

## RESEARCH ARTICLE

## Mother's Lifestyle in Digital Era, Life Satisfaction and Well-being: Moderating Role of E-Learning Anxiety among Jordanian Mothers of Grade 1-3 Students

Suhaib Khaled AL-Takhayneh<sup>1\*</sup>, Wejdan Karaki<sup>2</sup>, Ola Abdel Alkareem Alhwayan<sup>3</sup>, Rodaina Khader Altarawneh<sup>4</sup>, Ahmed Jibreel Othman AL Matarneh<sup>5</sup>

<sup>1,4</sup>Counseling and Special Education Department, Mutah University, Karak, Jordan

<sup>2</sup>Psychology Department, Faculty of Educational Sciences, Mutah University, Mutah, Jordan

<sup>3</sup>Department of Counseling and Special Education, University of Jordan, Amman, Jordan

<sup>5</sup>Clinical Psychology Department, College of Education, Mutah University, Karak, Jordan

### ARTICLE INFO

Received: April 26, 2022

Accepted: June 30, 2022

### Keywords

Mothers lifestyle

Life satisfaction

Self-determination theory

E-Learning anxiety

Mothers well-being

Longevity

### \*Corresponding Author:

Suheeb1986@mutah.edu.

jo

### ABSTRACT

The emergence of the online education system during the Covid-19 time has brought several psychological and health challenges for the students and parents of early-age students, especially mothers engaged in online education. The present study investigates the moderating role of eLearning anxiety between mothers' lifestyles and life satisfaction, as well as mothers' lifestyles and well-being, among Jordanian mothers of grade1- 3 students. Current research is theoretically and conceptually grounded in self-determination theory. In total, 385 mothers participated in a cross-sectional design field study of the Jordanian governorate of Karak. This study evaluated the direct and moderating effects of study variables using the Smart PLS software 3.0, Partial Least Square Structural Equation Modeling (PLS-SEM). The results revealed that mothers' lifestyles had a significant favorable influence on life satisfaction and well-being. Additionally, the association between mothers' lifestyle and well-being, and satisfaction were significantly moderated by eLearning anxiety. The study brings several significant policy takeaways to determine well being and life satisfaction of mothers with online anxiety. Suggestions for future research and recommendations for theoretical and practical implications are based on these unique findings.

### INTRODUCTION

Although extensive research is available on mothers' attitudes and behaviors toward young students, little is understood and investigated about the characteristics that best support a mother in remaining calm under pressure despite numerous obstacles (Bi et al., 2022). The research goal of a recent study was to di-

rectly investigate the influence of mothers' lifestyles on two outcome variables (i.e., anxiety and well-being) likely connected to mothers' parental responsibilities and those connected to aspects of personal interaction using online study mode for their children. The study also aimed to investigate moderating influence of e-learning anxiety among these relationships. In recent research in a large sample of more than 2,000 mainly

educated women, characteristics of anxiety and well-being were investigated but with a different focus (Bourke-Taylor et al., 2022; van Tintelen et al., 2022). Thus, the most recent research of 2022 has considered interest in the variables under investigation in this research showing the significance of current research that research on such constructs is hot among education and psychology researchers (Singletary et al., 2022; Skene et al., 2022; Stanley and Gilzene, 2022; Zhang, 2022).

Life Satisfaction is a multidimensional psychological structure linked to many critical psychological variables, such as stress and self-esteem, and this structure is the main indicator of success in adapting to different life conditions. A mother's life satisfaction is a child's instinctive attachment to or opinion toward their life during leisure time or other times. Age, religion, job status, working circumstances, occupational status, culture, color, level of income, family life, friendships, individual traits, and genetic factors are all associated with life happiness (Cava et al., 2014; Gul et al., 2021; Owusu, 2021). A mother's well-being may also be employed as a substitute for the mother's life satisfaction. Investigations on a mother's well-being, which consider distinct ideas, including joy, satisfaction, enthusiasm, and pleasant moods, concentrate on why people think their lives are good (Stanley and Gilzene, 2022; Waheed et al., 2013). A satisfied individual has aspirations and is energetic, strong, balanced, and smart. This is likewise accomplished as an outcome of the examination of specific life characteristics, similar to how the assessment of an overall mother's life satisfaction is made (Küçük and Küçük Alemdar, 2018). For the past forty years, mothers' involvement in their child's education has been a crucial component of good learning (Jam et al., 2017; Zhang et al., 2021). There is currently a large body of scientific research demonstrating the benefits of the personal interaction of mothers for kids of all ages. This includes the mother's involvement in education conducted at home, such as watching kids do their assignments and reading to their studies, as well as the mother's involvement in education conducted in the classroom, such as going to parental education classes and parent-teacher conferences (Stanley and Gilzene, 2022). Hence for the effectiveness of the learning process of young kids, it is vital to inves-

tigate the lifestyle of mothers and its impact on their life satisfaction and well-being. The current study is novel in exploring these associations in a comprehensive research framework.

