# THE EFFECT OF AN OCCUPATIONAL BALANCE EDUCATIONAL MODULE ON LIFE SATISFACTION AND OCCUPATIONAL BALANCE FOR UNIVERSITY STUDENTS

By

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# **Doctoral Project Approval**

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The Effect of an Occupational Balance Educational Module on Life Satisfaction and Occupational Balance for University Students	
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#### Abstract

Engaging in a variety of occupations daily can support university students in feeling a sense of balance and satisfaction in their lives. This study aimed to evaluate the effectiveness of an occupational balance education module on improving the life satisfaction and occupational balance of university students ages 18-22 in a public university in the southwest region of the United States. Five participants were recruited using convenience sampling from a student support services program. A four-part education module was provided using a one-group pretest posttest quasi-experimental design, which included education on occupational balance, barriers and supports to occupational balance, strategies to improve occupational balance, and strategies to enhance the satisfaction of your roles. Pre and post data were collected using two self-report questionnaires, and data analysis demonstrated a statistically significant improvement in occupational balance and life satisfaction. The small sample size limited the generalizability of the results. However, this study adds evidence supporting occupational therapy interventions that improve university students' occupational balance and life satisfaction. University students in a student support program like this one may benefit from an occupational balance intervention to enhance their occupational balance and life satisfaction.

## **Dedication**

This is dedicated to my family, Dad and Mom, Michael and Denise Bowden, Brother Debonaire Bowden, and all my extended family. It is also dedicated to my friends who have supported me along the way. Thank you to Dr. Krishnagiri for your guidance and patience throughout this process.

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#### Introduction

Life balance promotes well-being by aligning daily activities that fulfill personal values and desires, involving self-care, work, education, health management, and leisure. Disruption to life balance can arise from required daily activities, environmental factors, and life transitions. Changes in roles and responsibilities can impact one's perception of life balance and life satisfaction.

A balanced lifestyle is a highly valued concept in Western culture, where the demands of daily living can easily exceed a person's ability to cope (Christiansen & Matuska, 2008). The profession of occupational therapy defines occupations as the daily activities that an individual needs and wants to do. The profession recognizes that engaging in these occupations supports people's health and well-being (AOTA, 2020). Occupational balance is adequate time spent between all occupations, and it is positively associated with improved mental health, life satisfaction, and decreased stress (Rodriguez-Fernandez et al., 2021; Wagman & Hakansson, 2014). An imbalance of time spent in each role in life can negatively impact an individual's perception of their health, well-being, and life balance (Cha, Y-J., 2022). Occupational science research highlights that patterns of daily activities can lead to a balanced or imbalanced lifestyle, and this perception of balance changes across developmental periods positively correlating with life satisfaction, a subjective measure of quality of life (Christiansen & Matuska, 2008; Wagman & Hakansson, 2014).

The developmental period from adolescence to adulthood is characterized by multiple life events, including moving out of the parental home and entering the workforce. Young adults tend to associate their life satisfaction with their level of autonomy; however, this transition

period requires increased independence for a rapid influx of roles (Henkens et al., 2022). This developmental period has been associated with occupational imbalance due to decreased time spent in each occupation, leading to increased stress, burnout, and anxiety (Rodriguez-Fernandez et al., 2021).

The transition from adolescence to adulthood causes university students to have trouble managing multiple roles, increasing symptoms of stress and anxiety (Thompson et al., 2021). If persistent, these symptoms can negatively affect their life satisfaction (Worsley et al., 2021). Universities across the United States have found that students are experiencing mental health challenges without being properly diagnosed or treated. Students postpone seeking support because of stigma or a lack of time, and university mental health professionals are outnumbered by students (Keptner et al., 2016; Lipson et al., 2021). Additional support for university students' mental health is necessary to help students gain the skills required for increased autonomy and self-management during this transition from adolescence to adulthood (Worsley et al., 2021).

Although occupational imbalances negatively impact university students' mental health during the transition from adolescence to adulthood, the occupational therapy profession is equipped with the skills to support them. Occupational therapy supports people in engaging in various meaningful and purposeful occupations to improve health and well-being. Practitioners can use their skills to analyze daily occupations and guide these students to optimize their performance (AOTA, 2020). An occupational therapy research study conducted to measure the effectiveness of an occupational therapy intervention on occupational balance and life satisfaction for university students during the transition from adolescence to adulthood would be beneficial.

This capstone project conducted a quasi experimental one group pretest posttest design study to answer the question, "Does an occupational balance education module improve the occupational balance and life satisfaction of university students transitioning into adulthood?" This study used evidence-based occupational therapy strategies via an educational module to support students at a university in the southwestern region in improving their occupational balance. The results of this study were used to identify if occupational therapy could be beneficial in serving as a support professional in this university's student support service program. This capstone project involved developing, implementing, and evaluating an occupational therapy educational module for university students transitioning into adulthood.

This project contributes to the American Occupational Therapy Foundation's (AOTF) research agenda to advance the development of evidence-based occupational therapy practice. Specifically, the research agenda emphasized a need for research that provided interventions to promote the function and wellness of all people with or without disabilities and evaluated the effectiveness of occupational therapy interventions (American Occupational Therapy Foundation, 2024). AOTF strives to develop client-centered and occupation-centered research. Although occupational therapy can serve many people, research must be conducted to provide knowledge about occupational therapy practice in emerging settings such as the university. Providing occupational therapy services to university students through research can support advocacy for occupational therapy's role in the university setting and serve as a baseline for occupational therapy practice. Supporting university students with occupational balance education can help them develop skills to improve their autonomy and overall health and well-being.

#### Statement of the Problem

#### **Research Question**

Does an occupational balance educational module improve the perception of occupational balance and life satisfaction of university students (18-22) transitioning into adulthood?

#### **Hypothesis**

An occupational balance educational module will improve the perception of occupational balance and life satisfaction of university students (18-22) transitioning into adulthood.

### **Null Hypothesis**

An occupational balance educational module will not improve the perception of occupational balance and life satisfaction of university students (18-22) transitioning into adulthood.

#### **Definitions of Terms**

#### Occupational Balance

**Conceptual Definition:** a balance of engagement in all occupations that leads to subjective well-being and health (Wagman et al., 2014; Wilcock et al., 1997).

**Operational Definition:** In this study, occupational balance will be defined as the self-evaluated satisfaction with all occupations and roles an individual wants and needs to participate in, as measured by the Occupational Balance Questionnaire 11 (OBQ 11) (Hakansson et al., 2020). See Appendix A for a copy of the OBQ 11.

#### Life Satisfaction

**Conceptual Definition:** subjective levels of fulfillment with engagement in one's roles (Henkens et al., 2022).

**Operational Definition:** In this study, life satisfaction will be defined as the subjective measurement of fulfillment in engagement in one's roles and occupations as measured by the Satisfaction with Life Scale (SWLS) (Diener et al., 1985). See Appendix B for a copy of the Satisfaction with Life Scale.

#### Transitioning into Adulthood

**Conceptual Definition:** the period between adolescence and full adulthood, typically between 18-30 (Guzkowska & Dabrowska-Zimakowska, 2022).

**Operational Definition:** Young adults ages 18-22 who are transitioning to new roles in university self-reported using a screening questionnaire. See Appendix C for the screening questionnaire.

#### **Educational Module**

**Conceptual Definition:** Activities needed for learning and participating in an academic environment (AOTA, 2020).

**Operational Definition:** In this study, an educational module is defined as a series of evidence-based occupational therapy activities to educate students on strategies to improve or maintain occupational balance as measured by the occupational balance education module outline. See Appendix D for a copy of the intervention outline and Appendix E for the intervention PowerPoint.

#### Perception

**Conceptual Definition:** a way of regarding, understanding, or interpreting something (AOTA, 2020).

**Operational Definition:** In this study, perception is defined as a way of regarding, understanding, or interpreting the outcome measures as measured by SWLS and OBQ 11 (AOTA, 2020; Diener et al., 1985; Hakansson, 2020).

#### **Perceived Problem**

The transition period from adolescence to adulthood, emerging adulthood, is a developmental period of change. Young adults attain roles required for adulthood, including becoming employees, developing their identity, becoming financially independent, managing their homes, or entering university. The influx of new roles and responsibilities associated with this transition can conflict, resulting in increased stress, anxiety, and decreased life satisfaction, making it challenging to maintain occupational balance (Chatterjee et al., 2021; Henkens et al., 2022; & Rodriguez-Fernandez- et al., 2021). Young adults associate autonomy in their required roles with their perception of life satisfaction and overall well-being (Henkens et al., 2022). A lack of balance between these roles can be perceived as distressing, leading to adverse effects on mental health and life satisfaction. Many young adults also attend university during this transition, which can be psychologically demanding.

University students' mental health is impacted by multiple roles, including living independently, beginning to work, building relationships, caring for a child or pet, and entering the academic setting. Various factors, including economic and financial barriers, familial discourse, and communication challenges, can influence the transition to adulthood (Cho-Baker & Purtell, 2021). Consistent with young adults, the transition to university can lead to increased burnout and exhaustion, subsequently impacting their daily performance in academia and other life roles and responsibilities (Lexen et al., 2023).

Before the COVID 19 pandemic, university students experienced decreased life satisfaction and occupational balance due to decreased time and stress management skills to succeed in the transition to university and adulthood. Students reported inadequate sleep hygiene, increased workloads, and reduced social participation contributed to their occupational imbalance and increased stress (Guzkowska & Dabrowska-Zimakowsa, 2022). The occupational balance of university students was revisited when the COVID 19 pandemic caused a worldwide interruption of people's roles, habits, and routines (Tapia et al., 2022). As a result, students spent increased time online, engaging in remote learning, and experienced decreased social participation. This occupational imbalance led to students feeling increased stress, depression, and anxiety (Hogan et al., 2023; Romero-Tebar et al., 2021).

A lack of skills needed to manage new roles, including time and stress management, can contribute to a decreased perception of life satisfaction for university students (Angell et al., 2019). Specifically, the inability to manage time impacts performance in their roles due to missing deadlines, difficulty prioritizing responsibilities, and challenges identifying task duration, leading to increased perceptions of stress, anxiety, and depression (Romero-Tebar et al., 2021; Wagman et al., 2019). Having inadequate stress management skills to cope with daily stressors can negatively affect university students' performance in their roles (Barbayannis et al., 2022). Time management and stress management skills are not innately developed, and students would benefit from the support of professionals to gain these skills to enhance their daily performance and decrease the potential development of mental health conditions (Keptner & Rodgers, 2019).

Although university students face mental health barriers, including occupational imbalance and decreased life satisfaction during the transition to adulthood, the university setting

is an optimal place for mental health to be addressed. Many mental health disorders arise between the late teens and early twenties, leaving university support personnel in an opportune position to intervene (Solmi et al., 2022). However, university mental health services are underutilized due to stigma or access to the mental health professionals available (Vidourek et al., 2014). Occupational therapists have training in mental health and a thorough understanding of daily life activities and meaningful occupations and their relationship to health (AOTA, 2020). Significance and Relevance of Study to Occupational Therapy

According to the American Occupational Therapy Association's Occupational Therapy Practice Framework 4, a guiding document defining the domains of occupational therapy practice, occupational therapy strives to support people engaging in occupations. Occupational therapists analyze clients' daily activities by identifying barriers and supports to satisfactory occupational performance. They use evidence and occupation-based interventions to support clients' engagement in their preferred activities (AOTA, 2020).

Although the university setting is an emerging area of practice for occupational therapy, occupational therapists are trained and equipped with the knowledge and skills to support the occupational performance of university students transitioning into adulthood (Eichler & Keptner, 2023). Since the transition to university occurs during a developmental period when young adults obtain multiple roles, occupational therapy can be provided as a preventative measure to support students. Occupational therapy practitioners can use their observation and communication skills with this population to analyze and identify environmental and personal barriers or supports to their occupational performance in their academic or other life roles. Practitioners can deliver evidence-based occupational therapy services in the university setting to lessen the impact of the mental health crisis by supporting university students in developing self-management, self-

determination, decision-making, goal setting, and goal attainment skills (Angell et al., 2019). Providing occupational therapy services in this setting would support universities in providing more holistic services to enhance the health and well-being of the students they serve.

#### **Proposed Solution**

The proposed solution to address the occupational imbalance and the decreased life satisfaction of university students during the transition from adolescence to adulthood was to develop and implement an occupational therapy research study for university students at the University of Nevada Las Vegas and test whether it would help improve their occupational balance and life satisfaction. This research study has added to the existing evidence to support the occupational therapy profession's role in the university setting, and it has begun to demonstrate how occupational therapists can support university students during this critical developmental period.

The research study was developed following a review of the existing literature on the effectiveness of occupational therapy with typically developing university students and conversations with the agency director. The target population for this study were students at the University of Nevada Las Vegas (UNLV), a public university in the southwestern region. Specifically, the students in a student support center called the Center for Academic Enrichment and Outreach on UNLV's campus were selected as the accessible population because of the diverse background of students enrolled in their program.

A pretest posttest design was chosen to improve knowledge of the effectiveness of an occupational therapy intervention with the university student population. Research adds to existing evidence to improve knowledge about a topic, promotes the development of a profession's practice, and provides a way to test hypotheses for practice (Taylor, 2017). Limited

research has been conducted regarding occupational therapy's role in the university setting, and minimal research has been conducted on interventions to manage the occupational imbalances experienced by university students (Eichler & Keptner, 2023; Lexen et al., 2023; Pekcetin & Gunal, 2021). This study has added supporting evidence to demonstrate the effectiveness of occupational therapy for university students engaged in a student support center. It has been used as evidence to disseminate to the facility's coordinators and directors to begin highlighting how occupational therapy could have a role in this setting to support students in their transition to university and their academic journey.

#### Literature Review

This literature review focuses on occupational balance and life satisfaction for university students and occupational therapy interventions for university students. It begins with a brief overview of the literature on the origins and evolutions of occupational balance. Followed by the impact of life transitions on life satisfaction. The following section consists of a review of the experiences of university students during the transition from adolescence to adulthood. After that, university students' occupational balance and life satisfaction have been presented. The penultimate section will include occupational therapy interventions used in the university setting. Finally, this review will conclude by synthesizing the literature to identify what is known and reveal any missing gaps in the literature.

#### **Origin and Evolution of Occupational Balance**

A literature review on the origins and evolution of the concept of occupational balance has been conducted to understand its foundation and how it may impact university students during the transition to adulthood.

Adolf Meyer is a psychologist and a founder of the philosophical foundation of the concepts of occupational therapy and, subsequently, the concept of occupational balance. In his article on the philosophy of occupational therapy, he highlighted that obtaining balance in all daily activities involves doing the activities in the rhythm of time (Meyer, 1922). He also highlighted that personal and environmental factors impact the natural balance between occupations. He demonstrated that the motivation, pride, and pleasure of achievement can make achieving a sense of balance less challenging. Finally, he highlighted that occupational therapy's role in helping people achieve balance is to provide clients with opportunities for engagement. The downfall of these foundational viewpoints is that they make occupational balance appear to

be something that can be achieved, but it does not account for how occupational balance may be perceived differently across individuals. This article by Meyer (1922) demonstrates that in the foundational years of the profession of occupational therapy, the concept of occupational balance was emerging. It also highlights that the concept of occupational balance is dynamic and is influenced by external and internal factors.

Rogers (1984) wrote a position paper on the value of studying occupations. She demonstrated that occupational therapy believes a balance of occupations for self-care, play, rest, and work is essential to healthy living. Rogers describes that this perception of balance can be attained through engagement in routines and healthy habits. However, disruption of these routines can lead to a lack of balance. The downfall of Rogers' (1984) position is that it did not consider the variation of factors that could impact occupational balance. This paper highlighted the benefit of routines for maintaining occupational balance.

As the history of the profession of occupational therapy progressed, occupational scientists began to study the influence of occupational balance on health. Wilcock et al. (1997) conducted a cross-sectional design pilot study to test a questionnaire as a tool for gathering information about occupational balance and health. The researchers considered occupational balance in terms of physical, mental, social, and restful occupations rather than the interplay of work, rest, self-care, and leisure. The researchers identified that occupational balance should be measured individually, so they developed a tool to measure the perceptions of occupational balance and its relation to health. Using a cluster sampling method, 146 respondents were recruited from different living situations with a broad age range from school-aged children to older adults. The researchers provided each participant with a two-page questionnaire that used a four-point Likert scale to measure engagement in their occupations and a five-point Likert scale

to rate their perceived health. Results revealed that 146 people responded, ranging from 13 to 85 years of age. Results indicated that patterns of current balance in physical, mental, social, and restful occupations varied, but the most frequent occupational pattern selected was moderate engagement in each occupation category. However, all age groups desired a more ideal balance between occupations compared to their current perception of balance. The results also demonstrated that occupational balance was statistically significantly associated with health in all age groups. Older adults had a greater original perception of occupational balance than young adults and school-aged people. The limitation of this study is that it was a cross-sectional design, so it could not compare differences in the occupational balance of participants with an intervention. Additionally, the researchers did not measure the factors influencing differences in occupational balance across age groups, nor did they factor in the naturally occurring variation of occupational engagement between school-aged children and older adults. This study begins to depict the variation of occupational balance and its influence on health for people across the lifespan.

