additionally, there was a lack of incorporating definitions embedded in our survey, including "resilience", "burnout", and "team", in which participants may have differing interpretations of the questions asked.

Another limitation was that participants answered our survey questions at only one point in time, making it a cross-sectional study. While this allowed us to compare different groups within the OTP population at a single point in time, we were not able to analyze behavior and changes over time. Since this one-time measurement was taken, cause-and-effect relationships could not be determined. Therefore, while our study found correlations between certain factors and burnout, it cannot be concluded if those factors directly cause burnout.

### **Conclusion**

Due to the lack of research regarding how the Kawa Model can directly combat burnout to promote occupational performance among pediatric OTPs, our research study aimed to explore its potential through a needs assessment survey, in hopes that it will assist future researchers in developing effective Kawa Model interventions to reduce burnout and improve resilience. Our needs assessment survey offered a comprehensive approach to understanding various characteristics that impact well-being by identifying our participants' challenges, useful strategies to navigate their challenges, positive traits, and more. Pediatric OTPs experience high levels of stress within the workplace, putting them at risk for developing physical and mental health problems (Goffredo et al., 2024). To reduce these risks, we hope that the Kawa Model will assist pediatric OTPs in creating resiliency by identifying stress factors and creating a goal to combat burnout.

### References

- American Occupational Therapy Association. (2020). Occupational therapy practice framework: Domain and process (4th ed.). *American Journal of Occupational Therapy*, 74(Suppl. 2), Article 7412410010.  
<https://doi.org/10.5014/ajot.2020.74S2001>
- American Psychological Association. (n.d.-a). Self-efficacy. In *APA dictionary of psychology*. Retrieved May 12, 2024, from <https://dictionary.apa.org/self-efficacy>
- American Psychological Association. (n.d.-b). Resilience. In *APA dictionary of psychology*. Retrieved May 12, 2024, from <https://dictionary.apa.org/resilience>
- Anyfantis, I. D., Psychouli, P., Varianou-Mikelidou, C., & Boustras, G. (2020). Cross-sectional survey on burnout and musculoskeletal disorders in Greek and Cypriot occupational therapists. *Occupational Therapy in Mental Health*, 36(3), 291–302.  
<https://doi.org/10.1080/0164212X.2020.1779630>
- Carmody, S., Nolan, R., Ni Chonchuir, N., Curry, M., Halligan, C., & Robinson, K. (2007). The guiding nature of the Kawa (river) Model in Ireland: Creating both opportunities and challenges for occupational therapists. *Occupational Therapy International*, 14(4), 221–236. <https://doi.org/10.1002/oti.235>
- Derakhshanrad, S. A., Piven, E. F., & Zeynalzadeh. B. (2019). The relationships between problem-solving, creativity, and job burnout in Iranian occupational therapists. *Occupational Therapy in Health Care*, 33(3), 1–16.  
<https://doi.org/10.1080/07380577.2019.1639098>
- D’Zurilla, T. J., & Nezu, A. M. (1999). *Problem solving therapy: A social competence approach to clinical intervention* (2nd ed.). Springer.

- Goffredo, C. A., Bowyer, P., & Yeatts, P. (2024). Stress among pediatric occupational therapists: A study of prevalence, work and demographic factors. *Occupational Therapy in Healthcare, 38*(3), 816-826.  
<https://doi.org/10.1080/07380577.2024.2309677>
- Gregg, B. T., Howell, D. M., Quick, C. D., & Iwama, M. K. (2015). The Kawa river Model: Applying theory to develop interventions for combat and operational stress control. *Occupational Therapy in Mental Health, 31*(4), 366–384.  
<https://doi.org/10.1080/0164212X.2015.1075453>
- Iwama, M. K., Thomson, N. A., & Macdonald, R. M. (2009). The Kawa Model: The power of culturally responsive occupational therapy. *Disability and Rehabilitation, 31*(14), 1125–1135. <https://doi.org/10.1080/09638280902773711>
- Judd, M. J., Dorozenko, K. P., & Breen, L. J. (2017). Workplace stress, burnout and coping: A qualitative study of the experiences of Australian disability support workers. *Health and Social Care in the Community, 25*(3), 1109–1117.  
<https://doi.org/10.1111/hsc.12409>
- Korhonen, M., & Komulainen, K. (2023). Individualizing the burnout problem: Health professionals' discourses of burnout and recovery in the context of rehabilitation. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine, 27*(5), 789–809. <https://doi.org/10.1177/13634593211063053>
- Lape, J. E., Lukose, A., Ritter, D. R. M., & Scaife, B. D. (2019). Use of the Kawa Model to facilitate interprofessional collaboration: A pilot study. *Internet Journal of Allied Health Sciences and Practice, 17*(1), 1–10.  
<https://doi.org/10.46743/1540-580X/2019.1780>