According to a study, mothers who don't have the basic reading and writing skills when they start academic training continue to fall behind their colleagues who are doing (Waheed et al., 2012; Zhang, 2022). Less emphasis has been paid to what parents do to support their children's learning and development, whereas many studies have concentrated on the impact of home surroundings and family influence. Mothers' interactions with their children are influenced by their thoughts toward that child. For a kid to develop academically, both parents (such as parental opinions of their child's talents and interests in fields of study) and the interactions that parents have with their children are important (Farooq et al., 2011; Singletary et al., 2022; Skene et al., 2022; Zhang, 2022). In previous literature, the mother's lifestyle has been operationally defined as their level of education, work activities, friendship patterns, leisure time, personal presentation, care, and home responsibilities accumulated to define a mother's lifestyle (Kirke, 1979). So circumstances related to mothers' skills, attitudes, and health may affect the well-being and satisfaction of mothers of young children during the early stages of education. Studies investigating this phenomenon in a sample of mothers with early-stage kids are rare; thus, testing these unique associations in a different context advances the body of knowledge.

Over time, there has been a great deal of intellectual development in the area of eLearning anxiety, and this development is represented in the measuring tools employed to evaluate the structure. There has long been a separation between memory and eLearning anxiety (Pascal and Blidaru, 2021; Steimer, 2022; Thibaut, 2022; Waheed, 2011). Thinking and stimulation are usually regarded as independent elements of anxiety. Furthermore, despite their interaction, eLearning anxiety can occasionally be brought on by distinct antecedents, and their relation to performance might vary depending on the problem at a glance. Thus, the current study advanced by picking up this crucial concept that this anxiety may influence the existing relationship between lifestyle and well-being as well as lifestyle and life satisfaction. Stud-

ies measuring such moderated influence are scarce in the literature, so current research addresses a vital research gap related to study constructs.

Furthermore, the current research was conducted with mothers of Jordanian grade 1-3 students, providing a unique study context of Middle Eastern culture to provide empirical evidence for scholars from diverse cultural backgrounds. Jordan is ranked 30 on the individualism and collectivism scale and declared a collectivist society with a high power distance, which depicts that most children's activities, including early education, are mothers' responsibility. A recent study found that the education of Jordanian mothers and fathers was positively and significantly associated with individualism and collectivism. Similarly, mothers' family income and age were also significant in their role in caring for children in a family (Lansford et al., 2021). In this culture, mothers are mainly responsible for early child care and education, and collectivist culture puts a lot of work pressure on the mother as she has to take care of home chores in parallel. Hence, current research contributes to the literature by choosing a unique cultural context of Jordan. Finally, the current study has conceptualized the theoretical framework based on the self-determination theory, described as "people are motivated to grow and change by three innate and universal psychological needs" (Chiu, 2022). According to this theory, individuals might become self-determined provided their demands for freedom, competency, and relationship are met. Therefore, this study's proposed conceptual model being put to the test empirically is based on these concepts. When grounded in self-determination theory, a mother sacrifices her well-being and bears anxiety of online learning to practically absorb the requirements of online workload required in post-Covid-19 times. Practically, it is evident that in collectivist cultures, household responsibilities are handed over to mothers, including cooking, cleaning, shopping for groceries, and taking care of children's early childhood education. All these responsibilities and workloads pressure mothers, and now the eLearning requirements are added to these current responsibilities. Thus, posing a research question on how it affects the mothers' well-being and anxiety. Which is investigated in the current research and conceptualized accordingly in the theoretical framework based

on self-determination theory. Ultimately, this study aims to analyze the mother's lifestyle & life satisfaction, well-being and moderating role of eLearning anxiety among Jordanian mothers of grades 1-3. To recognize and accomplish the above research agenda, this study seeks to achieve the following objectives:

- Examining a mother's lifestyle (Direct involvement with her child, home-based work activities, and complete dedication to her child) significantly impacts a mother's life satisfaction and well-being.
- To examine eLearning Anxiety moderates the relationship between a mother's lifestyle and life satisfaction and well-being.