As the concept of occupational balance and life balance continued to develop, researchers understood that patterns of occupations influence health, so they began to develop models to conceptualize the topic. Matuska and Christiansen (2008) proposed a model to conceptualize the topic of lifestyle balance. The model was built on interdisciplinary research that explored relationships between well-being and situational or environmental factors. For this study, life balance was viewed as the extent to which an individual's unique occupation patterns enable needs essential to resilience, well-being, and quality. The researchers described a dynamic interaction between the environment, occupational patterns that meet the individual's needs, and degrees of satisfaction as an ideal state of balance. The model proposed by these researchers

indicates that lifestyle balance includes an array of occupations that meet the needs of the people, are self-rewarding, and create meaning. Their model also considered that multiple factors, including time use, meaning, engagement, relationships, and environment, may influence the congruence, satisfaction, and sustainability of occupation engagement because of life's complexity. The researchers recognized that the environment impacts an individual's life balance. Considerations for using the model should come with caution because it may not represent all factors that will impact life balance, such as the activities in life or personal factors. Also, this model does not demonstrate the change in lifestyle balance over time. This model illustrates how supporting people in developing healthy habits and routines while analyzing the factors of their environment may support people's engagement in various occupations to promote life balance.

As the profession of occupational therapy continued to develop, researchers began to look at how diagnoses influenced life balance. Hakansson et al. (2006) sought to understand the balance of everyday lives of women with stress related disorders by conducting a focus group. Nineteen participants were women between 30 and 59 recruited from four primary healthcare centers in Southern Sweden. A moderator conducted five focus groups, each containing three to four participants. Each focus group discussed what it meant to have balance in everyday life and how it was achieved. The findings of this study revealed themes including images of occupational self, strategies to manage and control everyday life, occupational repertoire, and occupational experience. The results demonstrated that the women in this study shaped their lives based on the interplay of daily occupations and used their engagement in occupations to develop a sense of being. Additionally, the women reported that being present, prioritizing relationships, and maintaining a structured daily life were the strategies they used to maintain

daily life balance. Lastly, the results demonstrated that a lack of harmony between occupations impacted their occupations of rest and sleep and made them feel burdened by everyday life. However, when the women felt harmony between their occupations, they thought they could manage everyday life. The limitations of this study are that this study was only done with people with stress related disorders, so the results are not generalizable to the population without a diagnosis. Additionally, the results of a focus group do not provide individualized perspectives of what impacts each person's occupational balance. Instead, all participant's responses are grouped together. This study shows the dynamic relationship between life balance and daily activities, and it demonstrates how the harmony between these activities impacts participants' mental health.

Wagman & Hakansson (2014a) conducted a cross-sectional design study to describe the relationship between occupational balance and self-rated health and life satisfaction for adults in Sweden. This study aimed to explore the differences in occupational balance between a sample of adults. One hundred fifty-five participants between ages 21 and 64 were recruited using convenience sampling and provided the Occupational Balance Questionnaire 13 (OBQ 13), which measures occupational balance on a six-step ordinal scale. Results indicated that occupational balance was statistically significantly positively correlated to self-rated health and life satisfaction. Additionally, the itemized results of the OBQ 13 indicated that participants had higher satisfaction with time used in rest, recovery, and sleep. This study identified that occupational balance in the category of rest and sleep was statistically significantly correlated with the age of women and was highly correlated for women without children. This study found no differences in occupational balance ratings between women and men. However, there was a difference in occupational balance between women with children versus those without. One

limitation of this study is that this study did not show what influences the occupational balance of this small sample of adults in Sweden. An additional limitation of this study is that changes in occupational balance could have been due to extraneous variables. Future research could identify what changes the occupational balance of adults. This study added to the knowledge that occupational balance can change based on gender and stage of life, such as having children or not. This study also adds that occupational balance positively correlates with health and life satisfaction.

The concept of occupational balance did not have a way to be measured. Therefore, Wagman & Hakansson (2014b) introduced and conducted a study to investigate the internal consistency, test retest reliability, and floor and ceiling effects of the Occupational Balance Questionnaire 13 (OBQ 13). Sixty-seven participants, ages 18 and older, were recruited and administered the OBQ 13 twice. Results indicated that the men in the study had a narrower range of scores than women, and the correlation for the total score was 0.926. The results indicate that the OBQ 13 focuses on satisfaction with the amount and variation of occupations, regardless of how much time each takes. The limitations of this study are that the OBQ does not measure a qualitative component of occupational balance and that cultural factors could impact how satisfied people are with their occupational balance. This study demonstrates that OBQ 13 measures the satisfaction of people's occupational balance and has good test-retest reliability. This study begins to indicate a reliable measure that can be used to measure occupational balance.

To further develop the understanding of occupational balance, research was done to identify how occupational balance is perceived and used in practice. Yazdani et al. (2018) conducted a qualitative study to understand how occupational therapy practitioners perceived

and practiced the concept of occupational balance. Fourteen occupational therapy practitioners were recruited to be interviewed and participate in a focus group. Individual interviews and focus group questions asked therapists to describe occupational balance. The focus and interviews revealed that occupational therapists perceived occupational balance as a concept that should be measured individually and varies across people. Additionally, the results demonstrated that the participants felt that supporting clients' occupational balance includes addressing what is meaningful and purposeful for that individual. Lastly, the results highlighted that occupational therapists perceive occupational balance as fundamental for a client's well-being, happiness, and health. The limitation of this study is that it did not consider the client's point of view related to the importance of occupational balance for them. This study adds that the concept of occupational balance is perceived as a subjective and dynamic measure that influences the well-being of others.

In recent years, the concept of occupational balance has been studied to understand the influence of other people on an individual's occupational balance. Wagman and Haakansson (2019) conducted a scoping review to understand how occupational balance can be influenced interpersonally. The scoping review's results revealed that surrounding people could influence occupational balance. For example, occupational balance was influenced by the relationships between parents and their children, employers and employees, and between spouses. The downfall of this type of study is the potential to miss some literature when reviewing. This scoping review demonstrates that occupational balance is not only an individualized construct but can also be influenced by surrounding people. This scoping review illustrates the complexity of factors influencing occupational balance.

Understanding that various factors can influence occupational balance, Wagman et al. (2019) conducted a cross sectional design study to describe occupational balance and its relation to self-rated anxiety, depression, quality of life, and occupational performance in clients with anxiety and depression. This study used data from a previous randomized control trial to compare interventions for people with anxiety and depressive disorders. One hundred eighteen participants between 19 and 64 were recruited from outpatient mental health care and primary health care centers. Five instruments, including a demographic questionnaire, the Occupational Balance Questionnaire 13 (OBQ 13), the Hospital Anxiety and Depression Scale (HADS), the Manchester Short Assessment of Quality of Life (MANSA), and the Canadian Occupational Performance Measure (COPM), were administered at once. This study's results indicated no statistically significant differences in the occupational balance between males and females in the study. Additionally, this study demonstrated that lower depression was positively correlated with higher quality of life and higher life satisfaction in the MANSA and COPM. The limitations of this study were the population of the sample of people having anxiety and depression, limiting the generalizability to other populations, and the lack of a qualitative component to describe the causality of the associations between variables. This study begins to demonstrate that occupational balance may be lower in participants with diagnoses of anxiety and depression and that higher quality of life and life satisfaction are positively associated with improved occupational balance.

Uthede et al. (2022) conducted a research study to describe the occupational balance of parents of preschool children and identify the differences between mothers and fathers. This cross-sectional design study was conducted with three hundred ninety-two parents of preschool children recruited from preschools in Sweden. Two instruments were administered, including the

Occupational Balance Questionnaire 11 and a demographic questionnaire. Results of the study indicated that higher occupational balance was found among younger parents or parents with only one child. Results also indicated that mothers rated lower on occupational balance in tasks for themselves than for others. Additionally, results indicated that mothers rated occupational balance statistically significantly lower than fathers. The downfall of this study is that it did not compare the occupational balance of the participants over time with a cross-sectional design and did not consider external factors that could have influenced the occupational balance of these parents. The results demonstrate differences in occupational balance among mothers and fathers and older parents versus younger parents, indicating that the perception of occupational balance can change based on role requirements and age.

The foundations of the concept of occupational balance originate at the foundations of the profession of occupational therapy. Meyer (1922) proposed that occupational engagement is influenced by the rhythm of time and that personal and environmental factors influence the perception of balance between occupations. This concept of the influence of external and internal factors on occupational balance is consistent with the position of Rogers (1984), who described that striving for healthy habits and routines positively influences life balance. Occupational balance is dynamic and is influenced by the factors in the environment, including family and life transitions. Matuska and Christensen (2008) proposed a life balance model to depict the dynamic nature of occupational balance and demonstrate how environmental factors heavily influence occupational balance. Hakansson (2006) demonstrated that internal factors such as diagnoses can negatively impact occupational balance, while Wagman and Hakansson (2014a) depicted how external factors such as familial influences, including having children, can impact occupational balance. Wagman (2014b) developed the OBQ 13, which has good test retest reliability for

measuring the subjective occupational balance of people. Both studies depict that occupational balance changes across life transitions. In recent years, the influences on occupational balance continue to be studied for young adults (Uthede et al., 2022; Yazdani et al., 2018). This literature depicts that occupational balance is dynamic and subject to influence by the internal and external factors surrounding an individual. Still, the literature needs more research on the specific factors that influence the occupational balance of people. Additionally, more research needs to be published in the United States on occupational balance, and the concept has less often been studied in the population of young adults and university students.

#### The Impact of the Transition to Adulthood on Life Satisfaction

Life satisfaction is the concept of being content with the level of engagement in one's roles, and it is a subjective measure of quality of life. The concept of life satisfaction changes over time and across transitional periods. Life satisfaction is expected to change due to developmental periods and life events typical for the transition into adulthood (Henkens et al., 2022).

To gain a deeper understanding of the impact of life transitions on life satisfaction for young adults, Henkens et al. (2022) conducted a retrospective study using longitudinal data from 2010 to 2018 to examine the changes in life satisfaction for children of immigrants and nonimmigrants in Germany between the ages of 14-23 during the transition to adulthood. The longitudinal study participants were asked to complete a demographic questionnaire and a self-report measure of life satisfaction called a Cantril ladder, which asks participants to measure their life satisfaction on a scale of one to ten once a year over eight years. The data was analyzed, and the results revealed that life satisfaction changed from adolescence to adulthood. Specifically, life satisfaction increased towards the age of 18, decreased between 18 and 20, and increased again after age 20. Additionally, results demonstrated variation in life satisfaction between girls and

boys, with girls having lower life satisfaction. This indicates adolescents have relatively higher life satisfaction, but it decreases into young adulthood, potentially due to the significant events that occur during this transition, such as entering the workforce, getting married, or becoming financially independent. This study has limited generalizability of the results due to the limited geographical region where this study was conducted and the fact that it only used a self-report measure for life satisfaction. Additionally, this research has limited reliability due to some data being lost between the original longitudinal study and this retrospective study. The authors recommended that future research consider the change in life satisfaction across developmental periods. Key points from this study include that life satisfaction changes across developmental periods in a nonlinear fashion, differs between genders, and critical life events can influence it.

Marquez et al. (2023) conducted a retrospective study to understand the developmental links between mental health and life satisfaction in young adults and compare the two outcome measures for correlations. This study was conducted in the United Kingdom (UK) and used data from the UK Household Longitudinal Study (UKHLS). The UKHLS was established in 2009 to 2019. Each year, participants were enrolled in the study, and interviews took place over 24 months. The questionnaire from the longitudinal study measured life satisfaction and mental health. Life satisfaction was measured using a 7-item Likert scale, and mental health was measured using a 12-item general health questionnaire (GHQ 12) to capture anxiety or depressive symptoms. Retrospective data from 661 participants aged 17 to 21 were analyzed for this study. Results were analyzed using psychometric analysis for correlations. Results indicated that life satisfaction and mental health were positively correlated between ages 17 and 21. Correlations were also found between life satisfaction between the ages of 17 to 19 and the ages of 19 to 21. These results demonstrate a correlation between mental health and life satisfaction

during the transition from adolescence to emerging adulthood. The limitations of this study were that it only used one scale of life satisfaction to capture the participant's perspective, and it had a significant degree of non-response attrition, impacting the reliability of the results. This study adds evidence that perception of life satisfaction and mental health changes across the developmental period from adolescence to adulthood.

Switek and Easterlin (2018) conducted a retrospective qualitative data using a panel of data called the Swedish Young Adults Panel Study (YAPS) to further understand the impact of life transitions on life satisfaction during young adulthood. The researchers analyzed retrospective data from YAPS and demographic data on three consecutive cohorts of young adults born in 1968, 1972, and 1976. The data collected from YAPS was measured on general life satisfaction. The results of the retrospective data analysis demonstrated that life satisfaction changes between 22 and 40, with a minor increase between 22 and 30 for these students. Additionally, the results showed trends of when life satisfaction improved during significant transitional events, such as having a child or getting married. In contrast, the transition from school to work had no statistically significant effect on the life satisfaction of these students. The limitations of this study were the potential for attrition or loss of data due to retrospective data collection and limited generalizability due to the study being done in one geographical location. Additionally, since the retrospective data was collected on young adults before the 2000s, the generalizability of these results is limited due to the potential for young adults to have different experiences now. Like Henkens et al. (2022), this study highlights a change in life satisfaction during young adulthood; it added that specific events influence young adults' life satisfaction.

Ni et al. (2021) conducted a cross-sectional quantitative study to investigate the impact of family environment and personality on life satisfaction. One thousand eight hundred seventy

participants, with a mean age of 20, were recruited from public universities in China. Three selfreport instruments were administered, including the Satisfaction with Life Scale, the Eysenck personality questionnaire, and the Family Environment Scale Chinese Version. Results were analyzed using a mediation model to measure correlations and mediation effects between variables. The results demonstrated that life satisfaction positively correlated with family cohesion, family independence, and extraversion. However, it was negatively correlated with family conflict. The results also showed that extroversion positively correlated with life satisfaction, while neuroticism negatively correlated. Reflecting on these results shows that family environment can indirectly influence life satisfaction by impacting the young adult's personality. The limitations of this study were that it was a cross-sectional design and that other extraneous variables could have influenced participants' life satisfaction. Additionally, the generalizability of the results is limited due to the study being conducted in one geographical location. Although this study had limitations, it highlights that environmental variables such as family influence can impact life satisfaction, and this could be taken into consideration for future research.

Life satisfaction is a subjective measure of quality of life, and it can be influenced by life transitions and the impacts of external factors such as family influence or internal factors such as personality (Henkens et al., 2022; Marquez et al., 2023; Ni et al., 2021; Switek & Easterlin, 2018). The retrospective studies highlighted the nonlinear change in life satisfaction during the transition from adolescence to young adulthood (Henkens et al., 2022; Switek & Easterlin, 2018). Ni et al. (2021) highlighted the external factors, such as family influence, that could influence life satisfaction. Henkens et al. (2022) demonstrated using a Cantril Ladder to measure life satisfaction with minimal validity and reliability, while Ni et al. (2021) depicted it using the

Satisfaction with Life Scale with greater reliability and validity. Recommendations for future research from all studies were to consider the extraneous variables that may influence life satisfaction and develop longitudinal studies in broader contexts to improve the generalizability and reliability of the results (Henkens et al., 2022; Ni et al., 2021; Switek & Easterlin, 2018).

#### **Experience of University Students during the Transition to Adulthood**

To begin understanding university students' occupational balance or life satisfaction, it is essential to explore the experiences of university students during the transition from adolescence to adulthood. The transition to university typically occurs during a critical development period between adolescence and adulthood, marked by emerging adults leaving their parental home, becoming financially independent, and beginning to manage household tasks independently (Chatterjee et al., 2021). The literature reviewed in this section will depict the experience of typically developing university students transitioning between adolescence and adulthood.

To begin to unfold the experience of university students during the transition to adulthood, Worsley et al. (2021) conducted a phenomenological study to understand the transition to independent living for university students in Northwest England. Thirty three university students, ages 18 to 19, were recruited using convenience sampling. The researchers conducted eight focus groups, including adapting to university life, challenges during the transition, and factors that helped or hindered the transition. Students reported that the transition between adolescence and adulthood was difficult due to needing to learn to live independently, share a living space, and navigate a new environment while gaining autonomy in social relationships and their education. Some limitations of this study were that the sample consisted of primarily female participants, only included students who lived in the dorms, and was only conducted in Northwest England, limiting the generalizability of the study results. Additionally,

the questions provided in the focus group could have influenced the participants' responses. Key points from this study are that the transition to university during the transition to adulthood is challenging, and students may feel there needs to be more support. The authors suggest that although the generalizability of this study is limited, future research could benefit from continuing to explore the experiences of university students during the transition to adulthood.