- Lu, M. A., O'Toole, J., Shneyderman, M., Brockman, S., Cumpsty-Fowler, C., Dang, D., Herzke, C., Rand, C. S., Sateia, H. F., Van Dyke, E., Eakin, M. N., & Daugherty Biddison, E. L. (2023). "Where you feel like a family instead of co-workers": A mixed methods study on care teams and burnout. *Journal of General Internal Medicine*, 38(2), 341–350. <https://doi.org/10.1007/s11606-022-07756-2>
- Naidoo, O., Christopher, C., Lingah, T., & Moran, M. (2023). The Kawa Model: A self-reflection tool for occupational therapy student development in practice placements in Australia. *Occupational Therapy International*, 2023, 1–10. <https://www.doi.org/10.1155/2023/2768898>
- Ober, J. L. & Lape, J. E. (2019). Cultivating acute care rehabilitation team collaboration using the Kawa Model. *Internet Journal of Allied Health Sciences and Practice*, 17(3), 1–8. <https://www.doi.org/10.46743/1540-580X/2019.1827>
- Ober, J. L., Newbury, R. S., & Lape, J. E. (2022). The dynamic use of the Kawa Model: A scoping review. *Open Journal of Occupational Therapy*, 10(2), 1–12. <https://doi.org/10.15453/2168-6408.1952>
- Park, J. H., & Park, J. H. (2017). Association among work-related musculoskeletal disorders, job stress, and job attitude of occupational therapists. *Occupational Therapy in Health Care*, 31(1), 34–43. <https://doi.org/10.1080/07380577.2016.1270482>
- Poulsen, A. A., Meredith, P., Khan, A., Henderson, J., Castrisos, V., & Khan, S. R. (2014). Burnout and work engagement in occupational therapists. *British Journal of Occupational Therapy*, 77(3), 156–164. <https://doi.org/10.4276/030802214X13941036266621>

- Ridremont, D. & Boujut, E. (2023) Burnout among French pediatric healthcare workers during the COVID-19 pandemic. *Psychology, Health & Medicine*, 28(7), 1901–1915. <https://doi.org/10.1080/13548506.2023.2216465>
- Shin, J., McCarthy, M., Schmidt, C., Zellner, J., Ellerman, K., & Britton, M. (2022). Prevalence and predictors of burnout among occupational therapy practitioners in the United States. *American Journal of Occupational Therapy*, 76(4), Article 7604205080. <https://doi.org/10.5014/ajot.2022.048108>
- Sibeoni, J., Bellon-Champel, L., Verneuil, L., Siaugues, C., Revah-Levy, A., & Farges, O. (2021). Workplace environment around physicians' burnout: A qualitative study in French hospitals. *Scandinavian Journal of Work, Environment & Health*, 47(7), 521–530. <https://doi.org/10.5271/sjweh.3977>
- Siddique, H., Maweni, R. M., Jr., Lupi, M., Woods, S., Shirazi, S., Foley, R. W., & Machando, D. (2024). Resilience and burnout of healthcare workers during the early COVID-19 pandemic. *British Journal of Nursing*, 33(3), 144–150. <https://doi.org/10.12968/bjon.2024.33.3.144>
- Sweetman, J., Van der Feltz-Cornelis, C. M., Elfeddali, I., & De Beurs, E. (2022). Validation of the work stress screener (WOSS-13) and resilience at work scale (ReWoS-24). *Journal of Psychosomatic Research*, 160, Article 110989. <https://doi.org/10.1016/j.jpsychores.2022.110989>
- Waterworth, S., & Grace, A. M. (2021). Resilience and burnout in pediatric nurses in a tertiary children's hospital. *MCN: The American Journal of Maternal/Child Nursing*, 46(3), 168–173. <https://doi.org/10.1097/nmc.0000000000000713>

World Health Organization. (2019). *International statistical classification of diseases and related health problems* (11th ed.). <https://icd.who.int/>

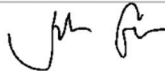
World Health Organization. (n.d.). *Occupational health: Stress at the workplace*.  
<https://www.who.int/news-room/questions-and-answers/item/occupational-health-stress-at-the-workplace>

Wressle, E., & Samuelsson, K. (2014). High job demands and lack of time: A future challenge in occupational therapy. *Scandinavian Journal of Occupational Therapy*, 21(6), 421–428. <https://doi.org/10.3109/11038128.2014.941929>

**Appendix A**  
**Institutional Review Board Approval**

Dear Dr. Jenna Mele and Students,

The Stanbridge University Institutional Review Board has completed the review of your application entitled "Exploring the Kawa Model's effectiveness as part of a treatment plan against burnout in pediatric occupational therapy practitioners." Your application (#07MSOT013) is approved and categorized as Expedited.