## **LITERATURE REVIEW**

The current study's theoretical framework was established on the self-determination Theory. Self-determination theory is described as "people are motivated to grow and change by three innate and universal psychological needs" (Chiu, 2022). According to this theory, persons might become self-determined provided their demands for freedom, competency, and relationship are met. Therefore, the proposed conceptual model being put to the test empirically in this study is based on these concepts (Rigby and Ryan, 2018; Waheed and Leisyte, 2020). The important educational and study goals outlined in the study are essential in bringing together a theory to explain an infrequently investigated systematic conceptual model linked to mothers' lifestyle, life satisfaction, well-being, and moderating role of eLearning anxiety among Jordanian mothers of grade 3. The degree of broader structural support that is provided for mothers has a significant impact on mothers' well-being. Parents' life happiness and well-being, for instance, have been linked to the availability of family regulations that offer advantages like raising children. The mother's determination and commitment help her cope with work-life balance challenges and stress, and additional anxiety from online teaching requirements. These additional requirements, continuous monitoring of children, and parallel management of home affairs bring several health and satisfaction challenges for mothers of young kids. Thus current research is incremental to shed light on this scarcely investigated phenomenon, and self-determination theory provides theoretical support for the associations

which helps mothers to cope with an emerging scenario during and post Covid-19 times.

### **Mother's Lifestyle and Mother's Life Satisfaction**

Life satisfaction has frequently been investigated as a key topic in the framework of studies on the well-being of mothers. As it relates to assessments of one's life or particular life dimensions, life satisfaction is thought of as the social cognition of a mother's well-being, while other parts, such as joy or pleasant and unpleasant feelings, indicate essential aspects (Chiu, 2022; Küçük and Küçük Alemdar, 2018). According to this viewpoint, life happiness involves a person's subjective assessment of their particular and overall life condition (Stanley and Gilzene, 2022; Zhang, 2022). Only modest to moderate associations between objective traits like money, healthcare, and knowledge and mothers' well-being is observed in many recent research attempts, which emphasized the significance of these subjective evaluations (Boonk et al., 2022; Calder et al., 2021; Chiu, 2022; Crosnoe, 2001). Mothers have a higher link between women's rights and life satisfaction than women without children. This is consistent with a survey conducted in Jordanian, which found that life satisfaction only slightly appears to decrease (Singletary et al., 2022).

On the other hand, a mother's lifestyle has been elaborated in this research with elements such as direct involvement with her child. As the sample of current research is students from grades 1-3, which are much younger thus, the aspect of direct involvement with a child, specifically in Jordanian collectivist society, is complemented (Hofsteds insights, 2021). The second aspect of the mothering lifestyle discussed in current research is home-based work activities. As Jordan is ranked as a high power distance country, most of the hierarchical norms in social life define that mothers are solely responsible for all home-related matters in collectivist cultures (Singletary et al., 2022; Williams et al., 2002). Hence the second aspect is also inculcated that most life satisfaction of mothers is expected to be linked with the burden and management of home-based activities by mothers in the family (Thompson et al., 2009). The third factor focused on the mother's lifestyle is complete dedication to her child. It is widely observed in collectivist societies that mothers sacrifice their careers, freedom, choices, and major life opportunities for the sake of

their children. Thus their commitment and dedication are considered the highest in collectivist societies compared to individualistic cultures. In the Jordanian setting, the same applies, and expected that mothers' dedication to their children would remain strong in this culture. Thus it will mainly help to determine the life satisfaction of the mothers in the Jordanian setting (Singletary et al., 2022; Williams et al., 2002). Numerous elements have been shown to affect a mother's well-being and life satisfaction. Based on the predominant perspectives and beliefs, various elements may contribute to life satisfaction in various cultures (Chiu, 2022; Küçük and Küçük Alemdar, 2018). Life satisfaction is a woman's feeling about or perspective toward their life during leisure time or other times. A mother's well-being may also be employed as a substitute for the concept of life satisfaction. Life Satisfaction is a multidimensional psychological structure linked to many critical psychological variables, such as stress and self-esteem, and this structure is the main indicator of success in adapting to different life conditions. A satisfied individual has aspirations and is fresh, strong, balanced, and intellectual. The educational focus has not been on the subject studies as the level of parental involvement in their child's grades 1-3 schooling (Barger et al., 2019; Boonk et al., 2018; Qureshi et al., 2021). Involvement typically mothers managing their children's careers (e.g., helping them choose courses), providing active support (e.g., assisting with homework), supporting their children's academic aspirations, and participating in school-related activities (Hornby and Blackwell, 2018). Even when prior achievement is considered, such involvement fosters academic progress. This is also accomplished due to the assessment of specific life characteristics, much like in the appraisal of overall life satisfaction (Hill et al., 2018). In previous studies, a mother's lifestyle significantly impacts a mother's life satisfaction (Boonk et al., 2018; Bourke-Taylor et al., 2022; Chienwattanasook and Jermsittiparsert, 2019). Thus, the current study hypothesized that;

H1: Mothers lifestyle is positively associated with a mother's life satisfaction.