Thompson et al. (2021) continued exploring university students' transition by conducting a phenomenological study. Using convenience sampling, ten first- and second-year psychology students between the ages of 19 and 22 were invited to participate in this research study. The study used focus groups and semi-structured interviews to explore what students liked most about being in university, what was different than they expected, why they think some people might struggle when they get to university, did they had any challenges coping with the independence of university, and lastly, what strategies have they used to cope. The researchers used thematic analysis to analyze the data, and the results demonstrated that many students reported the transition into university as stressful and challenging. Three themes emerged to describe university students' challenges, including independent living, independent learning, and a need for social support due to external pressure. Participants reported not anticipating the difficulty of managing daily activities independently and feeling increased pressure to manage the transition independently. Participants felt increased responsibility to manage their learning independently and felt there needed to be more one-on-one assistance. Lastly, the results revealed that students felt pressured by the social environment at the university because they felt that they did not want to use harmful coping mechanisms such as drinking alcohol and partying to manage the transition. However, they felt friendships helped during the transition. The limitations of this study also include limited generalizability due to the small sample size of

students who are all from one major and at a single university. It is difficult to infer that the challenges during this transition would only occur due to transitioning into university because these experiences could be due to the transition to adulthood in general. The results highlight the perceived challenges that university students experience during the transition to adulthood.

Although the transition to university during the transition to adulthood can be challenging, many university students do not seek mental health services for support in the United States. The mental health of university students has the potential to impact their academic performance, so Lipson et al. (2021) conducted a retrospective to analyze data from six semesters at community colleges and four-year institutions to gain a better understanding of which students access mental health services and identify reasons for the lack of use of services. Data for this retrospective study was retrieved from a national Healthy Minds Study (HMS) that examined mental health and service utilization in a sample of 10,000 universities and community colleges across the United States. From the data from the HMS, the final sample comprised 10,089 students from 23 community colleges and 95,711 students from 133 4-year institutions. The data demonstrated that more than half of the students met the criteria for one or more mental health problems, roughly one-third screened positive for depression and anxiety, and approximately fifteen percent reported suicidal ideation. Additionally, the results demonstrated that university and college students had less than 10% use of on-campus mental health services. Lastly, the results show that some of the barriers to using mental health services were that the students in the university and community college often felt they could deal with the challenges on their own, did not have enough time for the services, or did not have enough financial support to utilize these services. One limitation of this study is that the screening tools used in the HMS survey do not represent diagnoses; instead, they are only validated screens. Additionally, the

generalizability of these results to all university students may be limited due to the lack of randomization of the institutions selected to participate in this study. Lastly, there was potential for nonresponse bias in this study due to the use of online surveys. This research was the most extensive study of its kind and began to show the increased mental health challenges of university and college students. It warrants exploring further how mental health services can be provided to these students with increased accessibility. This study demonstrates that university students may not use traditional mental health services due to stigma, time, or access. However, university students are experiencing increased amounts of mental health challenges.

Further exploration of why university students do or do not seek mental health services is needed to understand their experience during the transition between adolescence and adulthood to provide them with the best services. Vidourek et al. (2014) conducted a survey design study to explore the benefits and barriers to mental health help-seeking behaviors in university students. Six hundred ninety-eight English-speaking students enrolled in general education, health, fitness, and leisure classes at a Midwestern university were recruited for this study. Six hundred eighty two students participated in the study, which provided a survey to examine the students' perceived benefits and barriers to mental health-seeking behaviors. The results revealed three benefits to help-seeking, including improved mental health, reduced stress, and resolving one's problems. Obstacles to help-seeking included embarrassment, denial, and not wanting to be labeled crazy. Additionally, stigma related to seeking mental health services was also a barrier to seeking services for university students. There is limited generalizability of the study's findings due to several limitations. The surveys were self-reported and only had a single theme, which could have led to a response bias in the results. Additionally, participants could have been subject to social desirability bias due to the nature of the subject. Despite the limitations, this

study highlights why university students may or may not use mental health services. This information can be used to guide the development of intervention strategies for mental health professionals to decrease the stigma surrounding mental health and increase student comfort with talking about mental health.

Since the transition from adolescence to adulthood can be stressful, it is essential to identify strategies university students can use to manage stress during this critical transition. Atler and Sharp (2019) conducted a cross-sectional study to collect data on university students' restorative experiences associated with everyday activities. Restorative experiences refer to how well students feel a particular activity brings them new energy and allows them to continue functioning. The researchers recruited 3418 randomly selected university students using email invitations. Data was collected using eight self-report surveys over two weeks at the end of the semester. The first survey was a time-use survey for students to record what they did over 24 hours, called the pleasure, productivity, and restoration profile. The second survey was a perceived stress scale that subjectively measures stress related to everyday life. A total of 264 students completed the stress and time-use surveys. Fifty percent of the sample reported feeling drained when they awoke in the morning, and some did not feel renewed. Results showed that students felt sleeping, engaging in a hobby, relaxing, eating, cooking, and playing video games were restorative activities, with sleep being the most restorative. More pleasure was associated with more restorative activities such as sleep. Additional activities such as working, studying, and attending class were draining. Enjoyable activities were experienced as restorative in this study.

A few limitations to Atler and Sharp's (2016) study design included the need for more longevity and generalizability of the results. This study was only done using a cross-sectional

design, limiting the ability of the researchers to measure a change in the perception of students' restorative experiences over time. The cross-sectional nature of the design also limits the ability of the researchers to report a causal relationship between being in university and having this viewpoint on restorative activities. The homogenous nature of the sample and the students only completing the surveys for one day limits the generalizability of the results to an entire population of university students. This study does suggest that some daily activities may be seen as restorative and that occupational experiences are interrelated between pleasure and productivity. This research demonstrates that some activities, such as sleeping, having hobbies, or spending time in nature, may have restorative properties for university students that could be incorporated into a daily routine.

The literature on the experience of university students during the transition to adulthood reveals that university students experience challenges in this phase of life and that they are less likely to seek services for support for the impact of the transition on their mental health (Lipson et al., 2021; Thompson et al., 2021; Viourdek et al., 2014; Worsley et al., 2021). The phenomenological studies conducted by researchers revealed that university students experience challenges with independent living, new environmental changes, and changes in the social and academic environment that impact their ability to adjust to the transition (Thomspon et al., 2021; Worsley et al., 2021). Some of the specific challenges highlighted in the research were that university students had difficulty with independent tasks such as managing household chores and meal preparation. In contrast, others had challenges navigating the negative social atmosphere at the university. Lipson et al. (2021) and Vidourek et al. (2014) identified that students do not seek mental health services because of lack of time, stigma, or denial of the need for help. The articles reviewed demonstrate that the transition to university is impacted by the changes in social and

academic environments and impacts the students' autonomy. Despite the challenges of the transition, there is potential that students would not attend traditional mental health services. However, they might be willing to engage in activities that they view as restorative, such as spending time doing a hobby, socializing with peers, relaxing, or sleeping (Atler & Sharp, 2016).

# **University Students' Life Satisfaction**

Knowing that the transition to university and emerging adulthood is challenging with new experiences, Luo et al. (2023) conducted a cross-sectional design study to examine the association between anxiety and various factors in emerging adulthood, including life satisfaction and internet addiction among college students in China. One thousand seven hundred seventy-two college students from universities in China were recruited for this study using convenience sampling. Five measurements were used to collect data on this sample, including a demographic questionnaire, an inventory of dimensions of emerging adulthood, a generalized anxiety disorder scale, Young's diagnostic questionnaire for internet addiction, and the satisfaction with life scale. A correlation analysis revealed that feelings of possibility were positively correlated with life satisfaction and negatively correlated with anxiety. Additionally, life satisfaction had a negative correlation with internet addiction and anxiety. Four characteristics were found among the emerging adult population, including self-exploration, responsibility, instability, and possibility. This study adds to the evidence that there is a bidirectional relationship between life satisfaction anxiety and depression. Further, it adds to the evidence that the instability and self-exploration of emerging adults could negatively impact the anxiety levels of college students. The limitations of this study are the cross-sectional nature of the study design, limiting the ability to see changes in these variables over time. When responding to this survey, the participants could have been subject to social desirability bias. This study begins to warrant further exploration into the characteristics and or factors that influence the life satisfaction of university students. Also, there is potential that future research aimed at targeting the factors that can reduce anxiety in emerging adulthood could be beneficial.

Tsitsas et al. (2019) conducted a cross-sectional study to compare first- and fourth-year undergraduate students in life satisfaction, stress, assertiveness, and empathy to determine whether the variables are related to state and trait anxiety in university students. Four hundred ten students were recruited from two universities in Athens in 2014-2015 to participate in this study. Participants were administered three tools, the Life Satisfaction Index, Rathus Assertiveness Scale, and Interpersonal Reactivity Index, to measure university students' life satisfaction, assertiveness, and empathy. Results of the cross-sectional survey design study indicated that the majority of the participants were found to have low life satisfaction. Participants who grew up in urban areas were presented with greater life satisfaction, and there was a statistically significant association between state anxiety and life satisfaction. Higher life satisfaction was statistically significantly higher with individuals with lower state anxiety. This shows that students with greater life satisfaction have less reported state anxiety. Additionally, those with lower levels of life satisfaction experience higher anxiety. State anxiety is anxiety that only occurs in stressful situations, whereas trait anxiety is the way someone experiences the world. Differences were found across the state and traits of anxiety. The results of this study also demonstrate that first-year students had less life satisfaction than fourth-year students. The limitation of this study is that the data was collected cross-sectionally without a longitudinal measure. Additionally, this study did not account for other extraneous variables that could have influenced the perception of anxiety for students. It demonstrates that life satisfaction is lower in individuals transitioning into university than those about to graduate. Further research would

need to demonstrate if this was consistent among students at other universities in a broader geographical region.

Life satisfaction can be altered by stressful situations, especially for college students, since they are at a stage where their plans may be unclear. Liu et al. (2022) conducted a crosssectional survey design study to explore the relationship between grit, stressful life events, depression, and life satisfaction among college students during the COVID-19 pandemic. Four measures were administered to 888 college students from China. The measures included the Grit Scale, which assessed students' motivation; the Stressful Life Events scale, which assessed how well students handled stressful events; the depression self-rating scale; and a life satisfaction scale. The researchers used mediation analysis to demonstrate the effects of the interactions between these four topics. Results showed that grit was positively associated with life satisfaction and negatively associated with depression. Grit and stressful life events had a statistically significant predictive effect on depression. This study's results further show the impact of life satisfaction and stressful events on the mental health of college students. Additionally, the results demonstrate that stressful events influence life satisfaction. The limitations of this study were its cross-sectional design and the potential for historical effects on results since the survey was conducted during COVID-19. It is difficult to know if these results would persist over time beyond the COVID-19 pandemic. Although this study was conducted during the COVID-19 pandemic, which was highly stressful for people worldwide, it demonstrates the importance of internal motivation on life satisfaction and mental health outcomes.

These studies about the life satisfaction of university students all show a correlation between life satisfaction and mental health outcomes such as depression and anxiety (Liu et al.,

2022; Luo et al., 2023; Tsitsas et al., 2019). Luo et al. (2023) and Liu et al. (2022) demonstrated the correlation between life satisfaction and anxiety outcome measures for university students. Liu et al. (2022) added knowledge that life satisfaction is negatively correlated with depression, indicating that greater life satisfaction can decrease depressive symptoms. Liu et al. (2022) also demonstrated that grit or internal motivation can positively correlate with university students' life satisfaction. This indicates that university students also need internal motivation to improve their life satisfaction. Tsitsas et al. (2019) depicted with a cross-sectional survey design that anxiety is inversely related to life satisfaction for university students. The culmination of these articles demonstrates how improving life satisfaction could decrease mental health symptoms in university students. More research is needed to see if these trends are consistent after COVID 19 in varying populations worldwide.

# **University Students' Occupational Balance**

Knowing that the transition to university during the developmental period between adolescence and adulthood is perceived as challenging, it may be essential to understand how university students perceive their occupational balance and how they cope with occupational imbalance.

Guzkowska and Dabrowska-Zimakowska (2022) conducted an exploratory qualitative study using a cross-sectional research design to understand the changes in university students' occupational balance and psychological well-being due to the COVID-19 pandemic. Additional aims of the study included identifying any sociodemographic factors related to occupational balance. One thousand three hundred thirty physical therapy, physical education, cosmetology, occupational therapy, and nursing students were recruited from a Polish university. The researchers used three measures, including the Polish version of the Occupational Balance

Questionnaire 11, the Psychological General Wellbeing Index, and a scale to determine the changes in time spent on various occupations. The Occupational Balance Questionnaire and Wellbeing Index had good internal consistency and sufficient test-retest reliability. Results indicated that university students during the COVID-19 pandemic felt they had enough things to do during the day. However, they felt an occupational imbalance between various daily activities. The results highlighted two critical points about occupational balance. One is that it differs between men and women, and it is positively correlated with engagement in preferred leisure and home maintenance activities. Additionally, the results revealed that occupational balance positively correlated with the psychological well-being of the university students in this study. Limitations of this study include limited generalizability due to the study being conducted at one university and limited longevity of the study results because they need to indicate how occupational balance changes over time for university students. Additionally, since this study was conducted during the COVID-19 pandemic the history could have influenced the reliability of the results, and participants likely had an increased perception of occupational imbalance during this time. This study does increase the understanding that occupational balance can change during drastic events, and it is positively correlated to the psychological well-being of university students.

To further understand the impact of the COVID-19 pandemic on the occupational engagement of college students, Tapia et al. (2022) completed an exploratory analysis with 152 college students, ages 18 to 25, who were recruited using convenience sampling. The study used several self-report measures to measure occupational engagement and mental health, including the Occupational Balance Questionnaire 11, PROMIS satisfaction with discretionary activities, short form 6a depression form, PROMIS short form 6a Fatigue, General Anxiety Disorder,

UCLA Loneliness Scale, and perceived stress scale. Results revealed a positive correlation between occupational engagement and mental health; specifically, occupational balance had significant negative correlations with mental health measures of depression, fatigue, anxiety, stress, and loneliness. Also, satisfaction with social occupations showed statistically significant negative correlations with the same mental health outcomes. Women reported more fatigue, stress, and anxiety than males in this study, and differences were found among race and perceived occupational balance. Furthermore, results demonstrated increases in alcohol consumption, smoking, and recreational drug use during the pandemic. These results further support the idea that environmental changes can negatively impact occupational engagement. Additionally, the results demonstrate that satisfaction with occupational engagement, including occupational balance and discretionary occupations, have a negative correlation with mental health symptoms. Limitations of this study include a lack of mental health data before COVID-19 for comparison, making it difficult to determine if the results are only a result of COVID-19. Additionally, the study had limited generalizability to the entire population of college students because of the limited representativeness of the sample. This research contributed evidence for the impact of environmental changes on the occupational engagement of college students and demonstrates that improved occupational balance positively impacts mental health.

Lexen et al. (2023) conducted a descriptive qualitative study to understand how the change in the environment during the COVID-19 pandemic altered the university student's experience of occupational balance. Fifteen university students were recruited between ages 18-29 using purposive sampling for the first participant, followed by snowball sampling. The researchers used semi-structured interviews based on the occupational balance questionnaire 11, and data was analyzed using content analysis. University students reported less social interaction

due to physical environment restrictions and were less motivated to engage in their studies due to COVID-19. They reported increased responsibility for their occupational balance by intentionally engaging in systematic routines to manage their education, leisure, and home maintenance activities. A limitation of this study included the limited generalizability of the study to the general population of university students because the survey was conducted in a restricted geographical region in Sweden. Additionally, the nature of the questions presented could have influenced the perception of occupational balance, and this study could have used a second measure of occupational balance to ensure the results are an accurate representation of occupational balance. This study begins to show how changes in the environment and routine can negatively impact the perceived occupational balance of university students. However, strategic engagement in preferred activities can positively impact occupational balance.

Rodriguez-Fernandez et al. (2021) conducted a cross-sectional study to explore the occupational balance of young adults during the COVID-19 pandemic. This cross-sectional design study was conducted in Spain, with 965 participants recruited using convenience sampling from a group of 18 to 30-year-olds, half of whom were university students. The researchers used the Spanish version of the Occupational Balance Questionnaire and a demographic questionnaire. The study found a statistically significant relationship between the perception of occupational balance and age and self-perceived health, as older adults had a better perception of health correlated to better occupational balance. Some factors that influenced the occupational balance of the participants included the isolation of confinement and distance learning. The limitations of this study included the limited generalizability of the results because the study was conducted in one geographical location and the use of convenience sampling. The nature of this study, which was conducted during the COVID-19 pandemic, may have had a

historical effect on the study results due to the stress of the time period. The cross-sectional design limits the ability to infer that the COVID-19 pandemic causes occupational imbalance in university students. This study supports the concept that the occupational balance of young adults influences the perception of health.