IRB Application Number	#07MSOT013
Date	09/16/2024
Level of Review	Expedited
Application Approved	X
Conditional Approval	
Disapproved	
Comments	The requested Minor changes have been reviewed and confirmed as completed by the IRB. (09/16/2024)
Signature of IRB Chair	

Please note that any anticipated changes to this approved protocol requires submission of an IRB Modification application with IRB approval confirmed prior to their implementation.

Sincerely,  
Julie Grace, M.S., M.A.  
IRB Chair

Appendix B
Site Approval Forms

Research Site Agreement Form
Stanbridge University
AGREEMENT
Research Site: Jenna Mele's LinkedIn page
RESEARCH STUDY INFORMATION
Student Investigator(s) Name(s):
1. Bianca Belanio
2. Kimberly Esguerra
3. Tiffany Lacambra
4. Sara Lapidario
Principle Student Investigator Name: Bianca Belanio
Description of Research:
We aim to explore how effective the Kawa Model process is at assisting pediatric occupational therapy practitioners (OTPs) in identifying factors contributing to burnout.

Research Site Agreement Form
Stanbridge University
Intellectual Property Statement:
Stanbridge University reserves the right to use, publish, and disseminate the results of the research findings.
Thesis Advisor Contact Information:
Name: Dr. Jenna Mele
Email address: jmele@stanbridge.edu
RECRUITMENT PLAN
Means by which the researcher(s) will contact and/or recruit participants:
We will recruit participants by posting a flyer on social media: LinkedIn groups and Instagram.
SITE REPRESENTATIVE AGREEMENT
I agree to the recruitment and data collection methods to be used in this study, and I authorize the investigator to conduct research at:
Facility Name/Research Site Name: Jenna Mele's LinkedIn page
Representative authorizing agreement: Jenna Mele
Signature: [Handwritten Signature]
Date: 7/18/2024

Research Site Agreement Form
Stanbridge University
STANBRIDGE UNIVERSITY AGREEMENT SIGNATURES
I/We accept the terms of this agreement.
Student Investigator 1: Bianca Belanio, Title: OT student, Signature: [Handwritten Signature], Date: 7/11/2024
Student Investigator 2: Kimberly Esguerra, Title: OT student, Signature: [Handwritten Signature], Date: 7/11/2024
Student Investigator 3: Tiffany Lacambra, Title: OT student, Signature: [Handwritten Signature], Date: 7/11/2024
Student Investigator 4: Sara Lapidario, Title: OT student, Signature: [Handwritten Signature], Date: 7/11/2024
Faculty Thesis Advisor: Jenna Mele, Title: OTD, OTR/L, Signature: [Handwritten Signature], Date: 7/18/2024
Program Director: Dr. Myka Persson, Title: MSOT Program Director, Signature: [Handwritten Signature], Date: Aug 12, 2024
Dr. Kelly Hamilton, Vice President of Instruction, Stanbridge University, Signature: [Handwritten Signature], Date: Aug 13, 2024

Research Study Inquiry
Kawa Model -kawamodeloc@gmail.com
Hello Dr. Mele,
As you may know, we are looking to recruit participants for our thesis group's research study. We would like to request permission from you to post our flyer on your LinkedIn page.
Warm regards,
Bianca Belanio
MSOT 13A
Kawa Model
Hello Dr. Mele, We would just like to follow up on our previous email. Thank you!
Jenna Mele
Yes! You have permission to post to my personal LinkedIn page to recruit participation.
From: Kawa Model <kawamodeloc@gmail.com>
Sent: Tuesday, June 25, 2024 2:46 PM
To: Jenna Mele <jmele@stanbridge.edu>
Subject: Research Study Inquiry



**Research Site Agreement Form**  
Stanbridge University

**AGREEMENT**

Research Site: Stanbridge University Media  
 Research Site Address: 2041 Business Center Dr, Irvine, CA, 92612  
 Title of Proposed Research: The Kawa Model and its Effectiveness on Resilience in Pediatric Occupational Therapy Practitioners

**RESEARCH STUDY INFORMATION**

**Student Investigator(s) Name(s):**  
 1. Bianca Belanio  
 2. Kimberly Esguerra  
 3. Tiffany Lacambra  
 4. Sara Lapidario  
 Bianca Belanio  
**Principle Student Investigator Name:** Bianca Belanio  
 Email address: kawamodeloc@gmail.com Phone Number: (951) 268-1193  
**Duration of the study:** 3 months  
 Authorization Effective Date: 7/22/2024 Authorization Expiration Date: 11/01/2024  
 Allowed Number of Contact Hours: N/A The study will be completed by (date): 11/01/2024

**Description of Research:**  
 We aim to explore how effective the Kawa Model process is at assisting pediatric occupational therapy practitioners (OTPs) in identifying factors contributing to burnout. This will be done by recruiting pediatric OTPs to complete a 15-20 minute online survey, including multiple choice and open-ended questions regarding stress, burnout, and resilience. We hypothesize that the Kawa Model will assist pediatric OTPs in creating resiliency by identifying stress factors and creating a goal to combat burnout.