H1a: Direct involvement with her child is positively associated mother's life satisfaction.

H1b: Home-based work activities are positively associated with a mother's life satisfaction.

H1c: Complete dedication to her child is positively associated with the mother's life satisfaction.

### **Mother's Lifestyle and Mother's Well-Being**

Furthermore, mothers' life experiences are crucial to their well-being throughout their full lifetime (Skene et al., 2022; Thibaut, 2022; Zhang et al., 2021). The competence to help others may be viewed as a sign of a mother's lifestyle and well-being because mothers are associated with deficits in natural ability, cultural expectations, and connections. As Zhang et al. (2021) contend, maintaining an active lifestyle may be a key component of effective aging. According to these claims, active support-giving to adult offspring was favorably correlated with mothers' life satisfaction. However, obtaining assistance has a detrimental impact on the mother's lifestyle. In addition to these direct links between promoting mothers' well-being and their way of life, indirect links may also exist. The favorable correlation between giving moms a good life and their well-being may be explained by maintaining a good relationship with grown children. Close ties to relatives are crucial, particularly for mothers (Thibaut, 2022; Waheed et al., 2017). In Jordanian communities, there is compelling evidence that the strength of interpersonal interactions and more common parental support are positively correlated (Ahmad-Ur-Rehman et al., 2010; Küçük and Küçük Alemdar, 2018; van Tintelen et al., 2022).

In previous literature, mothers' lifestyle and their effects on well-being have been indirectly documented. However, the associations with its dimension, such as direct involvement with her child and well-being, are scarcely investigated. As the current research focuses on mothers of students from grades 1-3, direct involvement with a child in Jordanian collectivist society is vital to this culture (Hofsteds insights, 2021). Hence, mothers' well-being will surely be associated with direct involvement with child activities (Thibaut, 2022). The second dimension of the mother's lifestyle home based on work activities creates a lot of work pressure on the housewife in a high power distance society with collectivist attributes. Thus, in Jordanian social life, mothers are expected to fully control and handle all home-related matters (Thibaut, 2022; Williams et al., 2002). Hence the second aspect defines that mothers' well-being is mostly expected to be linked with the burden and anxiety of home-based activities han-

dled by mothers (Thompson et al., 2009). The third factor, complete dedication to her child in collectivist societies, defines their commitment and dedication as the highest compared to individualistic cultures. In the Jordanian setting, the same applies, and expected mothers' dedication to their children would remain strong in this culture. Thus it will mainly help to determine the mothers' well-being (van Tintelen et al., 2022; Williams et al., 2002).

According to prior studies, parents' involvement in their child's school career decreases over age, particularly after primary school. Küçük and Küçük Alemdar (2018) asserts that a mother's involvement is situational, meaning that mothers must attend to the needs of their children and modify their involvement at home or in the classroom as necessary. The institutional aspect of involvement clarifies why mothers of more intelligent kids are more likely to be isolated and why mothers become less involved with time. Social and interpersonal ties also appear to be linked to the mother's well-being, particularly in Jordanian society (Gagné et al., 2022; Hornby and Blackwell, 2018). As a result, the availability of a mother's lifestyle and well-being may be related, leading to an improvement in the mother's lifestyle. A mother's well-being may also be employed as a substitute for the term of the mother's lifestyle. Investigations on a mother's well-being, which consider distinct ideas, including joy, satisfaction, enthusiasm, and pleasant moods, concentrate on why people think their lives are good (Stanley and Gilzene, 2022). Thus, the current study hypothesized that;

H2: Mothers' lifestyle is positively associated with mothers' well-being.

H2a: Direct involvement with her child positively correlates with the mother's well-being.

H2b: Home-based work activities are positively associated with the mother's well-being.

H2c: Complete dedication to her child is positively associated with the mother's well-being.