Romero-Tebar et al. (2021) conducted a retrospective, non-experimental, descriptive study to explore the relationship between occupational balance and university students' internet and phone use throughout their occupational therapy program. The retrospective study analyzed the data of 192 students between the ages of 18 and 65 in an occupational therapy program who were administered the Occupational Balance Questionnaire, Internet Addiction Test, and a Phubbing scale that measures telephone obsession. Results indicated that occupational balance improved as students progressed through the program. Students generally scored lower on occupational balance towards the beginning of the program compared to the end. Results may indicate that students may not have a strong perception of occupational balance between daily life activities. Additionally, the results revealed a negative relationship between occupational balance and internet addiction, indicating that less internet use improved students' perceptions of occupational balance. The limitations of this study are similar to other studies in that it had a specific university where it was conducted, and the concept of occupational balance could skew the questionnaire results. Lastly, the cross-sectional design limits the ability to infer causality between internet use and occupational balance. This study adds knowledge that external environmental factors can influence the perception of the occupational balance of university students.

The COVID 19 pandemic negatively impacted occupational balance (Guzkowska & Dabrowska-Zimakowska, 2022; Lexen et al., 2023; Rodriguez-Fernadez et al., 2021; Tapia et al.,

2022). University students worldwide reported changes in their daily routines and impacts on their mental health (Guzkowska & Dabrowska-Zimakowska, 2022; Tapia et al., 2022). The research showed that occupational balance correlates with psychological well-being and perception of health (Guzkowska & Dabrowska, 2022; Rodriguez-Fernandez et al., 2021). Routines positively impact occupational balance, and less use of the internet and phones can improve students' perceptions of their occupational balance (Lexen et al., 2023; Romero-Tebar et al.,2021). The limitations of these studies included limited geographical regions, an isolated period, and small sample sizes, limiting the generalizability to the entire population of university students (Guzkowska & Dabrowska-Zimakowska, 2022; Lexen et al., 2023; Romero-Tebar, 2021; Tapia et al., 2022). Although most of these studies were conducted during the COVID-19 pandemic, they highlight the importance of studying occupational balance in university students following the COVID-19 pandemic. These studies also highlight the impact that environmental factors influence occupational balance, psychological well-being is influenced by occupational balance, and university students may alter their perception of occupational balance based on how they spend their time.

# **Occupational Therapy and University Students**

Occupational therapy in the higher education or university setting is still considered an emerging area of practice (Dirette, 2019). This section will review the literature on occupational therapy practice in higher education and recent studies that have intervened with university students.

Eichler & Keptner (2023) conducted an online cross-sectional census survey to describe the current purpose of occupational therapy at university campuses worldwide. A 69-item survey was developed to gather information about higher education occupational therapy practice, including the practice environment, skills and experience, scope of services, needs and resources, and the barriers to providing services on campus. Fifty eight participants completed the census survey, including occupational therapy practitioners worldwide. Results demonstrated that occupational therapists work in multiple settings on campus, including disability services, student success centers, or offices of student affairs, and referrals come from students, academic advisors, and faculty. Services include life skills training, occupational skill development, leisure exploration, and coaching. Further results highlighted that occupational therapists could work as consultants, direct care, or serve generally in the university setting. Some barriers to practice included a need for more knowledge, funding, and role confusion. The limitation of this study is that there are few practitioners with clinical experience in the higher education setting. Hence, the responses of these practitioners only represent some higher education practitioners. Also, the results have limited generalizability due to each country and state having varying regulations for practice. Key points from this study are that the university setting is still an emerging practice area for occupational therapy, and there are several ways occupational therapy can serve in the university setting.

Keptner et al. (2016) conducted a pretest and posttest design intervention to better understand occupational therapy services' impact on occupational performance, performance satisfaction, and quality of life of university freshmen. Eighteen university freshmen were recruited using convenience sampling to participate in this study. Participants selected preferred sessions that coordinated with their availability. Participants attended five in-person group sessions focused on occupation-specific topics. Pre and post test scores were measured using a demographic form (SF-36 v2) and the Canadian Occupational Performance Measure (COPM) to measure university students' quality of life and performance satisfaction. Results revealed that

occupational performance and performance satisfaction improved in occupation-specific topics representing each area, as measured by COPM. This study's most significant score increases were from topics directly educated on in the intervention, including sleep, leisure, financial education, recreation, community resources, and study skills. The occupational therapy services did not statistically increase the posttest ranks in mental health or quality of life. The limitations of this study were the small sample size of participants. Additionally, the lack of a control group and randomization limits the validity of the results. Additionally, maturation could have influenced the results. Although this study had limitations related to methodology, it highlights that occupation-based intervention can improve the occupational performance and performance satisfaction of freshman university students. This study highlights that group interventions allow students to share information about their performance.

Understanding that university students experience multiple stressors during the transition to university, Egan et al. (2023) conducted a mixed methods study to evaluate the effectiveness of a telerehabilitation occupation performance coaching service for university students. The researchers used a pretest posttest design to measure the impact of the occupation performance coaching program and a qualitative descriptive method to explore the experiences of university students. The researchers for this study included faculty and fieldwork students. Thirty-five students enrolled in this telerehabilitation service and participated in one to six sessions each. Three methods were used to measure the Occupational Performance Coaching (OPC) for student clients, including the Canadian Occupational Performance Measure (COPM), Depression, Anxiety, and Stress Scale (DASS-21), and semi-structured interviews. Results indicated that students learned to develop and break down goals and learned strategies to improve academic and life engagement. Participants scored a statistically significant increase in COPM scores on

performance and Satisfaction with Performance. Out of the students who completed the DASS 21, 12 students demonstrated moderate to severe symptoms of mental health challenges before and scored statistically significantly better after the intervention. The limitations of this study are that they only begin to show the impact of occupational therapy interventions in the university setting, and because it was conducted at one university, generalizability is limited. These results show the effectiveness of occupational performance coaching interventions in typically developing university students and demonstrate that these interventions can improve students' performance and decrease mental health symptoms.

Secondary to COVID-19 changing the way university students experience occupational balance and use their time, Pekcetin and Gunal (2021) conducted a group randomized control trial among university students in a public University in Turkey to evaluate the effectiveness of a web-based time use intervention on the occupational balance of university students. Sixty university students with an average age of 19 were recruited using convenience sampling at an undergraduate university in Turkey. The study participants were randomized into two groups with either the intervention or control group, and a pre-test was administered by a blind assessor using the Occupational Balance Questionnaire 11 adapted for Turkey. Online time management education sessions focused on educating students about prioritization, time management strategies, routine development, and engagement in self-care were provided for eight sessions over one month. The results indicated that the Occupational Balance Questionnaire 11 scores did not differ significantly between study groups before the intervention. However, after the intervention, there were statistically significant increases in occupational balance in the intervention group. Students felt they had more time to do things they wanted. The authors concluded that a time-use intervention may positively affect the occupational balance of

university students. The limitations of this study included the use of convenience sampling and the risk of social desirability bias. This study is also limited in generalizability due to the specific setting in which it was conducted. This study highlights the benefits of a time-use intervention for university students and how an occupational therapy intervention could improve the perception of occupational balance. Future researchers should consider the other aspects of occupational balance, including focusing on various occupations.

The university setting continues to be an emerging area of practice for occupational therapy (Eichler & Keptner, 2023). Studies have been completed using time use, occupation-based interventions, and occupational performance coaching to intervene with university students (Egan et al., 2023; Keptner et al., 2016; Pekcetin & Gunal, 2021). The existing literature on interventions with typically developing university students transitioning into adulthood is minimal, and this transition causes an increase in occupational imbalance and stress (Eichler & Keptner, 2023; Pekcetin & Gunal, 2021). Both Keptner et al.. (2016) and Egan et al. (2023) demonstrate the benefit of an occupation-specific intervention in improving the occupational performance of university students. Pekcetin & Gunal (2021) add that an intervention based on time use could enhance the perception of the occupational balance of university students. These studies highlight the benefit of occupational therapy client-centered services with activities to improve the practical application of the intervention (Egan et al., 2023; Keptner et al., 2016; Pekcetin & Gunal, 2021).

### **Summary**

Transitioning from adolescence to adulthood brings on new roles, including living independently, self-management, and household management, requiring increased autonomy and independence. The influx of these new roles can influence how life satisfaction changes across

the transition from adolescence to adulthood (Henkens et al., 2022; Marquez et al., 2023; Ni et al., 2021; Switek & Easterlin, 2018; Thomspon et al., 2021; Worsley et al., 2021). For university students, this transition can bring added stress because they are simultaneously transitioning to adulthood and gaining autonomy as university students. Students experience challenges managing household chores and becoming financially independent during this transition, which can negatively affect their mental health (Lipson et al., 2021; Thompson et al., 2021; Viourdek et al., 2014; Worsley et al., 2021). Increased stress, lack of motivation, and anxiety during this transition can negatively impact university students' life satisfaction (Liu et al., 2022; Luo et al., 2023; Tsitsas et al., 2019). Although students experience stress and mental health challenges during this time, they may not seek mental health services due to fear, stigma, or lack of time (Thomspon et al., 2021; Worsley et al., 2021). Knowing that university students experience stress and difficulty transitioning into adulthood, researchers revisited the effects of the environmental changes and stress associated with the COVID-19 pandemic.

Changes in routine and habits negatively impacted the occupational balance and, subsequently, the psychological well-being of university students during the COVID 19 pandemic (Guzkowska & Dabrowska, 2022; Lexen et al., 2023; Rodriguez-Fernandez et al., 2021; Tapia et al., 2022). The lack of routines and consistent daily patterns of occupations can result in a decreased occupational balance and subsequently impact health (Meyer, 1922; Wagman & Hakansson, 2014a; Wagman et al., 2019). Occupational balance is a dynamic and subjective concept that can be positively influenced by engagement in health habits and routines (Matuska & Christiansen, 2008; Meyer, 1922; Rogers, 1984). Occupational therapists can use their expertise in providing roles and routines to enhance the occupational balance experienced by university students (Eichler & Keptner, 2023).

Occupational therapy interventions can positively influence the occupational balance of university students. Lexen et al. (2023) and Romero-Tebar et al. (2021) highlighted that effective time management strategies and decreased Internet use improved students' perception of occupational balance. This is consistent with a recent study by Pekcetin and Gunal (2021), who used online time-use intervention with university students to improve their occupational balance. Recent literature reveals that occupational therapy interventions using occupation-specific focus and occupational performance coaching have provided practical and client-centered interventions to combat the occupational imbalance experienced by university students (Egan et al., 2023; Keptner et al., 2016; Pekcetin & Gunal, 2021).

Limited research has been published on the effectiveness of occupational therapy interventions in typically developing university students (Pekcetin & Gunal, 2021). Most of the studies were previously conducted in specific geographical regions and done during or immediately following the conclusion of the COVID-19 pandemic; gaps remain in the literature on the effect of occupational therapy interventions on university campuses in a broader population of people following the COVID-19 pandemic (Guzkowska & Dabrowska, 2022; Rodriguez-Fernandez et al., 2021). Two articles highlight using valid and reliable measures, including the Occupational Balance Questionnaire 11 and the Satisfaction with Life Scale, to measure satisfaction with life and occupational balance, respectively (Ni et al., 2021; Pekcetin & Gunal, 2021).

Further research is needed to identify if occupational therapy intervention methods, including occupational performance coaching, occupation-based interventions, and time-use interventions, would continue to improve the occupational balance and life satisfaction of typically developing university students in more populations. Using an occupational balance

education module, this research study was designed to identify if an occupational balance educational module would effectively improve the occupational balance and life satisfaction of university students transitioning into adulthood.

### **Statement of Purpose**

This capstone project aimed to develop an occupational therapy educational module to improve the occupational balance of 18 to 22 year old university students and measure its effectiveness on the participants' perceived occupational balance and life satisfaction. The project was developed in response to the occupational imbalance that university students experience during the transition to adulthood and the lack of research on effective interventions to support students in this transition. The intervention consisted of a four-part educational module using strategies from occupational therapy, including performance coaching, time-use interventions, and guided reflection. The modules aided students in identifying barriers and support to their occupational balance. They provided them with self-management skills, including time and stress management strategies, to improve their occupational balance and, subsequently, life satisfaction.

There were three intended objectives for this study. The first was to measure the occupational balance and life satisfaction experienced by university students and demonstrate the value of an occupational therapy intervention in supporting students. The second objective was to produce results that could be used by a student support services program at the university to determine if occupational therapy interventions would support the mental health focus of their existing program. The last intended objective was to benefit the profession of occupational therapy by demonstrating the effectiveness of occupational therapy intervention for university students transitioning to adulthood.

### **Theoretical Framework**

The person-environment occupation performance (PEOP) model, a practice model in the Occupational Therapy profession, served as the theoretical lens through which this study was conducted. See Appendix F for an image of the model. A model of practice is used to guide the clinical reasoning of the practitioner and demonstrate the distinct value of the practice of occupational therapy. A model outlines the evaluation and intervention process for patients and how occupational engagement is central to the profession. Models of practice provide a unified language that the practitioner can use to describe their interventions (Feaver & Creek, 1993). The PEOP model can be used at an individual, organizational, or population level to guide an occupational therapist's view of the experiences of the individuals they serve and how the personal and environmental factors impact their daily performance (Baum et al., 2015). The PEOP model focuses on an individual's overall occupational performance and participation in daily life and how personal factors, environmental factors, and occupations impact their well-being and quality of life.

The PEOP model by Baum et al. (2015) has foundational components of an ecological approach, suggesting that an individual's performance is determined by the continuous interaction between the person and their surrounding environment. This PEOP model consists of four components, including personal factors, environmental factors, occupations, and performance. The first component includes the person and any intrinsic factors that might influence that person, including their cognition, psychological well-being, physical well-being, spirituality, and functioning. The second component includes the environment and all extrinsic factors that might influence the person's performance in their daily activities. The extrinsic factors can include the amount of social support the person has, the surrounding economic

system, and the surrounding technological and natural environment. The last two components of this model include the occupations or activities that a person performs daily and how that impacts their performance. The intersection of these four components represents occupational performance and participation. This indicates that the person's intrinsic factors, environment, and occupations can influence daily performance. This model also suggests that a satisfactory person, environment, and occupation fit is optimal for daily performance in desired occupations and supports overall well-being and quality of life.

Using the PEOP model as a guide, the student researcher supported students in selfidentifying intrinsic and extrinsic barriers to occupational performance through activities including the role checklist, a time management chart, and a goal-setting worksheet. As students completed the activities, they reported intrinsic barriers, including decreased spiritual connections, decreased internal motivation, decreased physical well-being, and difficulty prioritizing physical activities as barriers to their engagement in their leisure, work, and education occupations. Additionally, students reported environmental barriers such as needing more social support, transportation, and motivation to complete school-related tasks. The PEOP model served as a guide to help the researcher reflect on factors to consider when supporting students' occupational balance. After analyzing these personal and environmental factors that influenced the students' occupational performance, the student researcher provided strategies and supports such as sleep hygiene techniques, campus resources for psychological support, and time management strategies to optimize their occupational performance. Practical strategies were provided to support students' engagement in their desired occupations, which aligned with the mission of occupational therapy.

#### Methods

This section discusses the methods used to answer the question: Does an occupational balance education module improve the perception of occupational balance and life satisfaction of university students (18-22) transitioning into adulthood? The first section will describe the agency where this research took place, followed by a description of the research approach and design of this study. The following section will describe the data collection methods used in this study. The fourth section includes the participants of this study with the inclusion and exclusion criteria followed by the sampling design and procedures section. Then, the pilot study procedures will be discussed, followed by the procedures of the main study. Lastly, this section will end with data management and analysis procedures.

## **Agency Description**

This research study was conducted at the University of Nevada Las Vegas, a public university in the southwestern region of the United States. Students were recruited using convenience sampling with a mass email, social media communication, in-person communication, and recruitment flyers from the Center for Academic Enrichment and Outreach (CAEO), an on-campus program providing student support services. Ten students from this agency, ages 18-22, originally signed up for the study.

The student researcher contacted the agency director to conduct research here because it serves a broad population of university students from multiple backgrounds. This program serves between 800 and 900 undergraduate students from minority backgrounds, including students with financial and academic needs. This on-campus student support services program helps undergraduate students in academics and degree attainment. The program provides services, including tutoring, coaching, advising, skills testing, supplemental instruction, and career

exploration to aid students as they proceed through university and support them as they achieve their goal of graduation. This program supports students in their academic journey by providing resources and workshops on writing skill development, time management, and stress management.

This research study was conducted at this agency, and a repository of workshop material was developed for the coordinators and staff to continue supporting university students following the research study's conclusion. The student researcher has assisted with multiple workshops on stress and time management for general student use at this agency.

## **Research Approach and Study Design**

This study used a quasi-experimental one-group pretest posttest design to demonstrate the effectiveness of an occupational balance educational module on the life satisfaction and occupational balance of university students ages 18 to 22. Quantitative research approaches are used to measure the effectiveness of an intervention on its outcome variables (Taylor, 2017). A true experimental design would require randomization and control; randomized allocation of participants to select groups was not feasible for this study (Portney, 2020). For this study, a quasi-experimental approach was used to test the hypothesis that an occupational balance education module would improve the life satisfaction and occupational balance of university students ages 18 to 22. Quasi-experimental category designs are specifically used when randomization is not feasible, and there is a need to demonstrate the relationship between the independent and dependent variables (Taylor, 2017). A one group pretest posttest design was selected for this study to compare the results of two questionnaires measuring occupational balance and life satisfaction before and after a four-part occupational balance education module for a sample of university students.