Research Site Agreement 1 of 3

**Research Site Agreement Form**  
Stanbridge University

**Intellectual Property Statement:**

Stanbridge University reserves the right to use, publish, and disseminate the results of the research findings. The University shall provide the research site with a copy of the final research product at the earliest practicable time.

**Thesis Advisor Contact Information:**

Name: Dr. Jenna Mele  
 Email address: jmele@stanbridge.edu Phone Number: (213) 314-1052

**RECRUITMENT PLAN**

Means by which the researcher(s) will contact and/or recruit participants:

We will recruit participants by posting a flyer on social media: Stanbridge Media, LinkedIn groups, and Instagram. LinkedIn groups: Stanbridge University, and Jenna Mele; Instagram: stanbridge.ssota

Our message: Hello, I am a student researcher from Stanbridge University looking to recruit participants for my thesis group's research study. I wanted to ask if there were any procedures I needed to do in order to share our research study on \_\_\_\_\_ is there anything else necessary other than an ethics approval?

**SITE REPRESENTATIVE AGREEMENT**

I agree to the recruitment and data collection methods to be used in this study, and I authorize the investigator to conduct research at:

Facility Name/Research Site Name: Stanbridge University Media

Representative authorizing agreement: Karli Berkompas

Title: Operations Manager, Media + Communications

Signature: [Signature] Date: 8/20/24



Research Site Agreement 2 of 3

**Research Site Agreement Form**  
Stanbridge University

**STANBRIDGE UNIVERSITY AGREEMENT SIGNATURES**

I/We accept the terms of this agreement.

**Student Investigator 1:** Bianca Belanio Title: OT Student  
 Signature: [Signature] Date: 7/15/24

**Student Investigator 2:** Kimberly Esguerra Title: OT Student  
 Signature: [Signature] Date: 7/15/24

**Student Investigator 3:** Tiffany Lacambra Title: OT Student  
 Signature: [Signature] Date: 7/15/24

**Student Investigator 3:** Sara Lapidario Title: OT Student  
 Signature: [Signature] Date: 7/15/24

**Faculty Thesis Advisor:** Dr. Jenna Mele Title: OTD  
 Signature: [Signature] Date: 7/15/24

**Program Director:** Dr. Myka Persson Title: MSOT Program Director  
 Signature: [Signature] Date: Aug 12, 2024

**Dr. Kelly Hamilton**  
 Vice President of Instruction, Stanbridge University  
 Signature: [Signature] Date: Aug 13, 2024



Research Site Agreement 3 of 3

**Research Study Inquiry** Inbox x

**K** Kawa Model <kawamodeloc@gmail.com> to media@stanbridge.edu  
 Fri, Jun 14, 10:50 AM

Hello, I am a student researcher from Stanbridge University looking to recruit participants for my thesis group's research study. I wanted to ask if there were any procedures I needed to do in order to share our research study on @stanbridgeuniversity. Is there anything else necessary other than an ethics approval?

Warm regards,  
 Bianca Belanio  
 MSOT 13A

**3**

**K** Karli Berkompas <kberkompas@stanbridge.edu> to me, media  
 Thu, Jun 20, 9:15 AM

Hi Bianca,

We could post on our LinkedIn account since that is where our largest professional community is. Once approved by the Office of Instruction, we can work on getting that posted for you. Please send over your content, and I can work on getting it approved.

**Research Site Agreement Form**  
Stanbridge University

**AGREEMENT**

Research Site: Instagram: stanbridge\_ssota  
 Research Site Address: 2041 Business Center Dr, Irvine, CA 92612  
 Title of Proposed Research: The Kawa Model and Its Effectiveness on Resilience in Pediatric Occupational Therapy Practitioners

**RESEARCH STUDY INFORMATION**

- Student Investigator(s) Name(s):**
1. Bianca Belanio
  2. Sara Lapidario
  3. Kimberly Esguerra
  4. Tiffany Lacambra

**Principle Student Investigator Name:** Bianca Belanio  
 Email address: kawamodeloc@gmail.com Phone Number: Google voice: (650)265-1193

**Duration of the study:** 3 months

Authorization Effective Date: 7/22/2024 Authorization Expiration Date: 11/01/2024

Allowed Number of Contact Hours: N/A The study will be completed by (date): 11/01/2024

**Description of Research:**

We aim to explore how effective the Kawa Model process is at assisting pediatric occupational therapy practitioners (OTPs) in identifying factors contributing to burnout. This will be done by recruiting pediatric OTPs to complete a 15-20 minute online survey, including multiple choice and open-ended questions regarding stress, burnout, and resilience. We hypothesize that the Kawa Model will assist pediatric OTPs in creating resiliency by identifying stress factors and creating a goal to combat burnout.