### **Moderating Role of E-Learning Anxiety**

In the current research, e-Learning anxiety refers to "They may feel heightened anxiety about keeping up to date with their school work. Other teens may experience difficulty concentrating or staying focused while at home" (Müller et al., 2021). The online network links millions of people to engage with those in

the world and is the biggest connection. People use social media for various purposes, including communicating with loved ones and spreading knowledge. How grade 1-3 students are educated has also significantly transformed (Tick, 2019). In this epidemic, online schooling is the most popular method for students and faculty to communicate, complete coursework, turn in projects, and take standardized tests (Al Kurdi et al., 2020). It can help the students communicate their educational experiences and express their ideas. eLearning is a cutting-edge tool for students that promotes more high school senior education, aids in informing activities, and offers new, more adaptable methods of instruction but eLearning methods cause anxiety for mothers of grade 1-3 students (Al Kurdi et al., 2020; Kolski and Weible, 2018). Mother's involvement and school ambition can connect. Moms actively involved provide a good example for their children and are clear about the value of schooling. Simultaneously, more interested pupils may entice parents to support their academic endeavors (Calder et al., 2021; Fauzia et al., 2012; Müller et al., 2021). These views influence parental behavior toward the child that mothers have about them. How parents interact with their children and their perspectives toward their children's skills and interests in academic subjects greatly impact how well their kids do in school. When parents describe their mother's involvement, they include it in their child's schooling to learn about their educational success and involvement (Davies et al., 2018; Malureanu et al., 2021). It has also been proposed that including creative techniques in home-based activities may increase family participation and improve parent-child relationships (Calder et al., 2021; Cava et al., 2014; Khan et al., 2016). Experiential approaches are imaginative exercises emphasizing connection and involvement between children and parents rather than merely discussing issues. In-home-based activities may benefit especially from experiencing "home-based activities" since they give therapists a chance to observe and engage with parents in novel ways. Compared to verbal conversations alone, interactive tactics generate more involvement and give parents new lines of communication (Al Kurdi et al., 2020; Boonk et al., 2018). The idea that modern women are overly focused on their children and unhealthily obsessed with how well their kids are

doing is frequently made in online media.

Furthermore, being impacted by their child's pain need not entail overriding against mothers' well-being can be greatly enhanced by outside help. In other words, It is more likely that, rather than being adversely affected by parenting issues, moms' well-being, even the most talented or educated ones, depends just as much, if not more, on the mental support they receive (Davies et al. et al., 2018; Gagné et al., 2022; Khan et al., 2018). E-learning anxiety can start early, have negative effects, and worsen students' progress through the educational system. Chienwatanasook and Jermstittiparsert (2019) revealed negative associations between 2nd or 3rd graders' computation and skills and their evaluated eLearning anxiety level in a behavior evaluation. Children in first and 2nd grade were also affected in the same ways. In previous studies, E-learning anxiety has a moderate relationship with the mother's lifestyle (Hornby and Blackwell, 2018; Owusu, 2021; Singletary et al., 2022; Skene et al., 2022).

Recent research on online learning anxiety during covid-19 times reported the adverse influence of online learning anxiety on students' self-efficacy (Arora et al., 2021). Another study on Iranian collectivist culture and high school students found a similar negative effect of eLearning anxiety on students' self-efficacy (Azizi et al., 2022). Another recent research on Chinese college students reported that anxiety perception moderated the relationship between students' self-efficacy and online learning and well-being (Zhou and Yu, 2021). Even a recent study conducted in the Jordanian context focusing on public university teachers reported that the level of technology anxiety moderated the actual use of technology among teachers (Alkhawaja et al., 2021). Thus pointing towards the direction and need to investigate the moderating role of eLearning anxiety among mothers of younger kids. Many studies focused on school and higher education students, but studies on mothers affected by anxiety and how it influences their life satisfaction and well-being are scarce in the literature.

Current research moved one step further to propose that this controversy in existing associations is due to potential moderators and, per the definition of eLearning anxiety (Müller et al., 2021). The mothers of grade 1-3 students are expected to face variations

in their already existing phenomenon of lifestyle and well-being, and life satisfaction. In case of higher levels of eLearning anxiety, the mother's life satisfaction and well-being may have a chance to be greatly affected. Thus posing research hypotheses that need to be empirically tested in this study. Based on theoretical support and logical arguments by literature, current research hypothesized that,  
H3: E-learning anxiety moderates the relationship be-

tween a mother's lifestyle and a mother's life satisfaction. With higher levels of eLearning anxiety, the relationship between mothers' lifestyles and life satisfaction will be weaker.

H4: ELearning Anxiety moderates the relationship between a Mother's lifestyle and well-being. With higher levels of eLearning anxiety, the relationship between mothers' lifestyles and well-being will be weaker.