The advantages of a one group pretest posttest quasi-experimental design include providing a direct measure of the effectiveness of the intervention using a comparison of the pre and post-test data. This study administered two self-report questionnaires to students before and after a four-part educational module intervention. One advantage of this design type is that it can be completed quickly compared to a time series design, which requires increased time and multiple opportunities to administer the assessments (Portney, 2020). Another advantage of this design is that it allows for direct comparison within subjects instead of across subjects.

Collecting the same pre and posttest data within subjects allowed the researcher to analyze the difference between each participant's scores. Lastly, a quasi-experimental one-group pretest posttest design can be completed without randomization. Participants had regulatory requirements to be at work or school at certain times of the day, causing their schedules to interfere with one another and limiting the randomization of participants into intervention groups. Although randomization was not feasible, students were provided multiple time slots each week to select the dates for education modules that worked best within their schedule.

A few disadvantages to this research design include a risk of attrition, the potential for testing bias, and the potential for regression to means (Taylor, 2017). To decrease the risk of attrition, the participants were offered an incentive to be entered into a raffle for a chance to win one of four fifty-dollar Target gift cards upon completion of all four sessions. Another risk related to this design is selection bias, and this was countered by providing all students of this student support services program with an invite and allowing those interested in signing up to participate in the study to contact the researcher. To decrease any risks of testing bias, the assessments were provided in consistent conditions with the researcher absent from the room, and students were asked to place completed questionnaires in a folder with randomly assigned

identification (ID) numbers to maintain the anonymity of the study results. One strategy to reduce potential regression to means would have been to have a control group; however, due to the small sample of participants available to participate in this study, a control group was not feasible.

Specific strategies were included in this research study design to increase the study's internal and external validity. To improve the study's internal validity, it was conducted during the first six weeks of the semester to decrease the influence of historical effects on the outcomes of this study. Typically, during the eighth week of the semester at this university, students are administered midterm exams, potentially influencing their perception of their occupational balance or life satisfaction. Secondly, to increase the potential that the intervention had a direct effect on the results, temporality was taken into consideration by providing the posttest immediately after the last session of the modules. This enhances the potential that the posttest results are a direct effect of the intervention rather than external factors that may influence the posttest results if administered after the study's conclusion. The third method to improve the internal validity of this study was that the selected instruments were valid and used across multiple populations before being implemented in this study, strengthening the reliability of the testing results. An incentive was provided to maintain participation in the study to improve internal validity and decrease the risk of attrition bias. To improve the external validity of this study, participants were recruited from a diverse population of university students.

Overall, this design was selected because it was the best method for determining the effectiveness of an occupational balance education module intervention on the self-reported outcome measures of occupational balance and life satisfaction. This design could be used without the means for randomization of participants, and it could be conducted within the sixteen

week university semester with enough time to conduct the intervention and interpret the results.

Lastly, this research design was feasible without the ability to have a comparison group due to the limited availability of research participants and the small sample size.

# **Description of the Intervention**

The negative impact of the transition from adolescence to adulthood for university students on occupational balance and life satisfaction influenced the development of this research study (Guzkowska & Dabrowska Zimakowska, 2022; Luo et al., 2023; Worsley et al., 2021). The literature on occupational therapy interventions, including time use, occupational performance coaching, and stress management strategies for university students, influenced the development of this intervention (Egan et al., 2023; Keptner et al., 2016; Pekcetin & Gunal, 2021). The literature review revealed that university students have trouble with time management and stress management because of the lack of balance between roles; however, these intervention methods were effective in improving their perceptions of life satisfaction and occupational balance (Egan et al., 2023; Keptner et al., 2016; Pekcetin & Gunal, 2021). Time use interventions are effective in helping university students take responsibility for how they spend their time to avoid feeling stressed and anxious. They have been used in literature to help students during the COVID 19 pandemic decrease stress from a lack of time management and improve prioritization (Pekcetin & Gunal, 2021; Romero-Tebar et al., 2021).

This research study's intervention was provided once a week over four weeks, as longer interventions allow students to retain and implement the strategies learned in occupational therapy. Each week, participants engaged in a one-hour session, including fifteen minutes of education and forty-five minutes to work on individualized participant needs related to occupational balance.

The first session began with a time management intervention that required participants to reflect on how they spent 24 hours of their day and identify how they would prefer to allocate their time to manage their roles and responsibilities. Using occupational performance coaching strategies, including active listening and supporting students in self-reflection, the student researcher guided participants in discussions about their time management (Egan et al., 2023). This intervention used occupation-focused discussions to help students learn strategies and develop goals to improve their engagement in their preferred occupations, including education, leisure, and work (Keptner et al., 2016). Stress management strategies were incorporated into the second session of this intervention to help students during the transition to university. Participants were educated on how to identify their stressors and stress symptoms. They were informed of several coping strategies, and occupational performance coaching was used to determine the best strategy for each participant. Participants were led in a mindfulness meditation to demonstrate how to implement a stress management technique. In the last session, a goal-setting activity was used to develop a plan for implementing the strategies learned following the conclusion of the intervention to allow students to self-identify how they would implement the strategies they have learned (Keptner et al., 2016). The specific details of the weekly intervention topics can be found in the Procedures section, module outline, and intervention PowerPoint. See Appendix E for a copy of the intervention PowerPoint and Appendix D for the Intervention outline.

### **Data Collection Methods**

Data for this study was collected using two instruments, plus an additional one for screening of participants. The screening instrument was a five-minute non-standardized questionnaire administered during recruitment to ensure participants understood the study

requirements and met the inclusion criteria. In the main study, two Likert scale questionnaires served as the pretest and posttest instruments to measure the outcome variables of life satisfaction and occupational balance, titled Satisfaction with Life Scale (SWLS) and Occupational Balance Questionnaire 11 (OBQ11).

#### Instrumentation

The screening questionnaire collected data on sample characteristics. See Appendix C for a copy of the screening questionnaire. This instrument was used to verify that the participants were university students, participants in the student support services program, and met the age requirements for eligibility to participate in this study. It was administered over the phone or in person with potential participants. This questionnaire was created for this study and has not been standardized.

The first instrument, the Occupational Balance Questionnaire (OBQ 11), is a self-report questionnaire that measures the self-perception of occupational balance in several categories, including occupations one does with others, time spent in each occupation, variety of activities, and the number of meaningful activities one participates in. It was developed by Hakansson et al. (2020), and it is an 11-item Likert scale questionnaire with four ordered response items on each question ranging from strongly disagree to strongly agree. See Appendix A for a copy of the questionnaire. This questionnaire was revised from its original version, titled Occupational Balance Questionnaire 13 (OBQ 13), in a construct analysis study to improve the reliability and item fit of the questionnaire in measuring occupational balance (Hakansson, 2020). The total score of the OBQ 11 can range from 0-44, with a higher score indicating greater occupational balance. This questionnaire demonstrated a good test retest reliability of 0.90 across various populations (Hakansson, 2020; Hernandez et al., 2023). A recent retrospective study has shown

that this questionnaire has improved construct validity, representing individuals with high and low occupational balance for a population of adults in the United States with type 1 diabetes (Hernandez et al., 2023). This instrument was used simultaneously with the Satisfaction with Life Scale.

The Satisfaction with Life Scale (SWLS), a 5-item Likert scale, was designed to be a subjective measure of an individual's life satisfaction (Diener et al., 1985). See Appendix B for a copy of this questionnaire. On a scale of one to seven, participants are asked to indicate how strongly they agree or disagree with five items, subjectively measuring their life satisfaction. A sum of the scores measures the participant's perceived life satisfaction, ranging from extremely dissatisfied (5-9) to extremely satisfied (31-35). Diener et al. (1985) demonstrated that the SWLS is a reliable and valid measure of life satisfaction and is suitable for use with a wide range of age groups with an internal consistency of alpha 0.87, test-retest reliability of 0.82, and criterion validity that has been established along with other measures of wellbeing and self-esteem.

## **Participants**

The target population for this research study were students at the University of Nevada Las Vegas who were transitioning into university and between the ages of 18 and 25. The accessible population included students at UNLV who participated in the Center for Academic Enrichment and Outreach (CAEO). Inclusion criteria were selected to represent students in recent transition to university who were participants of CAEO. Inclusion and exclusion criteria are listed below.

#### Inclusion Criteria

To participate in this study, a participant must:

• be enrolled student at the University of Nevada Las Vegas

- be a participant in the Center for Academic Enrichment and Outreach
- be between 18 and 22 years of age

#### Exclusion Criteria

To participate in this study, a participant must not:

- be a student at a different university
- be below the age of 18 or above the age of 23

# **Sampling Design and Recruitment Procedures**

For this research study, data was collected from participants at a student support services program at a university in the southwestern region of the United States. A non-probability convenience sampling design was used to recruit participants for this study. This allowed participants to participate in the study voluntarily. Participants could select preferred timeslots for the educational modules based on their schedule and availability. Convenience sampling is used to access readily available participants in a specific program (Taylor, 2017). This sampling design was selected for its ease of use, voluntary participation, and cost-effectiveness.

Participants were recruited from CAEO at the University of Nevada Las Vegas. A target sample size of 30 participants was proposed to represent a portion of the population of the 840 CAEO participants.

In the Fall 2023 semester, potential participants were informed by the student researcher about this upcoming study at an orientation for the student support services program. At that time, one participant provided contact information to be contacted when the study recruitment would begin.

Recruitment for the pilot study and main study began following institutional review board approval at the university on the first week of the spring semester. See Appendix G for a copy of

the IRB approval letter. Permission to distribute all recruitment materials was obtained from the facility. See Appendix H for facility permission. Four different recruitment strategies were implemented per the original proposal. First, the agency's director sent a mass email on the student researcher's behalf to invite 593 active student support service participants to participate in the study. See Appendix I for the recruitment letter. The student researcher emailed the interested participant from the orientation; however, the email address was incorrect.

A second recruitment strategy was the posting of recruitment flyers. Twenty flyers containing information about the requirements to participate in the study, the study duration, incentive information, and instructions to contact the student researcher were distributed in the agency's lobby during the first week of the semester. See Appendix J for the recruitment flyer. The agency employees also posted five recruitment flyers in their offices and shared them on their school website to communicate with students. As the third recruitment strategy, the student researcher attended three existing student support services workshops to inform potential participants about the study. No students signed up for this in-person recruitment option.

As the final recruitment strategy, the student researcher sat in the lobby throughout the first three weeks of the semester with the research information to allow students to sign up for the study and be informed about its content. An incentive for entry into a raffle for one of four \$50 Target gift cards was offered for completion of all four occupational balance education modules to improve recruitment and decrease the risk of attrition.

All recruitment materials directed the potential participants to contact the student researcher by email or phone to complete a screening questionnaire to ensure they met the criteria for the study. At that time, participants were allowed to ask questions about the study and sign up for their preferred time slots for the intervention. This recruitment procedure was also

followed to recruit for the pilot study. Upon conclusion of the recruitment period, 14 participants were screened, 10 students opted to participate in the study, and nine began the study on the first day of implementation.

# **Pilot Study**

A pilot study aims to demonstrate evidence for the feasibility of the recruitment procedures, intervention implementation, and data collection process (Taylor, 2017). The pilot study conducted for this research intended to ensure participants could follow the procedures accurately, complete the questionnaires with the directions provided, and determine the total time required to complete the intervention.

Recruitment strategies proposed for the full study were followed, and two participants signed up to participate. Although the main study was estimated to last four hours, the pilot study was conducted over two hours due to limited participant availability. The four-part educational module was administered, and the OBQ 11 and SWLS were administered before and after the pilot study. See Appendix D for an Intervention Outline. Upon completion of the pilot study, both participants provided verbal feedback that increased time would be required for the full study. Participants had no difficulty with the intervention instructions or the questionnaires. Minor changes to the main study were made due to the participant feedback, including longer room reservations and participant reminders before each session.

## **Procedures of the Study**

The following procedures were used in this research study:

 The University of Nevada Las Vegas Institutional Review Board (IRB), IRB # UNLV-2023-491, approved the study on January 16, 2024. See Appendix G for the IRB approval letter.

- Permission to distribute all recruitment material was obtained via email from the agency director. See Appendix H for the Facility Permission.
- 3. Recruitment for the pilot study and main study began during the first two weeks of the spring semester using the recruitment methods outlined in the sampling design and recruitment procedures section. See Appendix I for the recruitment email script and Appendix C for the screening questionnaire.
- 4. Twenty flyers were distributed in the agency's lobby. See Appendix J for a copy of the recruitment flyer.
- 5. The agency director, on behalf of the student researcher, sent a mass email to all agency participants on the first day of the second week of the semester.
- 6. Agency staff posted five copies of recruitment flyers in their offices.
- 7. Agency staff shared the flyer on the school website that they use to contact students.
- 8. The student researcher attended three existing workshops to inform potential participants about the upcoming study.
- 9. Two participants contacted the student researcher to participate in the pilot study. Both participants were verbally informed about the date and location of the pilot study.
- 10. Pilot study participants were emailed a reminder email with the date and location of the pilot study.
- 11. Recruitment for the pilot study concluded at the end of the second week of the semester.
- 12. The pilot study was conducted for two hours with two participants (see Pilot Study for details).
- 13. Participants for the main study contacted the student researcher via email, phone, or in person to sign up for the study.

- 14. Participants were administered a five-minute screening questionnaire in person or over the phone and were allowed to ask any questions about the study. See Appendix C for a copy of the screening questionnaire.
- 15. Nine participants chose to participate in the study. At the end of the screening questionnaire, each participant selected their preferred time slots for each module. Four time slots were provided each week for each of the four modules.
- 16. Recruitment for the main study concluded at the end of the third week of the semester.
- 17. Participants were provided two opportunities to sign the informed consent form. The first opportunity was whenever participants signed up for the study in person at the agency.

  The second opportunity was during the first day of the intervention in a room reserved by the agency. Participants were provided opportunities to ask questions about the study at any time. See Appendix K for a copy of the Informed Consent Form.
- 18. The student researcher emailed participants a reminder about the study location and time the day before each session.
- 19. Upon arrival on the first day of the study, participants randomly selected identification(ID) numbers to identify the pre and post-test questionnaires during data analysis.
- 20. Participants completed two hard copy questionnaires, OBQ 11 and SWLS, to measure occupational balance and life satisfaction. The participants were instructed to complete both questionnaires using the randomly assigned ID number instead of their name. The researcher left the room for twenty minutes to allow the participants enough time to complete the questionnaires and place them in an empty folder in front of the room.
- 21. The study began on the first day of the fourth week of the semester. It consisted of four educational workshops conducted over four weeks in February. Each session ran for

forty-five minutes to one hour. The study was provided in person, in a group setting, and in a room reserved on the university campus. Week 1 consisted of education on time management and occupational balance and completing a time management worksheet. Week 2 consisted of education on barriers and supports to occupational balance, completing a role checklist, and identifying barriers and support to occupational balance. Week 3 included education on strategies to improve occupational balance, a guided mindfulness activity, and goal setting. Week 4 consisted of a recap of all material, goal setting for the next three to six months, and a raffle. See Appendix D for an Intervention outline.

- 22. Upon the study's conclusion, participants completed the same two hard copy questionnaires, OBQ 11 and SWLS, using the same ID numbers. The student researcher left the room for twenty minutes to allow participants sufficient time to complete the questionnaires and place them in an empty folder in front of the room.
- 23. On the last day of each session, participants who completed all four educational modules were entered into a raffle to win one of four \$50 Target gift cards.
- 24. Hard copies of questionnaires and informed consent forms were stored in a locked briefcase and remained with the student researcher throughout the study.
- 25. Data was tallied from both questionnaires by the student researcher.
- 26. Data was uploaded into an Excel file on a locked computer and exported to IBM SPSS

  Statistics (Version 29) for data analysis. Data without a post-test score was removed from the analysis for both questionnaires.
- 27. Hard copy data was transported to the principal investigator's office for data storage.

- 28. Participants who did not complete the post-test questionnaires were emailed to gather information regarding attrition.
- 29. All outcome variables were analyzed descriptively, followed by inferential statistics. For more details, refer to the data management and analysis section.
- 30. Results were calculated and reported.
- 31. Interpretation, discussion, and conclusion were developed.

### **Data Management and Analysis**

### Data Management

Data management involved collecting and handling screening information, informed consent forms, and pre and post-test questionnaires. Participants' contact information collected during screening was stored in a Google drive on the student researcher's password protected computer. Hard copy data from the pre and posttest questionnaires and informed consent forms were stored in a locked briefcase that remained with the student researcher throughout the study. At the end of the intervention, the scores from the Satisfaction with Life Scale (SWLS) and Occupational Balance Questionnaire 11 (OBQ11) instruments were tallied and reviewed three times by the student researcher. Although there were four sessions for the intervention each week, the data was compiled into one dataset and then entered into an Excel file on the student researcher's password-protected computer. The data was then imported into the IBM SPSS 29. Data entry was checked three times for accuracy by the student researcher. After entering all the data, the student researcher transported all hard copy data, including the questionnaires and informed consent forms, to the principal investigator's office, where they will remain in a locked drawer for three years. After three years, all hard copy and electronic data will be destroyed.