**Research Site Agreement Form**  
Stanbridge University

**Intellectual Property Statement:**

Stanbridge University reserves the right to use, publish, and disseminate the results of the research findings. The University shall provide the research site with a copy of the final research product at the earliest practicable time.

**Thesis Advisor Contact Information:**

Name: Dr. Jenna Mele  
 Email address: jmele@stanbridge.edu Phone Number: (213)314-1052

**RECRUITMENT PLAN**

We will recruit participants by posting a flyer on social media: LinkedIn groups, and Instagram. LinkedIn groups: Stanbridge University, and Jenna Mele Instagram: stanbridge\_ssota

Our message: Hello, I am a student researcher from Stanbridge University looking to recruit participants for my thesis group's research study. I wanted to ask if there were any procedures I needed to do in order to share our research study on \_\_\_\_\_. Is there anything else necessary other than an ethics approval?

**SITE REPRESENTATIVE AGREEMENT**

I agree to the recruitment and data collection methods to be used in this study, and I authorize the investigator to conduct research at:

Facility Name/Research Site Name: Instagram: stanbridge\_ssota

Representative authorizing agreement: Seanna Garewal

Title: Stanbridge SSOTA Social Media Chairperson

Signature: [Signature] Date: 07/18/2024



**Research Site Agreement Form**  
Stanbridge University

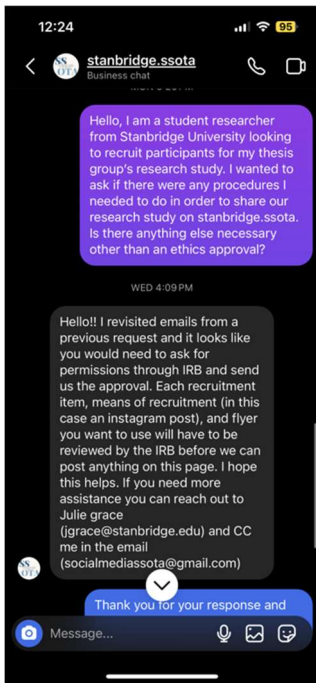
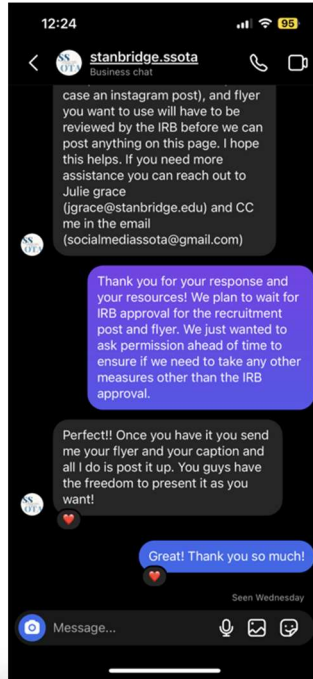
**STANBRIDGE UNIVERSITY AGREEMENT SIGNATURES**

I/We accept the terms of this agreement.

<b>Student Investigator 1:</b> Bianca Belario	Title: OT student
	7/11/2024
Signature	Date
<b>Student Investigator 2:</b> Sara Lapidario	Title: OT student
	7/11/2024
Signature	Date
<b>Student Investigator 3:</b> Tiffany Lacambra	Title: OT student
	7/11/2024
Signature	Date
<b>Student Investigator 4:</b> Kimberly Esquerre	Title: OT student
	7/11/2024
Signature	Date
<b>Faculty Thesis Advisor:</b> Jenna Mele	Title: OTD, OTRL
	7/18/2024
Signature	Date
<b>Program Director:</b> Dr. Myka Persson	Title: MSOT Program Director
	Aug 12, 2024
Signature	Date
<b>Dr. Kelly Hamilton</b> Vice President of Instruction, Stanbridge University	Aug 13, 2024
	Date
Signature	Date

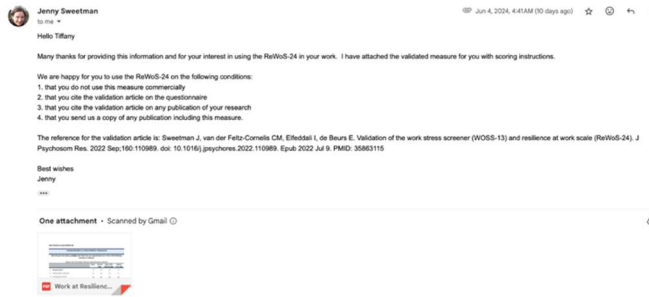
 **STANBRIDGE UNIVERSITY**

Research Site Agreement 3 of 3



## Appendix C

### ReWos-24 Scale Approval



**Work Resilience Scale (ReWos-24)**

**Individual Resilience at Work (ReWos- individual A)**

Over the past two weeks, at **WORK**, how often have you experienced one or more of the following situations or feelings?