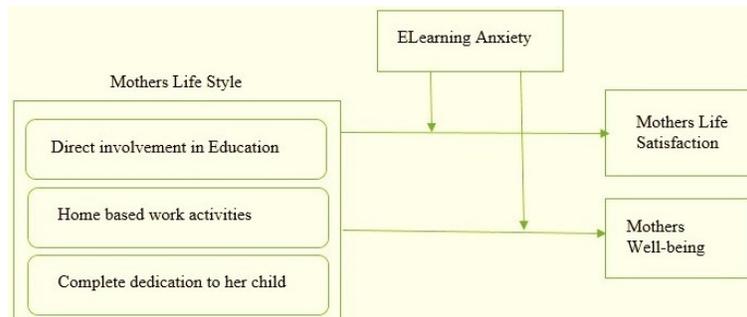


Figure 1: Conceptual framework

## RESEARCH METHODOLOGY

Based on a detailed assessment of the literature and the self-determination theory, the conceptual framework in Figure 1 was established, and hypotheses were proposed for empirical testing. The current study analyzes mothers' lifestyle impact on life satisfaction and well-being. Additionally, the moderating role of eLearning anxiety among Jordanian mothers of grade1-3 was tested in current research to extend the literature in this field further. Jordan has been ranked as a high power distance country with a score of 70, while it has been ranked 30 on the dimension of individualism and collectivism. It depicts that in hierarchical orders, mothers will be mostly responsible for household activities, including the education of younger kids like grades 1-3. It will increase pressure and workload on mothers while being engaged in on-line learning for their kids, and they will experience online anxiety, which is expected to influence their life satisfaction and well-being. Thus mothers of grades 1-3 were the right population and target sample for the current study. A selective convenience sampling technique was adopted due to the nature of the study. Only the mothers of grade 1-3 students were selected, and the data was conveniently collected based on their willingness and availability. Although in past litera-

ture, convenience sampling has been objected to by researchers (Etikan et al., 2016). The current research using convenience sampling has been supported along with special criteria of inclusion (Jager et al., 2017; Kempen and Tobias-Mamina, 2022). The current research investigates mothers' life satisfaction, eLearning anxiety, lifestyle, and well-being in the Jordanian context. Hence, the convenience sampling method is a suitable technique for this study.

The characteristics of the study sample have been analyzed using basic statistical analysis. According to the model assessment in Figure 2, mothers' age was 49% at 25-35 years, and above 35 were 51%. Qualification of mothers involved in this study was bachelor's and 49% and master's degree holders 51%. Mothers' children involved in grade 1 was 29%, grade 2 was 35%, and grade 3 was 36%.

## Participants and Procedure

The descriptive-analytical method was used to reach the results and to provide the recommendations suggested by the researcher. The study population consisted of students in the first three grades in the Karak Governorate in Jordan. An accessible sample was taken from the mothers of the students in the first three grades by distributing an electronic link via email to the mothers after returning to school, and the link was left to participate them for a month. The

contact data about mothers were collected from well-reputed schools in Karak, Jordan. A total of 10 school managers were contacted initially, a letter was written to the school management, and the study objectives & importance for the school managers and education scholars were explained. It was ensured that none of the school and their clients/mothers would be identified during the research process, and all information would be kept confidential during the complete research project. Neither the school's nor the mother's information will be shared with any third party at any stage of this research project. The authors also provided an endorsement letter from the author's university to convince the school management to participate and cooperate in this research voluntarily. In total, 9 schools, managers/leaders agreed to participate and provided access to contact data of students' mothers coordinating with school administration during covid-19 times to continue their children's online education. School coordinators also ensured the level of English proficiency of mothers before contacting mothers to seek their consent. Only 600 qualified mothers from those 9 schools were contacted to seek their voluntary participation in the survey. In total, 500 mothers gave initial consent to participate in the research program. A survey containing 23 study items and demographic information was sent via a link to all 500 mothers, and they were requested to complete and return the survey. The authors did a continuous weekly follow-up to complete this study in 2 months. The data collection started on January 10, 2022, and was closed on March 10, completing 400 filled responses by participating mothers. The remaining mothers were either not replying to the reminders sent by study authors or were out of reach by authors. Of those 400 responses, some of them were partially filled and had missing values, so 15 more responses were excluded from the study analysis. In this study, the authors left 385 usable responses with a final rate of 77%.

#### **Measures of the Study, Reliability, and Validity**

As presented values in Table 2, the measurement model was used to evaluate the consistency of the data using "Cronbach's Alpha (CA) and Composite Reliability (CR)" (Raeder et al., 2008). "CA and CR value bigger than 0.7" indicated that every inquiry item satisfied the reliability requirement (Ramayah et al., 2018). To evaluate the components' convergent validity, "factor

loading and Average Variance Extracted (AVE)" calculations were made after that (Ramayah et al., 2018). AVE was higher than 0.5, and all factor loading of the study constructs achieved the minimum requirement of 0.70 (Raeder et al., 2008).