### Data Analysis

The SWLS and OBQ 11 instruments resulted in interval and ordinal data using a number to represent total life satisfaction and occupational balance, respectively. Descriptive and inferential statistics were run on both outcome variables to describe the data. Additionally, inferential statistics were used to determine if a statistically significant difference existed between the pretest and posttest on these outcome variables. Descriptive statistics were not run on the sample characteristics because all participants met the same criteria.

A related sample Wilcoxon Sign Rank Test was used to compare the participants' scores on occupational balance and life satisfaction before and after the occupational therapy intervention. This test was used to determine if there was a statistically significant difference in the mean ranks in pre and post-test scores. This test was chosen because the study was conducted on a small sample of five participants (N=5), and there was a lack of normally distributed data in each variable, indicating the need for a nonparametric related samples test. The randomly selected participant identification (ID) numbers were used to match the pre and post-test scores. Data without a post score was omitted before the Wilcoxon sign rank test was run.

An analysis of itemized questions was sought to further understand if certain items in the measures could indicate specific changes due to the intervention. However, these could not be calculated due to the small sample size. Instead, a visual analysis of scores was completed to compare itemized scores and identify any trend in the data.

### **Ethical and Legal Considerations**

Permission was obtained from the agency director to conduct research on-site, distribute recruitment material, and engage with the student support program participants (Appendix H). This study was approved by the UNLV Institutional Review Board (ID# UNLV-2023-491). See Appendix G for a copy of the IRB approval page. Participants voluntarily contacted the student researcher via a secure phone to enroll in this study. Participants were screened for eligibility and could ask questions about the study throughout recruitment and the study duration. All phone calls were taken in a private office to maintain confidentiality, and contact information was stored in a 2-step authentication Google Drive on the student researcher's password protected computer.

Although there are potential risks for any study, the immediate and long-term risks for this study are minimal. This study has no physical risks involved. Some may consider the screening questions about the participant's age and status in the university an invasion of privacy, but participants can choose not to answer those questions. Participants were given an informed consent form about the study and were permitted to ask questions at any time.

Questions about the study were answered in person, over the phone, or via email. Participants were verbally informed at the beginning of each module that they could discontinue participation in the study at any time with no risk to them.

The research study was conducted in a windowless room with a door that could be locked to maintain participant's privacy. To maintain the confidentiality of all participants, randomly selected identification (ID) numbers deidentified data, no photography was permitted, and participants were asked to refrain from discussing other participants' information at the beginning of each session. Upon conclusion of the study, all electronic data was stored in 2 step

authentication Google Drive on the student researcher's password protected computer, and hard copy data was stored in the principal investigator's locked office. All data will remain in the Google Drive and the principal investigator's office for three years, after which it will be destroyed.

#### **Results**

This section reports the results of this study. To answer the question of whether an occupational therapy balance educational module would improve the perception of occupational balance and life satisfaction for university students transitioning into adulthood, the results begin with a description of the sample. This is followed by the results of the Occupational Balance Questionnaire 11 (OBQ 11) and Satisfaction with Life Scale (SWLS) conducted on the outcome variables of occupational balance and life satisfaction. The results section will end with a summary of observations and field notes collected during the study.

## **Description of the Study Sample**

Using all recruitment procedures described above, nine participants between ages 18 to 22, students at the University of Nevada Las Vegas, and participants of CAEO initially completed the OBQ 11 and SWLS pre-test. Upon completion of the intervention, five (N=5) participants completed the OBQ 11 and SWLS post-test questionnaires. All participants who remained in the study appeared engaged and motivated to try the strategies from the modules. For sessions with two or more participants, it was noted that participants discussed strategies between them to maintain or develop occupational balance.

### **Satisfaction With Life**

The Satisfaction with Life Scale (SWLS), a seven point Likert scale, with interval measures ranging from extremely dissatisfied to extremely satisfied, can result in a maximum score of 35. The five participants' scores ranged between 18 and 29 before the intervention and 26 and 31 after the intervention. Descriptive statistics revealed a pretest mean of 23, a median of 23, and a standard deviation of 4.44. The post-test mean was 23, the median was 29, and the

standard deviation of 2.302. The pretest median of 23 represents a slight satisfaction with life, and the post-test median of 29 indicating satisfaction with life.

To see if the occupational balance educational module made a difference in the perception of the study sample per their satisfaction with life, the pretest and posttest questionnaire scores were compared using Wilcoxon Signed Rank Test-related samples. The results indicated a statistically significant increase in participants' satisfaction with life with a Z score of -2.032 (p=0.042). This result means that the null hypothesis can be rejected and that the occupational balance educational module improved the perceived life satisfaction of this sample of university students. See Table 1 for a comparison of pre and post-test scores for the satisfaction with life scale and the occupational balance questionnaire.

A visual analysis was conducted to see if there were trends in the differences between itemized question scores before and after the intervention. As a result of the visual analysis of individual questions within the SWLS data, all five participants showed an increase in scores for item 2, which states, "The conditions of my life are excellent," and item 3, which states, "I am satisfied with my life."

**Table 1**Comparison of Pre and Post-Test on SWLS & OBO 11 Questionnaire (N=5)

Item	Pre- Questionnaire Median	Post Questionnaire Median	Wilcoxon Signed Rank <i>Z</i> ( <i>p</i> -value)
Satisfaction with Life Scale	23	29	-2.032 (p=0.042)
Occupational Balance	27	36	-2.032 (p=0.042)

*Note.* Satisfaction with Life Scale (SWLS) = 35 possible points. Occupational Balance Questionnaire (OBQ11) = 44 possible points.

## **Occupational Balance**

The Occupational Balance Questionnaire (OBQ 11), a four point Likert scale, ranging from strongly disagree to strongly agree, can result in a maximum score of 35, with a higher score indicating greater occupational balance. The five participants' scores ranged from 24 to 34 on the pretest and 29 to 43 on the posttest. Descriptive statistics revealed a pretest mean of 28, a median of 27, and a standard deviation of 4.40. The post-test mean was 36, the median was 36, and the standard deviation of 5.177.

To see if the occupational balance educational module made a difference in the perception of the study sample per their occupational balance, the pretest and posttest questionnaire scores were compared using Wilcoxon Signed Rank Test-related samples. The results indicated a statistically significant increase in participants' occupational balance with a Z score of -2.032 (p=.042). This result means that the null hypothesis can be rejected and that the occupational balance educational module improved the perceived occupational balance of this

sample of university students. Refer to Table 1 for a comparison of pre and posttest scores for the satisfaction with life scale and the occupational balance questionnaire.

A visual analysis was conducted to see if there were trends in the differences between itemized question scores before and after the intervention. As a result of the visual analysis of individual questions within the OBQ 11 data, no trends were noted for the itemized questions.

## **Summary of Field Notes and Observations**

Field notes were kept throughout the study to retain information about the procedures and participant experiences. This section reveals the challenges with the procedures and summarizes participant feedback about their experience throughout the study.

Field notes regarding the study's procedures indicated that students preferred to contact the researcher via email and asked for reminder emails. Also, participants required longer sessions with time management and role checklist activities. Lastly, participants did not attend some sessions due to illness and busy schedules.

Participant feedback about their experience was collected in field notes to support the results of this study. Participants initially reported decreased life satisfaction and occupational balance due to increased roles and routines associated with the start of the semester. In the first session, participants reported that this session was individualized and provided practical strategies that they could implement. Participants reported that the time management worksheet provided an opportunity for reflection. In week two of sessions, students reported that they had already begun implementing strategies from the first session. One participant reported completing his homework on time, and another participant reported waking up earlier to avoid rushing to classes. Participants reported some barriers to occupational balance, including environmental barriers, difficulty with motivation, and challenges attending to tasks for long

periods. Upon the study's conclusion, participants reported that this intervention provided strategies to improve stress and time management, allowing them to engage in their student roles and manage their homes more efficiently. Participants developed goals to implement the strategies learned in the sessions.

#### Discussion

Advancing the profession of occupational therapy requires developing and implementing evidence-based practice research. University students can be supported in their occupational performance using occupational therapy interventions (Egan et al., 2023; Keptner et al., 2016; Pekcetin & Gunal, 2021). This research study contributed to AOTF's research agenda to develop evidence-based research for advancing the profession of occupational therapy (American Occupational Therapy Foundation, 2024). This quasi-experimental one-group pretest-posttest design demonstrated that an occupational balance education module delivered over four weeks had a statistically significant improvement in occupational balance and life satisfaction for this small sample of university students between the ages of 18 and 22.

## **Sample Characteristics and Recruitment**

The sample of five university students did not represent the 900 participants served by the Center for Academic Enrichment and Outreach, and it should be noted that four out of five participants were women. Obtaining a representative sample of the accessible population was difficult due to participants' conflicting schedules and limited availability. Participants were required to report to work and school at specific times of the day, limiting their availability to participate in the study. Additionally, limited spaces and timeslots on campus for reservation created an environmental barrier to the time of day this study could be conducted. A total of 14 participants were initially interested in this study, however nine could not participate due to these restrictions. Despite the environmental constraints and limited student availability, multiple timeslots allowed participants to select preferred timeslots and make up any missed sessions. These recruitment barriers and limited sample representation are consistent with the challenges presented in the literature due to limited student availability. Recent literature suggests that

virtual interventions may be more accessible to participants (Keptner et al., 2016; Pekcetin & Gunal, 2021). Consistent with the PEOP model by Baum et al. (2015), these environmental constraints and limited student availability demonstrate how the environment can impact university students' occupational performance in this desired activity.

### Satisfaction with Life and Occupational Balance

The results of this study demonstrated that occupational balance and satisfaction with life were statistically significantly increased following this intervention. Consistent with similar interventions using time use and occupational performance coaching, these results indicate that these intervention methods improve occupational balance and life satisfaction for this sample of university students (Egan et al., 2023; Pekcetin & Gunal, 2021). This research study adds evidence that a stress management component of the intervention can also improve these outcome measures.

A visual analysis of the itemized scores depicted a Satisfaction with Life Scale trend. All participants improved their scores on item 2, which states, "The conditions of my life are excellent," and item 3, "I am satisfied with my life." No trends were noted from the visual analysis of itemized scores from the Occupational Balance Questionnaire 11. These results further indicate that this occupational balance educational module positively influenced the perception of satisfaction with life for this sample of university students.

### **Field Notes and Supportive Observations**

Field notes were kept throughout this study to record what participants reported about their experiences with the intervention and how it impacted their life satisfaction or occupational balance. At the beginning of the intervention, university students reported feeling that new routines and roles from the start of the semester were decreasing their sense of occupational

balance and increasing their stress. These perceptions are consistent with the literature that demonstrated that university students feel less balance and experience more stress during a change of routines (Guzkowska & Dabrowska-Zimakowska, 2022; Tapia et al., 2022). Consistent with the Person Environment Occupational Performance model, the occupational balance of this sample of university students is impacted by changes in their environment and negatively impacts their personal factors (Baum et al., 2015). Furthermore, these experiences of university students add to evidence that the perception of occupational balance continues to be impacted by changes in students' routines after the pandemic.

Throughout the intervention, students reported that the materials used, including the role checklist, time management worksheet, and goal setting worksheet, provided support to guide the self-reflection for barriers and supports to occupational balance and helped develop a plan for implementing the strategies learned from the intervention. This is consistent with the literature by Keptner et al. (2016) and Egan et al. (2023), who demonstrated that occupational performance coaching and in-person interventions for university students could improve their occupational performance by using practical strategies and individualized care. Additionally, the group format of this intervention promoted student interaction and engagement throughout the research study. Participants met other students, shared barriers to occupational balance, and shared resources for improvement. Sessions with only one student could not experience this comradery due to the small sample size.

Upon concluding the intervention, students reported that the strategies provided were practical. Participants reported improved sleep hygiene techniques, time management, and stress management skills.

## Limitations

Future researchers and practitioners should consider the limitations of this study before generalizing or inferring the causality of its results to university students at large. This study had a small sample size with limited representation and was conducted at one university in a singular geographical region. The improved satisfaction with life and occupational balance for this sample of university students could be influenced by uncontrollable extraneous variables, such as other time and stress management workshops in which students may have engaged. There is the potential that history impacted the results secondary to the naturally occurring events of the semester. A benefit of this educational module intervention is that it provided tailored support strategies for students based on their needs, whereas workshops provided across campus provided general information for academic support and success. Despite these limitations, the study statistically significantly increased occupational balance and life satisfaction for this sample of university students.

### **Limitations and Assumptions**

Several limitations and an assumption need to be discussed about this research project. It was assumed that university students at this university wanted to improve their occupational balance. To gain further insight into the needs of students at this university, this student researcher had discussions with the Center for Academic Enrichment and Outreach (CAEO) program director to identify students' needs related to occupational balance and life satisfaction. Additionally, the student researcher attended several workshops and faculty meetings with this agency a semester before this intervention to listen to the needs of students. Students reported needing more specific information to improve their time management and stress management strategies at that time. The outcome of those conversations and the workshops concluded that students need strategies for improving their mental health through stress and time management, decreasing the risk of this assumption.

One limitation is that this study has a small sample size of five participants, which is not representative of the population of CAEO students, limiting the generalizability of the results to the entire university population. Secondly, this research study was limited on environmental resources to conduct this study, due to rooms only being available during business hours. Third, self-selection bias could have occurred due to the use of convenience sampling for recruitment and participants voluntarily enrolled in this study. Fourth, an incentive was provided to increase participation; this could have motivated the participants to engage in the study, causing them to respond in a socially desirable way. Fifth, this intervention was at risk for attrition and history due to participant availability and the study duration. This study lost four people to attrition secondary to illness or schedule changes. Additionally, historical events throughout the duration of the study, such as midterm exams or life events, could have caused a response bias to the

participant's perceived life satisfaction or occupational balance. There is potential that the participant's responses could have been subject to social desirability bias if they wanted to answer the questionnaires favorably to reduce stigma related to low life satisfaction or occupational balance. When the pretest and posttest are the same, the response to the pretest could have an influence on the posttest. Each time, the testing conditions were provided in the same format to decrease the risk of confounding variables influencing the results. The temporality of the test administration is considered by providing the posttest immediately after the intervention to improve the likelihood of the results being related to the intervention rather than extraneous variables. Another limitation is that students in the CAEO facility may have been motivated to participate in this study and perform well due to the dynamic of working with an occupational therapy student or being in a setting that requires engagement in workshops. Lastly, it is difficult to infer the causality of the occupational balance education intervention on the outcome measures of occupational balance and life satisfaction due to the lack of randomization and control. Future studies with a greater sample size could randomly assign participants into groups or develop a control group for comparison.

#### Conclusion

The university setting remains an emerging practice area for occupational therapy. This research study added to AOTF's research agenda by producing client-centered, occupation-based occupational therapy research, which can be used to support occupational therapy's role and interventions that can be provided in the university setting (American Occupational Therapy Foundation, 2024). Interventions such as this can provide university students with preventative care for their mental health, equip them with practical strategies to manage multiple roles, and improve their occupational balance and life satisfaction. Similar interventions can support existing student support programs by providing care for students in collaboration with their advisors. If these interventions continue to be implemented in the university setting, the load can be lessened for mental health professionals through collaboration with an occupational therapist. The statistically significant increase in occupational balance and life satisfaction because of this intervention depicts that it could begin to serve as a baseline for practice or for future research to support occupational therapists in the university setting.

## **Implications for Future Research**

Multiple recommendations can be made to support future researchers in replicating or expanding this project to support university students' occupational balance and life satisfaction. First, it is recommended that researchers replicate this study with a sample of university students from a broader demographic. To enhance the generalizability of the results, demographic questionnaires can be collected to depict the sample's representation, and future researchers can consider receiving referrals from academic coordinators to gain a purposive sample of students.

Secondly, future research should consider altering the implementation methods of this research study by adding qualitative and longitudinal components to understand how the

intervention impacts the occupational balance and life satisfaction of university students over time. Written participant feedback can serve as the qualitative component to be used in combination with the OBQ 11 to further understand what components of this intervention most effectively supported the university students' occupational balance and life satisfaction.

Conducting this research in a longitudinal study with a follow up after three or six months would add evidence of the long-term effects of this type of intervention. Lastly, it is recommended that future researchers consider alternative delivery modes to provide this intervention to university students, potentially considering providing it virtually or in the evening to improve participation.

Lastly, future research should consider adding a control group or randomizing participants to sessions to strengthen the reliability of this type of research. Having a control group that does not receive the intervention would demonstrate the effectiveness of this type of intervention. Randomizing participants to the control or intervention group would provide a comparison group to support the effectiveness of this intervention method.