*(Please mark the answer that best represents your situation)*

	Never	Several days	More than half the days	Almost every day
1. Being healthy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Feeling well in general?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Feeling well rested?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feeling assertive?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Feeling self-confident?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Being flexible at work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Feeling in control?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Allowing yourself to make mistakes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Feeling optimistic under workstress?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Trusting your ability to overcome barriers at work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Feeling safe under workstress?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Putting things in perspective?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Being able to set limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Experiencing work pleasure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Coping well with challenges at work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Persevering?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Having a sense of responsibility in your work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Working in a disciplined manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. If you marked any of these situations or feelings, how did these feelings or situations help you to do your work?

Not helpful at all	Somewhat helpful	Neither helpful nor unhelpful	Very helpful	Extremely helpful
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sweetman, J., Van Der Feltz-Cornelis, C. M., Ellefðáall, I. & de Beurs, E. 2022. Validation of the Work Stress Screener (WOSS-13) and Resilience at Work Scale (ReWos-24). *Journal of Psychosomatic Research*, 160, p. 110989. <https://doi.org/10.1016/j.psychres.2022.110989>.

**Team Resilience at work – ReWoS-team B**

Over the past two weeks, at **WORK**, how often have you experienced one or more of the following situations or feelings?  
(Please mark the answer that best represents your situation)

	Never	Several days	More than half the days	Almost every day
1. Experiencing a good team spirit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Feeling positively challenged?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Sharing humour with work colleagues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Receiving sufficient work guidance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Feeling appreciated for your work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Having a clear set of duties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. If you marked any of these situations or feelings, how did these feelings or situations help you to do your work or get along with your colleagues?

Not helpful at all	Somewhat helpful	Neither helpful nor unhelpful	Very helpful	Extremely helpful
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sweetman, J., Van Der Feltz-Cornelis, C. M., Eifeddali, I. & de Beurs, E. 2022. Validation of the Work Stress Screener (WOSS-13) and Resilience at Work Scale (ReWoS-24). *Journal of Psychosomatic Research*, 160, p.110989. <https://doi.org/10.1016/j.psychres.2022.110989>.

**ReWoS-24 / Resilience at Work Scale 24-items**

**Aim**

The aim of the Resilience at Work Scale (ReWoS - 24) is to identify the extent to which an employee experiences characteristics of resilience at work.

**Application of the instrument**

The ReWoS - 24 consists of 24 items, divided into two parts. Form A is about individual characteristics of work resilience and consists of 18 items which are divided into three sub-scales. Items 1-3 relate to general wellbeing, items 4-15 relate to wellbeing at work and items 16-18 relate to satisfaction with job performance. Form B is about characteristics of team resilience and consists of six items. A maximum of 54 points can be scored in Form A; 18 points can be scored in Form B.

Extra question: Questions A19 and B7 explore if work functioning benefits from the level of individual and team resilience respectively.

**Application on the work floor:**

The instrument can be filled out by employees themselves.

**Scoring:**

A sum score is calculated per subscale by adding the items 1 to 15 in Form A and 1 to 6 in Form B.

Score "never" as "0", "several days" as "1", "more than half the days" as "2" and "almost every day" as "3".

The score in Form A subscale 1 is at least 0 and at most 9, scores in subscale 2 are at least 0 and at most 36, scores in subscale 3 are at least 0 and at most 9.

In Form B scores are at least 0 and at most 18.

A high score on Form A is an indication that there is individual resilience.

A high score on Form B is an indication that there is team resilience.

**Time investment:**

It takes approximately five minutes to complete the screener.

**Target population:**

The screener is intended for employees in all branches

**Citation:** Sweetman, J., Van Der Feltz-Cornelis, C. M., Eifeddali, I. & de Beurs, E. 2022. Validation of the Work Stress Screener (WOSS-13) and Resilience at Work Scale (ReWoS-24). *Journal of Psychosomatic Research*. (In press)

Sweetman, J., Van Der Feltz-Cornelis, C. M., Eifeddali, I. & de Beurs, E. 2022. Validation of the Work Stress Screener (WOSS-13) and Resilience at Work Scale (ReWoS-24). *Journal of Psychosomatic Research*, 160, p.110989. <https://doi.org/10.1016/j.psychres.2022.110989>.