A 23-item questionnaire was devised to analyze the mother's lifestyle & life satisfaction, well-being, and moderating role of eLearning anxiety among Jordanian mothers of grade 3.

1. A 4-item scale of involvement in education was adopted by (Williams et al., 2002). Items include "If I talk too often to teachers at my child's school, I will be labeled a troublemaker, and I find my child's school welcoming to parents." The responses were collected by a "7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree".

2. A 4-item scale of home-based work activities was adopted by (Thompson et al., 2009). Items include "Play with math toys, i.e., shape sorters, counting toys and reading counting or shape book." The responses were collected by a "7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree".

3. A 3-item scale of complete dedication to her child was adopted by (Williams et al., 2002). Items include "I would like to be more involved in my child's school life, and I know all I need to about how I can help with my child's education." The responses were collected by a "7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree".

4. A 3-item scale of eLearning anxiety was adopted by (Smith et al., 2006). Items include "My stomach gets upset before or during eLearning, and my heart pounds before eLearning." The responses were collected by a "7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree".

5. A 3-item mother's life satisfaction scale was adopted (Cava et al., 2014). Items include "All things considered, how satisfied are you with life as a whole these days? and I am satisfied with my life". The responses were collected by a "7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree".

6. A 6-item scale of a mother's well-being was adopted (Owusu, 2021). Items include "Frequent headaches and feeling low in energy or slowed down." The responses were collected by a "7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree".

The study adopted a basic data analysis strategy for

demographic variables and One way ANOVA was applied to check the influence of demographic variables on outcomes. It helped to identify control variables. Later the study adopted the PLS technique to test the proposed associations in the theoretical framework of this research.

**RESULTS**

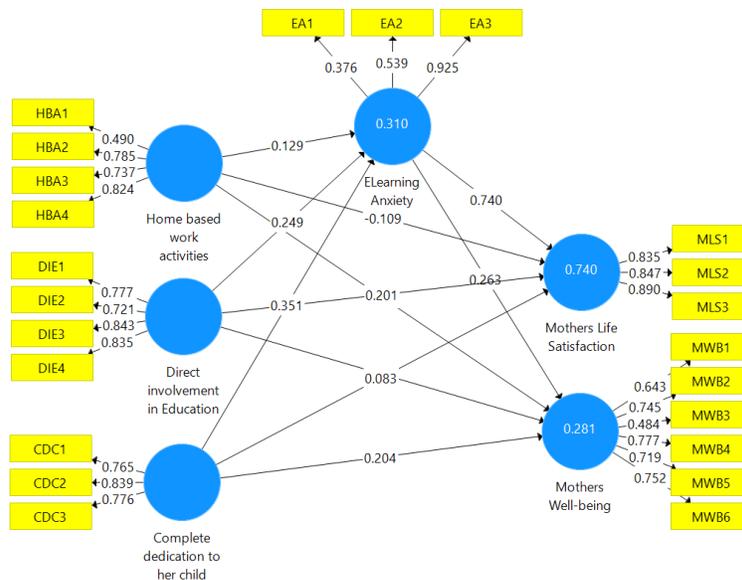
**Measurement Model**

The measurement and structural models were evaluated using SmartPLS3. One-way analysis revealed that

qualification significantly impacted mothers' life satisfaction and well-being, so it was controlled during the analysis.

**Table 1: Demographic profile**

Demography	Description	No. of Responses	%
Age	25-35	190	49
	Above 35	205	51
Qualification	Bachelors	190	49
	Master	205	51
Grade	Grade 1	110	29
	Grade 2	135	35
	Grade 3	140	36



**Figure 2: Measurement model**

**Table 2: Composite reliability, Cronbach's alpha, and AVE values**

Constructs/Items	CA	Rho-A	CR	AVE
Complete dedication to her child	0.707	0.713	0.837	0.631
Direct involvement in Education	0.805	0.812	0.873	0.633
e-Learning Anxiety	0.761	0.701	0.764	0.529
Home-based work activities	0.795	0.746	0.807	0.519
Mothers Life Satisfaction	0.825	0.873	0.893	0.736
Mothers Well-being	0.777	0.783	0.845	0.581

"Note: CR = composite reliability; AVE = average variance extracted; CA = Cronbach's Alpha"

Moreover, all study methods' discriminant validity must be proven. As presented in Table 3, Fornell and Larcker (1981) described discriminant validity as "the extent to which a particular latent variable differs from other latent variables." It was calculated by looking at

the correlation between the analysis of variance items and the exact number of AVE (Raeder et al., 2008). Raeder et al. (2008) recommended that latent variables with a value of "0.50 or above" be employed to prove discriminant validity.