### **Implications for Practice**

The university provides an ideal community-based setting for occupational therapy intervention for practitioners and students. This setting allows occupational therapists to collaborate with other mental health professionals and advocate for their entire scope of practice. Occupational therapy students can learn how to provide preventative services to university students, and practitioners can help them gain confidence in treating all people with and without diagnoses. The information presented in the occupational balance education module intervention can easily be altered to be used across various populations to determine its effectiveness with more university students.

## **Future Implications for Occupational Therapy**

Few studies have produced interventions focused on supporting university students' occupational balance and life satisfaction. Occupational balance and life satisfaction changes occur across the transition from adolescence to adulthood, negatively impacting university students' mental health. The American Occupational Therapy Association's (AOTA's) centennial vision aims to support society's occupational needs while producing evidence-based research (AOTA, 2007). Occupational therapy is equipped to meet society's occupational needs by intervening using preventative and supportive strategies. Occupational therapy can serve everyone and promote their occupational engagement using its strong mental health background. As the community's mental health needs grow, occupational therapy can support them by expanding its practice to various community settings, including the university.

## Appendix A

## Occupational Balance Questionnaire 11 (OBQ11)

Occupational Balance Questionnaire (OBQ) ©Carita Håkansson and Petra Wagman

Name:		Date:			
Please check the box	that best correspor	nds to your curre	nt situation.		
1. In a typical week,	_		do.		
Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree		
2. There is a baland others.	ce between things	I do for myself	and things I do for		
]	2	3	4		
Strongly Disagree			trongly Agree		
	hings I really want t	o do.			
1	2	3	4		
Strongly Disagree	Disagree	Agree	Strongly Agree		
4. I balance the different kinds of activities in my life, e.g., work, household chores, leisure, rest, and sleep.					
1	2	3	4		
Strongly Disagree	Disagree	Agree	Strongly Agree		
5. I have enough tin	ne to do the things t				
Change to D'annua	2	3	4		
Strongly Disagree	Disagree	Agree	Strongly Agree		
6. I have a balance activities.	e among my phy	sical, social, int	ellectual and restful		
1	2	3	4		
Strongly Disagree	Disagree	Agree	Strongly Agree		
7. I am satisfied wit activities.	h the amount of tir	me that I spend	on my various daily		
1	2	3	4		
Strongly Disagree	Disagree	Agree	Strongly Agree		
8. In a typical week, I am satisfied with the number of activities that I take part in.					
1	2	3	4		
Strongly Disagree	Disagree	Agree	Strongly Agree		

9. There is enough v want to do.	ariation between t	hings that I must	do and things that I
1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree
10. There is a balance that drain my energy.	ce between activiti	es that give me	energy versus those
1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree
<ol><li>I am satisfied wit and sleeping.</li></ol>	h the amount of tir	me that I spend	relaxing, recovering,
1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree
Total score (add):			
References Wagman, P. & Håkar Questionnaire (OBQ). 227-231			•

Yu, Y., Manku, M. & Backman, C. L. (2018). Measuring occupational balance and its relationship to perceived stress and health: Mesurer l'équilibre occupationnel et sa relation avec le stress perçu et la santé. Canadian Journal of Occupational Therapy. Revue Canadienne d'Ergotherapie, 85(2), 117-127. https://doi.org/10.1177/0008417417734355

## Appendix B

## **Satisfaction with Life Scale**

## **Satisfaction with Life Scale:**

to be used as benchmarks.

*Instructions:* Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest when responding.

<ul><li>7 - Strongly agree</li><li>6 - Agree</li></ul>
• 6 - Agree
• 5 - Slightly agree
• 4 - Neither agree nor disagree
• 3 - Slightly disagree
• 2 - Disagree
• 1 - Strongly disagree
In most ways my life is close to my ideal.
The conditions of my life are excellent.
I am satisfied with my life.
So far I have gotten the important things I want in life.
If I could live my life over, I would change almost nothing.
Scoring:
Though scoring should be kept continuous (sum up scores on each item), here are some cut-offs

□ 31 - 35 Extremely satisfied

- $\square$  26 30 Satisfied
- $\hfill\Box$  21 25 Slightly satisfied
- ☐ 20 Neutral
- $\square$  15 19 Slightly dissatisfied
- $\square$  10 14 Dissatisfied
- $\square$  5 9 Extremely dissatisfied

## Appendix C

## **Screening Questionnaire**

Hello,

I am happy you have chosen to participate in this research study.

This screening questionnaire is to ensure that you are aware of the requirements to participate in this research study and that you meet all of them.

Can I confirm that you are a student of UNLV?

Can I confirm that you are actively participating in the Center for Academic Enrichment and Outreach?

Can I ask if you are between the ages of 18 and 22?

Are you aware that if you choose to participate, this research study would require 5 total hours of your time in February 2024?

Thank you for signing up; I look forward to working with you soon. I would like to assist you with signing up for your four modules throughout the month of February. Here are the available dates, times, and locations of the modules. You may come into the CAEO building to complete an informed consent form at your convenience or wait until the date of your first module. If you want more information about this research study or have additional questions, please contact me, Unique Bowden OTD/S, at (725) 222-8720 or bowdenu@unlv.nevada.edu. If you have further questions beyond what I can answer, please contact the principal investigator,

Dr. Sheama Krishnagiri, at (702) 895-1671.

Goodbye.

## Appendix D

#### **Intervention Outline**

## **Module 1: What is Occupational Balance?**

Time Commitment: 1 hour **Learning Objectives**:

- The participants will learn the definition of occupational balance (life balance)
- The participants will learn about variations in occupational balance.
- The participants will be educated on an overview of the various types of occupations (work, education, self-care, activities of daily living, home management, leisure, and social participation.
- The participants will identify how they spend their time across occupations.

Timeline of Module

First 15 minutes

#### Consent and Pretest

All participants will complete an informed consent form and be permitted to ask questions. Participants will complete the two pre-test questionnaires, Occupational Balance Questionnaire 11 and Satisfaction with Life Scale.

#### 45 minutes

## Content of the Module

Participants will be provided with the definition of occupational balance (life balance). Students will be led in a discussion about what that might mean to them.

This intervention will follow concepts from the model supporting life balance from Matuska & Christiansen (2008). Matuska & Christiansen (2008) state that life balance is a satisfying pattern of daily activity that is healthful, meaningful, and sustainable to an individual within the context of his own circumstances.

Balance includes meeting biological needs, physical needs, engagement, and having meaning in life.

Individuals can have a congruence of activities vs an equivalence of activities. Individuals need both to thrive.

- Congruence- actual activity configuration matches desired activity configuration
- Equivalence- approximate equal apportion of satisfaction across various activities

Participants will be educated that occupational balance can look different for everyone. It can be a mix of the activities that you need and want to do.

Participants will be educated on the various types of occupations that make up how people spend their time. (Work, school, leisure, activities of daily living, instrumental activities of daily living)

Educate how occupational imbalance (life imbalance) can affect overall health and wellbeing. Occupational imbalance can lead to increased feelings of stress and anxiety. Occupational imbalance can lead to feelings of depression and life dissatisfaction.

Activity: Participants will begin to fill out a time management pie chart to see how they spend their time over 24 hours. Participants will be guided through the packet to identify list of priorities for time spent. Participants will be encouraged to bring it back for the next session. (See next page)

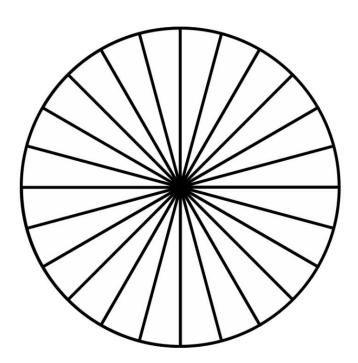
## Time Management Worksheet

#### Why is time management important?

- Reduces stress & anxiety.
- · Reduces the fear of failure.
- Preparation improves your confidence.
- Reduces completing tasks at a mediocre level.
- Preparation makes the day run more smoothly.

#### How do you spend your time?

There are only 24 hours in a day. It is helpful to learn and track how you utilize every hour in each day. On average where do you spend your time each day? Take time to fill in the circle with everything you do in a day. Example: You spend time sleeping, so will need to include the total number of hours spent sleeping in your circle. Don't forget all of the various responsibilities and activities you do each day: classes, studying, sleep, fitness, work, family, personal care, eating, transportation, relaxation/hobbies, etc.



## **Module 2: Identifying Barriers and Supports to Occupational Balance**

Time Commitment: 1 hour

## Learning Objectives:

- Participants will be guided in self-identifying barriers and support to occupational balance
- Participants will be educated on various supports and barriers that can impact occupational balance
- Participants will be provided resources to continue use to combat barriers to occupational balance.

#### **Timeline of Module**

### Part 1: 30 minutes

Recap of occupational balance module

- What is occupational balance? Self-perceived balance of all of the tasks, roles, and routines that one needs to engage in
- What would occupational imbalance look like:
  - Spending too much time in one occupation, work taking over responsibilities, not knowing how to set boundaries.
  - Increased stress
  - Increased burnout
  - Inability to sleep
  - Long to-do list with incomplete tasks

Participants will review time management charts with the student researcher to identify which occupations take up most of their time.

Participants will be allowed to discuss what they found took up their time and why. Participants will be educated on how the supports and barriers can impact their overall occupational performance using the PEOP model as a guide.

- Having supports can increase your feelings of support and increase occupational balance
- Barriers can decrease occupational performance

#### Part 2: 30 minutes

The student researcher will aid the participants in categorizing supports and barriers to their occupational balance

Barriers to occupational balance:

- Poor self-management (rest, sleep, leisure)
- time management, stress management
- Physical environment, social environment, finances, awareness/perceived value, time management

Supports to occupational balance:

- Student Support services, Center for academic enrichment and outreach, academic success center, family/friend support, other campus resource
- Engaging in the things are most meaningful
- Prioritizing self-care

The student researcher will provide support resources to participants to combat occupational imbalance

- Time management resource
- Stress management resource

## Activity

Introduce the role checklist concept.

Participants will use a basic role checklist to identify their roles.

- What are your roles (student, parent, child, spouse/significant other)
- o What do you value most?

Are you spending a satisfactory amount of time in each of your roles?

o Why or why not?

Identify demands of various roles.

What is hindering you from participating in those roles vs what is helping you engage in those roles?

How can students improve their time spent in each role?

Take home the role checklist activity to complete by the next module

## **Module 3: Developing Skills to Improve Occupational Balance**

Time commitment: 1 hour

## Learning Objectives:

- Participants will learn how to make goals to improve their occupational balance
- Participants will be educated on strategies to improve time management and stress management
- Participants will be educated on mindfulness as a strategy for stress management
- Participants will be led through a 10 minute guided meditation
- Participants will receive individualized time with the researcher to aid identifying individual strategies for improving occupational balance

Present strategies to support time management and stress management (20 minutes)

## Time management

- Self-discipline
- Putting the time in for the things that are most important to you
- Scheduling in leisure time
- Leveling priority of tasks important/urgent tasks
- Developing routines
  - Use google calendar, other time keeping apps
  - o Remember you can't do it all
- Using your support system
- Set your boundaries
  - o communicate effectively regarding what you can and can't do in each role
  - Learning to say no
  - You don't have to be accessible all of the time

## Stress management

- Stress impacts performance
  - Learn to say no
  - o Learn to be mindful and direct your attention to the tasks at hand
- Identifying your stressors
- Writing down what you can and cannot control.
- Using mindfulness to increase awareness of stressors and meditate
  - Engaging in mindfulness
  - o Demonstrate the research that supports mindfulness
- Participating in the things that bring you spiritual peace (spirituality isn't only engaging in church or religion)
  - Participate in the activities that bring you joy, schedule those activities in to your daily schedule

## Goal making

Participants will be assisted in developing short term and long term goals to manage their stress and time management.

Lead a 5-10 minute mindfulness exercise

Individual time/group (Last 20- 25 minutes)

## - Discussion

- o Identifying individual support/barriers/ skills already used
  - Reflect on sleep hygiene, exercise routine, social participation, healthy eating, support systems
  - Continue goal making

## **Module 4: Finding satisfaction in time spent in each of your roles**

Time commitment: 1 hour

## Learning objectives:

- Participants will be educated on support mechanisms to satisfy their current roles.
- Participants will be engaged in a discussion to incorporate meaningful occupations into their daily lives.
- Participants will develop an action plan to achieve their goals for maintaining occupational balance

General objective

- Participants will complete the Occupational Balance questionnaire and Satisfaction with Life Scale
- Raffle will be completed for participants who attended all four modules for a chance to win one of 2 \$50 gift cards.

35 minutes

Activity: Participants will create a one year plan for maintaining occupational balance.

Participants will be asked to make goals for 1 month, 3 months, 6 months, and 12 months after the modules are complete.

Participants will be provided tips and reminders to increase self management of occupational balance

Knowing your roles and responsibilities

- Use your resources
- Don't be afraid to take time for yourself
- Remember you can't control everything
- Do what's important to you and those surrounding you
- Live your best life
- Focus on the positive
- Engage in what makes you happy

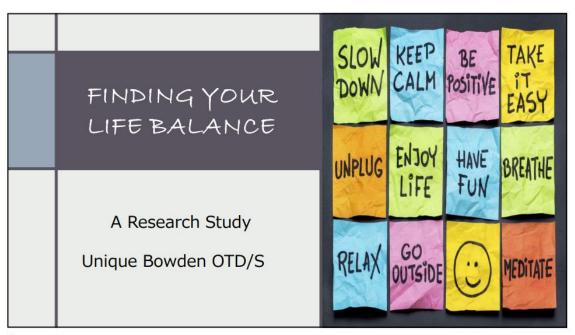
Which occupations mean the most to you – incorporate them into your daily life

### Post test- 15 minutes

Raffle: Participants will stay after the end of the session (2 minutes)

## Appendix E

## **Intervention PowerPoint**



1



# Questionnaires

- 1. Please complete these (2) questionnaires.
- 2. I will leave the room for 20 minutes while you complete them.
- 3. Please place your number on top of the questionnaires instead of your name (Save this number please)
- 4. Please place the completed questionnaires in the folder in front of the room when you are done.
- 5. When everyone is done, please come and get me.

3

3

## **Workshop Modules**

**Module 1:** What is Occupational Balance?

Module 2: Barriers & Supports to Occupational

Balance

Module 3: Skills to Improve Occupational

Balance

Module 4: Finding Satisfaction in Your Roles



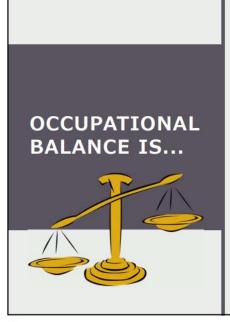
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# What to expect from **Finding Your Life Balance**

- Education on Occupational Balance
- · Gain Time Management Skills
- · Gain Stress Management Skills
- · Mindfulness Meditation Exercise
- · Group time with an Occupational Therapy Student
- · Develop Goals and an Action Plan for the future



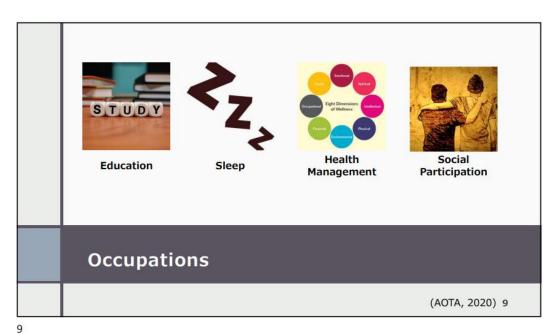


- · Different for every individual
- The perceived balance of daily activities that meet your biological, physical, mental, and spiritual needs.
- A congruence between the activities you do and what is important to you
- Adequate time spent doing the things that you need and must do

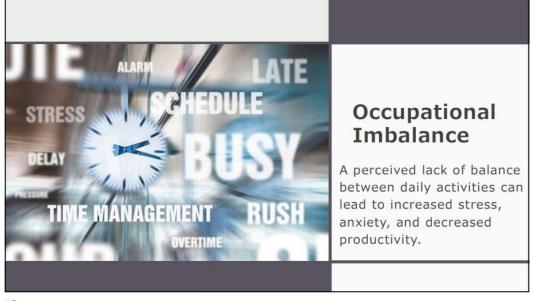
(Wagman & Hakansson, 2014)

7





,



# How do we spend our time…

#### Consider:

How long does it take you to make your coffee?
Get dressed?
Drive/ Public Transportation
Feed the dog
Relaxation time
Phone scrolling time
Studying time
Class Time

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## Barriers & Supports to Occupational Balance

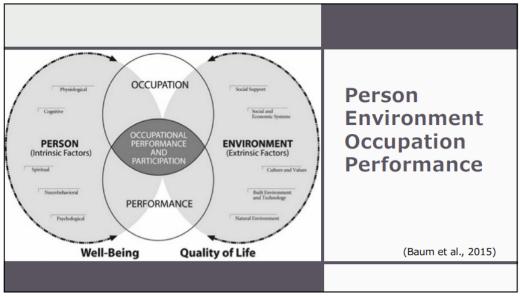
Module 2

- Occupational balance is a perception of an adequate amount of time spent in the activities you want and need to do
- Occupational imbalance can lead to increased feelings of stress & anxiety
- Let's review those time management charts
- Discussion about what surprised them about how they spent their time.