## Appendix D

### Google Form Survey Questions

#### Kawa Model and Its Effectiveness on Resilience in Pediatric Occupational Therapy Practitioners

**Title of Study:** Kawa Model and Its Effectiveness on Resilience in Pediatric Occupational Therapy Practitioners

**Description:** Stanbridge University's Master of Occupational Therapy Graduates are conducting a research study to assess the effectiveness of the Kawa Model process at creating resilience to burnout in pediatric occupational therapy practitioners. Voluntary participation in completing a 15-20 minute online survey will provide information about which factors contribute to burnout. Participants will be asked questions regarding their personal assets and liabilities, physical and psychological impairments, and physical and social environment to evaluate their life's flow. Our research study presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

**Time Involvement:** Your participation in this study involves a 15-20 minute one time commitment. You are being asked to complete a survey consisting of multiple choice and open-ended questions.

**Risks and Benefits:** By taking part in this study, there may be a minimal psychological risk of emotional discomfort expressing personal experience of burnout and the effect it has on you. The outcomes of this study can be used to identify potential stressors and beneficial coping strategies to decrease feelings of burnout.

**Participants Rights:** Your involvement in this research study is voluntary. You have the freedom to opt out at any time. You may take any breaks as necessary. You are not obligated to answer any questions or procedures that make you feel uncomfortable.

**Compensation for Participants:** Compensation will not be provided.

**Privacy, Confidentiality, Data Security:** The online survey will be conducted through Google Forms, which has its own privacy policies for security measures. We anticipate that your participation in this survey presents no greater risk than everyday use of the internet. All participant identifiers will be gathered and de-identified through one data collection email to be stored in a google drive only accessible to one member of the research team and the principal investigator. Data may exist on backups and server logs beyond the timeframe of this research study, but we cannot guarantee against hackers.

Please mark only one response \*

I agree

I disagree

After section 1 Continue to next section

Section 2 of 9

#### Electronic Signature

Description (optional)

I, \_\_\_\_\_, agree and understand that by signing the Electronic Signature Acknowledgment and Consent Form, that all electronic signatures are the legal equivalent of my manual/handwritten signature and I consent to be legally bound to this agreement.

Short answer text

<p>How old are you? *</p> <p><input type="radio"/> 18-20</p> <p><input type="radio"/> 21-30</p> <p><input type="radio"/> 31-40</p> <p><input type="radio"/> 41-50</p> <p><input type="radio"/> 51-60</p> <p><input type="radio"/> 61 and above</p>	<p>What type of pediatric setting do you work in? *</p> <p><input type="radio"/> School based</p> <p><input type="radio"/> Outpatient clinic</p> <p><input type="radio"/> Inpatient setting</p> <p><input type="radio"/> Home health</p> <p><input type="radio"/> Community outreach</p> <p><input type="radio"/> Mental health</p>
<p>What gender do you identify as? *</p> <p>Your answer _____</p>	<p>How many years have you worked as a pediatric occupational therapy practitioner? *</p> <p><input type="radio"/> Less than a year</p> <p><input type="radio"/> 1-3 years</p> <p><input type="radio"/> 3-5 years</p> <p><input type="radio"/> 5-7 years</p> <p><input type="radio"/> 7+ years</p>
<p>What title do you hold as a pediatric occupational therapy practitioner? *</p> <p><input type="radio"/> OTR/L</p> <p><input type="radio"/> COTA or OTA</p>	

<p><b>Section 4 of 9</b></p> <p>Your river represents the flow of your life. <span>✕ ⋮</span></p> <p>Description (optional)</p> <hr/> <p>If your life was a river, please choose the option that best describes its flow. *</p> <p><input type="radio"/> Calm (content, relaxing)</p> <p><input type="radio"/> Dull (mundane, lifeless)</p> <p><input type="radio"/> Choppy (small, rough waves)</p> <p><input type="radio"/> Rushing (fast and vigorous flow)</p> <p><input type="radio"/> Turbulent (not controlled or calm)</p>	<p><b>Section 5 of 9</b></p> <p>Your rocks are your obstacles and challenges. <span>⌵ ⋮</span></p> <p>Description (optional)</p> <hr/> <p>On a scale of 1 to 10, how would you rate your feelings of burnout and stress levels from work? *</p> <p>1 2 3 4 5 6 7 8 9 10</p> <p>zero levels of feeling burnt out or stressed <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> extremely burnt out and stressed</p> <hr/> <p>Identify the top three challenges you are facing at the moment. Why are they stressful? *</p> <p>Long answer text</p> <hr/> <p>Mark any physical symptoms of stress or burnout you have experienced in the past month. *</p> <p><input type="checkbox"/> Headache</p> <p><input type="checkbox"/> Fatigue</p> <p><input type="checkbox"/> Insomnia/sleep disturbances</p> <p><input type="checkbox"/> Changes in appetite</p> <p><input type="checkbox"/> Chest pains/rapid heartbeat</p> <p><input type="checkbox"/> Anxiety</p> <p><input type="checkbox"/> Memory/concentration issues</p> <p><input type="checkbox"/> N/A</p> <p><input type="checkbox"/> Other...</p>
--	--

**Section 6 of 9**

Your river banks are your physical and social environments. ✕ ⋮  
Description (optional)

---

Do you feel supported by your manager and colleagues when it comes to managing your workload and stress levels? Please specify how they do or do not provide support.

Long answer text

---

What, if anything, do you think could be done to improve the work environment and reduce feelings of burnout among employees? \*

- Opportunities for training, skill development, and career advancement
- Team-building activities
- Recognition programs to recognize employees for their achievements
- Wellness programs to promote physical and mental well-being
- More support and resources from higher management
- Other...

**Section 7 of 9**

Your driftwood is personal resources that can be assets or liabilities. ✕ ⋮  
Description (optional)

---

On a scale of 1 to 5, how satisfied are you with your income? \*

1 2 3 4 5  
 extremely or very dissatisfied ○ ○ ○ ○ ○ extremely or very satisfied

---

Do you believe that you have a healthy work-life balance? \*

Long answer text

---

What traits/values of yours do you believe help you succeed in the workplace? \*

- Integrity/Honesty
- Adaptability/Flexible
- Confidence
- Creativity
- Determined/motivation
- Dependable
- Positivity/Optimism
- Innovative
- Other...

---

How do you typically cope with stress? \*

- Being active
- Seeking social support
- Deep breathing
- Meditation
- Engaging in hobbies
- Seeking professional help
- Spending time outside
- Other...

---

What strategies do you think you can use to build resilience? \*

- Taking personal time off to relax with family/friends
- Making time to exercise or engage in hobbies
- Seeking support from trusted individuals
- Taking space to process feelings or recharge
- Other...

**This next section will involve questions from the Work Resilience Scale (ReWoS-24) created by Sweetman et al. (2022).**

Sweetman, J., van der Feltz-Cornelis, C. M., Elfeddali, I., & de Beurs, E. (2022). Validation of the work stress screener (WOSS-13) and resilience at work scale (ReWoS-24). *Journal of Psychosomatic Research*, 160, 110989. <https://doi.org/10.1016/j.jpsychores.2022.110989>

**Individual Resilience at Work (ReWos - Individual A)**

Over the past two weeks AT WORK, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)

**Being healthy?**  
 Over the past two weeks AT WORK, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)

- Never
- Several days
- More than half the days
- Almost every day

**Feeling well in general?**  
 Over the past two weeks AT WORK, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)

- Never
- Several days
- More than half the days
- Almost every day

<p><b>Feeling well rested?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Being flexible at work?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Feeling optimistic under workstress?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>
<p><b>Feeling assertive?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Feeling in control?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Trusting your ability to overcome barriers at work?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>
<p><b>Feeling self-confident?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Allowing yourself to make mistakes?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Feeling safe under workstress?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>
<p><b>Putting things in perspective?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Coping well with challenges at work?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	
<p><b>Being able to set limits?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Perserving?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	
<p><b>Experiencing work pleasure?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Having a sense of responsibility in your work?</b> Over the past two weeks <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	

<p><b>Working in a disciplined manner?</b> Over the past two weeks, <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Team Resilience at work - ReWos-team B</b> Over the past two weeks, <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><b>Experiencing a good team spirit?</b> Over the past two weeks, <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>
<p><b>If you marked any of these situations or feelings, how did these feelings or situations help you to do work?</b></p> <p><input type="radio"/> Not helpful at all <input type="radio"/> Somewhat helpful <input type="radio"/> Neither helpful nor unhelpful <input type="radio"/> Very helpful <input type="radio"/> Extremely helpful</p>	<p><b>Feeling positively challenged?</b> Over the past two weeks, <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>
<p><b>Sharing humor with work colleagues?</b> Over the past two weeks, <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>Having a clear set of duties?</b> Over the past two weeks, <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>
<p><b>Receiving sufficient work guidance?</b> Over the past two weeks, <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	<p><b>If you marked any of these situations or feelings, how did these feelings or situations help you to do your work or get along with your colleagues?</b></p> <p><small>Description</small></p> <p><input type="radio"/> Not helpful at all <input type="radio"/> Somewhat helpful <input type="radio"/> Neither helpful nor unhelpful <input type="radio"/> Very helpful <input type="radio"/> Extremely helpful</p>
<p><b>Feeling appreciated for your work?</b> Over the past two weeks, <u>AT WORK</u>, how often have you experienced one or more of the following situations or feelings? (Please mark the answer that best represents your situation)</p> <p><input type="radio"/> Never <input type="radio"/> Several days <input type="radio"/> More than half the days <input type="radio"/> Almost every day</p>	