## Recap of Module 1

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# **Barriers & Supports to Occupational Balance**

#### **Barriers**

- Poor self management (organizational skills, communication skills, problem solving)
- · Poor Time management
- · Increased workload
- · Poor Stress management
- Poor Self Care
- Financial
- Physical Environment

#### Supports

- · Student Support Services
- · Prioritizing Self-care
- · Engaging in Leisure Activities
- · Mindfulness Meditation
- · Scheduling and managing your time
- · Community Resources
- · Stress management skills
- Support System

15

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# Role Checklist Now we will spend time identifying our roles The Role Checklist is an occupational therapy activity that helps identify what roles we currently have and how these roles might impact how we spend our time. This activity, in conjunction with the time management worksheet, can help you set goals for how you would like to spend time in each role.

# **Discussion/Individual Time**

- This time is set aside to work on your individual needs.
   We can reflect on your time management chart and role checklist and begin to identify your supports and barriers to occupational balance
- Together, we can discuss your satisfaction in your roles and how we can work together to create a plan for your time management between your roles

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We completed a role checklist
We learned how to identify supports and barriers
to occupational balance

Can anyone give me an idea of a support for occupational balance?

Can someone give me an idea of a barrier to occupational balance?

# Recap of Module 2

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# Strategies for Successful Time Management

- · Use a Scheduling System
- Prioritize tasks
- Develop Routines
- Delegate Tasks/Support System
- Minimize Distractions
- Set Boundaries
- · Allow yourself to take breaks
- Remember to include (self care, exercise, social participation, and home management tasks)



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# **Strategies for Stress Management**

- · Identify your stressors
- Journaling
- Relaxation Techniques
- Spirituality
- · Connect with Others



- Recognize Stress Symptoms
- · Sleep Hygiene
- Exercise
- · Allow yourself to take breaks
- Time Management
- · Leisure Time/Finding a Hobby
- · Positive Self Talk
- · Professional Support

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# **Goal Setting**

Goal Setting is a strategy to help you plan how you will use the strategies we have learned in the short term and long term.

This activity will require you to set SMART goals for improving your occupational balance.

These goals will describe how you will use the strategies you learned in this Finding Your Life Balance Series

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# **Goal Setting Example**



S:Specific M: Measurable A: Attainable R: Relevant T:Time

#### **Examples:**

I will walk for 30 minutes daily to improve my stress management and my health.

I will practice belly breathing for 5 minutes while I take a break from studying to improve my stress management.

23

23

# **Mindfulness Meditation**

One stress management technique is mindfulness. It is focused on being present in the moment.

We will participate in a **10-minute body scan**. A body scan is a good way to relax and be present. There are longer and shorter versions of mindfulness exercises.

Other mindfulness activities include:

- · Mindful eating
- Yoga with mindfulness
- 5-4-3-2-1 Grounding Techniques

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# **Discussion and Reflection**

Reflect on your supports and barriers to occupational balance from the last module

What stress and time management strategies do you see yourself using?

We now have time to continue working on goal making until the session is over.

This is also time I can work with each of you individually

Thank you again for your participation.

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# Finding Satisfaction in your Roles

Module 4

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# Putting it all together

We have spent the last 3 sessions identifying barriers and supports to occupational balance, developing goals, and learning about stress management and time management strategies

This module is intended to prepare you for the time following this workshop. We will work together to create a 1 year plan to maintain the skills we have learned.

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# Tips to Maintain Balance

- · Take care of yourself
- Engage in the occupations that are meaningful to you
- Use your time management skills



- · Delegate tasks when you need to
- Use your support systems
- · Engage in Mindfulness
- · Use stress management skills
- Schedule Leisure Time/Finding a Hobby
- Positive Self Talk
- · Professional Support

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# **Available Campus Resources**

- · CAEO Workshops
- Wellness Zone in the Wellness and Recreation Building
- · Academic Success Center
- Counseling and Psychological Services (CAPS)



- Professional Support in the Wellness Center
- Campus Events (leisure, community, support)
- Therapy Animals on Campus
- Student Organizations

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# Questionnaires

- 1. Please complete these (2) questionnaires.
- 2. I will leave the room for 15 minutes while you complete them.
- 3. Please place the same number from module 1 on top of the questionnaires instead of your name
- 4. Please place the completed questionnaires in the folder in front of the room when you are done.
- 5. When everyone is done, please come and get me.

31

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# Congratulations on completing all 4 modules!!! Thank you for your time. Please take a raffle ticket In this session, I will raffle off one \$50 Target Gift card



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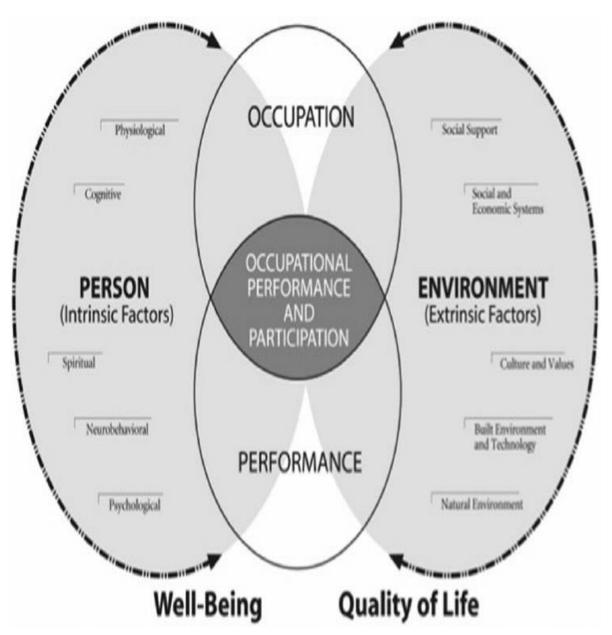
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Appendix F

Person Environment Occupation Performance Model



(Baum et al., 2015)

# Appendix G

# **Institutional Review Board Approval**

Date: 3-30-2024

IRB #: UNLV-2023-491

Title: Occupational Balance Education for University Students

Creation Date: 9-15-2023

End Date:

Status: Approved

Principal Investigator: Sheama Krishnagiri

Review Board: Biomedical

Sponsor:

# Study History

Submission Type Initial Review Type Exempt Decision Exempt	
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# **Key Study Contacts**

Member Sheama Krishnagiri	Role Principal Investigator	Contact sheama.krishnagiri@unlv.edu
Member Unique Bowden	Role Primary Contact	Contact bowdenu@unlv.nevada.edu

#### Appendix H

#### **CAEO Facility Permission**



University of Nevada, Las Vegas 4505 S. Maryland Pkwy. Box 452006 Las Vegas, Nevada 89154-2006 (702) 895-4777 • Fax (702) 774-4333 http://caeo.unlv.edu/

ACADEMIC ENRICHMENT

ADULT EDUCATIONAL SERVICES

**EDUCATIONAL OPPORTUNITY CENTER** 

**EDUCATIONAL TALENT SEARCH** 

FAMILY SUPPORT SERVICES

MCNAIR SCHOLARS INSTITUTE

MENTORING PROGRAM

PARENTS EDUCATIONAL SERVICES

RESEARCH & COMPLIANCE

STUDENT SUPPORT SERVICES

STUDENT SUPPORT SERVICES STEM & HEALTH SCIENCE

TITLE III AANAPISI

Asian American and Native American Pacific Islander Serving Institutions TITLE III AANAPISI STEM Asian American and Native American Pacific Islander Serving Institutions

TRIO TRAINING INSTITUTE

TUTORING SERVICES

UNLV PARTNERSHIP GEAR UP Gaining Early Awareness and Readiness for Undergraduate Programs

UPWARD BOUND

UPWARD BOUND MATH & SCIENCE CENTER









September 7, 2023

To Whom It May Concern:

Unique Bowden (2000321608) is allowed to conduct research in our facilities. This includes conducting marketing (including flier distribution), conducting workshops, and supervised meetings with

Should you have any questions or concerns regarding any of this information, please do not hesitate to contact me at 702/895.4778 or via email at kyle.ethelbah@unlv.edu.

Respectfully,

Alulanda

Kyle K. Ethelbah, MPH Director, College Programs (TRIO SSS, McNair and AANAPISI)

STUDENT SUPPORT SERVICES

#### Appendix I

#### **Recruitment Email Script**

Dear CAEO students,

Thank you for taking the time to open this email. My name is Unique Bowden, and I am a third-year occupational therapy student completing her capstone project at the center. I have contacted you because you are a student at the Center for Academic Enrichment and Outreach (CAEO). I have contacted you as a potential participant in my research study to support university students like you in gaining and maintaining their daily life balance. Participating in this study will allow you to learn more about daily life balance, gain skills to maintain or improve your life balance, and identify strategies to manage stress while you're in college.

I am searching for 30 university students from the CAEO to participate in my study. You already meet two criteria required to participate in this study because you are a student at UNLV and a CAEO participant. If you are between the ages of 18 and 22, you are welcome to participate. If you choose to participate in this study, it will require a total of 5 hours of your time. This includes 4 hours of a one-hour-per-week educational workshop in the month of February. The additional hour will be the completion of questionnaires before and after the workshops. If you complete all four sessions, you will be entered into a **raffle for a chance to win one of 4 \$50 Target gift cards**. If you are interested in participating in this study or would like more information, please contact me at (725) 222-8720 or bowdenu@unlv.nevada.edu. When you reach out, I will ask you a few questions to ensure you meet this study's criteria. If you need additional information beyond what I can provide, please contact the principal investigator, Dr. Sheama Krishnagiri, at (702) 895-1671.

I look forward to hearing from you,

Unique Bowden OTD/S
University of Nevada, Las Vegas
Department of Brain Health
School of Integrated Health Sciences
Occupational Therapy Doctoral Program

#### Appendix J

#### **Recruitment Flyer**



WHEN

#### February 2024

WHERE

4 Part Series Workshop Weekly 1 hour Sessions Student Union 2nd Floor Meeting Rooms

WHO

#### Who can participate:

CAEO Student Ages: 18-22

Who cannot participate:

Ages: <18 or 23+ Not a CAEO Student WHAT

This is a research study to understand the benefits of Occupational Therapy on life balance. By participating you will gain skills in time management and stress management to improve your life balance.

# Sign up to participate



CONTACT ME:

Student Researcher Unique Bowden OTD/S (725) 222-8720 bowdenu@unlv.nevada.edu

Principal Investigator Dr. Sheama Krishnagiri, PhD, OTR/L, FAOTA (702) 895 1671

\*Must complete the workshop to be entered for raffle\*

#### Appendix K

#### **Informed Consent Form**



#### INFORMED CONSENT

#### Department of Brain Health - Occupational Therapy

TITLE OF STUDY: The effect of occupational balance education on life satisfaction and occupational balance for university students transitioning into adulthood

INVESTIGATOR(S): Sheama Krishnagiri PhD, OTR/L, FAOTA; Unique Bowden OTD/S

For questions or concerns about the study, you may contact:

**Principal Investigator**: Dr. Sheama Krishnagiri at (702) 895-1671 or sheama.krishnagiri@unlv.edu **Student Researcher**: Unique Bowden OTD/S at (725) 222-8720 or bowdenu@unlv.nevada.edu

For questions regarding the rights of research subjects, or any complaints or comments regarding how the study is being conducted, contact the UNLV Office of Research Integrity – Human Subjects at 702-895-2794 or via email at IRB@unlv.edu.

It is unknown as to the level of risk of transmission of COVID-19 if you decide to participate in this research study. The research activities will utilize accepted guidance standards for mitigating the risks of COVID-19 transmission: however, the chance of transmission cannot be eliminated.

#### PURPOSE OF THE STUDY

You are invited to participate in a research study. The purpose of this study is to identify if an occupational therapy educational module improves occupational balance and life satisfaction for university students.

#### PARTICIPANTS

You are being asked to participate in this study because you fit the following criteria:

- University of Nevada Las Vegas Student
- Age 18-22
- Participant of a program within the Center for Academic Enrichment and Outreach

You will not be able to participate if you:

- Adults over the age of 22 or below the age of 18
- Not a participant of the Center for Academic Enrichment and Outreach

#### PROCEDURES

If you volunteer to participate in this study, you will be asked to do the following: Complete questionnaires before and after participating in a 4 part series workshop. This is a group workshop, and will occur for one hour each week for a month. Each week you will learn a different set of skills, such as time management and stress management, to help improve life satisfaction and balance. At the end of the series, you will be entered into a raffle.

#### Appendix H

#### **Informed Consent Form**

The workshop will be held in reserved rooms on the second floor of the student union. Room numbers will be provided to you when you sign up for specific times of the workshop.

#### BENEFITS OF PARTICIPATION

At the conclusion of this study, we hope to identify how Occupational Therapy can support students within the Center for Academic Enrichment and Outreach with their occupational balance and life satisfaction. Through this study, we hope to increase awareness of barriers to occupational balance that students in the Center for Academic Enrichment and Outreach face and how the occupational therapy profession can aid in supporting students in their transition to college.

#### RISKS OF PARTICIPATION

There are risks involved in all research studies. This study may include only minimal risks. Participating in this study may cause some to become emotionally overwhelmed. You may stop participating at any time, refuse to answer any questions, or ask for a break during the session.

#### COST / COMPENSATION

There is no cost to participate in this study. If you complete all four sessions of the workshop series, you will be eligible to be entered in a raffle for one of four \$50 Target gift cards. At the end of the last workshop session that you attend, you will be given a raffle ticket. A random drawing will occur immediately and one group member present in your session will win. You must be present during the raffle to win.

#### CONFIDENTIALITY

All information gathered in this study will be kept confidential by allocating numbers to each participant. No reference will be made in written or oral materials that could link you to this study. All records will be stored in an encrypted and password protected computer on the campus of UNLV and in a locked office until the completion of the study. Upon completion of the study, all identifiable data from questionnaires and informed consent forms will be destroyed immediately. De-identified data will be stored in an encrypted file on a password protected computer using a UNLV Google drive for three years after the completion of the study. Deidentified data will then be destroyed three years after the completion of the study.

#### **VOLUNTARY PARTICIPATION**

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with UNLV. You are encouraged to ask questions about this study at the beginning or any time during the research study.

#### PARTICIPANT CONSENT:

I have read the above information and agree to participate in this study. I have been able to ask questions about the research study. I am at least 18 years of age. A copy of this form has been given to me.

Signature of Participant	Date	_
Participant Name (Please Print)		

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#### **Curriculum Vitae**

# **Unique Bowden OTD/S**

Email: bowdenu@gmail.com

#### **EDUCATION**

Doctorate of Occupational Therapy, Occupational Therapy Doctorate, Anticipated May 2024

University of Nevada, Las Vegas

Capstone Project: Supporting university students occupational balance and life satisfaction

Capstone Experience: Center for Academic Enrichment and Outreach

Capstone Site mentor: Kyle Ethelbah, MPH

Capstone Faculty mentor: Dr. Sheama Krishnagiri Phd, OTR/L, FAOTA

**Bachelor of Science,** Biology Major, Pre-professional Concentration, December 2017

University of Nevada, Las Vegas Department of Life Sciences

Graduation: Fall 2017

#### LEVEL II FIELDWORK

**Optimal Physical Therapy** 

Caseload: Outpatient Pediatrics, Adults, Neurological, & Upper Extremity Summer 2023

Fieldwork IIA Student, Lake Taylor Transitional Hospital (Inpatient/LTAC) Summer 2022

Caseload: Inpatient Rehab, Skilled nursing facility

#### LEVEL I FIELDWORK

Clark County School District Spring 2023

School Based Occupational Therapy

Cornerstone Christian Academy & Tykes Preschool Fall 2022

Pediatric Community Based

**Dignity Health St Rose Dominican Hospital** Spring 2022

Acute Care

Nevada Senior Services Fall 2021

Community Based Adult Day Care

# **AWARDS & HONORS**

UNLV Access Grant, (\$2000 annually for two years)	2021 to 2023
UNLV Occupational Therapy Out of Area Scholarship, (\$2000)	2022
CBC Spouses Education Scholarship, (\$2600)	2021
CERTIFICATIONS & TRAINING	
<b>Building Capacity of School Personnel to Promote Positive Mental</b>	<b>Health</b> September 2022
KORU Mindfulness	November 2021
American Health Association CPR & AED	July 2023-July 2025
Mental Health First Aid USA	January 2024
RELATED WORK EXPERIENCE	
Life Skills Trainer, Neurorestorative Nevada	2018- Present
PROFESSIONAL ORGANIZATIONS	
American Occupational Therapy Association	Member Since 2021
National Black Occupational Therapy Association	Member Since 2021
Nevada Occupational Therapy Association	Member Since 2020
STUDENT ORGANIZATIONS AND LEADERS	SHIP
Co-Chair, Coalition of Occupational Therapy Advocates for Diversity	(UNLV) 2023
State OT Liaison, UNLV Student Occupational Therapy Association	2022