**Table 3: Discriminant validity**

	CDC	DIE	EA	HWA	MLS	MWB
Complete dedication to her child	0.794					
Direct involvement in Education	0.385	0.795				
e-Learning Anxiety	0.474	0.427	0.655			
Home-based work activities	0.208	0.332	0.285	0.721		
Mothers Life Satisfaction	0.488	0.513	0.734	0.185	0.758	
Mothers Well-being	0.408	0.388	0.449	0.211	0.543	0.694

"CDC = Complete dedication to her child; DIE = Direct involvement in Education; EA = ELearning Anxiety; HWA = Home-based work activities; MLS = Mothers Life Satisfaction; MWB = Mothers Well-being"

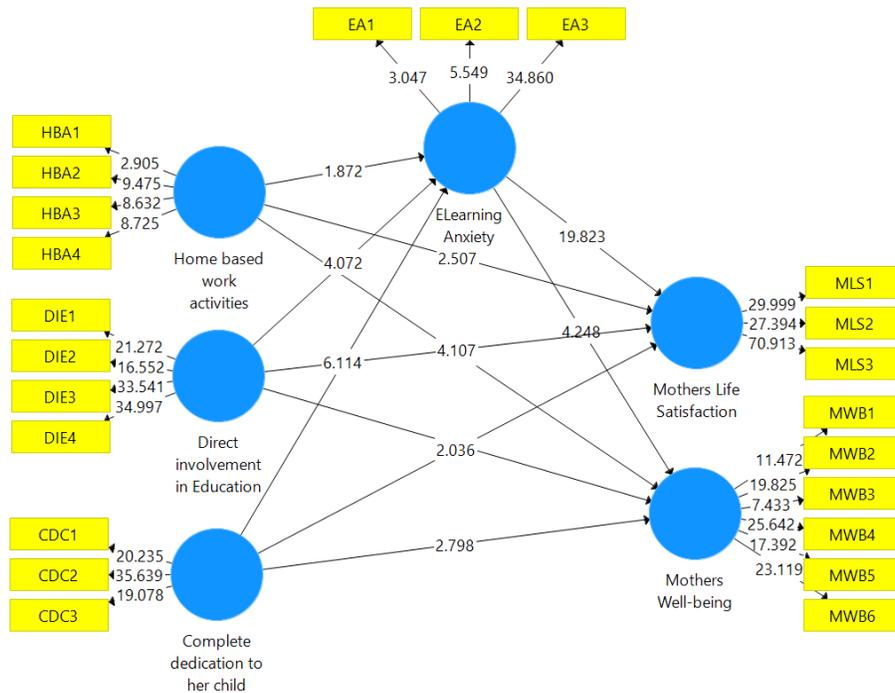
The value of  $R^2$  ranges from zero to one; as explained in Table 4, the values of the assessment of  $R^2$  are presented. Moreover, Chin et al. (1998) recommended that the  $R^2$  of "0.13 is considered weak", "0.33 is moderate", and "0.67 is considered as strong". The coefficient of determination for endogenous constructs is given in the table. eLearning anxiety value of  $R^2$  is 0.310, which shows a moderate value, the mother's life satisfaction value of  $R^2$  is 0.740, which shows a strong value; and the mother's well-being value of  $R^2$  is 0.281, which shows a weak relationship.

**Table 4: Assessment of R square**

	$R^2$
e-Learning Anxiety	0.310
Mothers Life Satisfaction	0.740
Mothers Well-being	0.281

**Assessment of Structural Model**

This part refers to the structural model presented in Figure 3 and expressed in terms of evident measurement model connections (Raeder et al., 2008). The proposed model for the study uses a structural model to highlight the interconnectedness of the links.



**Figure 3: Analysis of the combined forest plot recapping relationship with the incidence of needlestick injury in health facilities**

The structural model in PLS looks at the direct relationship between the offered hypotheses and their  $t$ -values and regression coefficients; an indirect effect is the same as a standardized beta value in regres-

sion analysis, according to Ramayah et al. (2018). The  $t$ -values and beta values of the regression coefficients are used to determine significance; according to Hair et al. (2017),  $t$ -values of more than "1.64" are statis-

tically significant and are then used to make conclusions about the suggested hypothesis. The model's two main purposes are to examine direct linkages and verify projected interactions between components us-

ing structural model results, as presented in Table 5 below.

**Table 5: Hypothesis testing**

Path	B-Value	Sample Mean	Standard Deviation	t value	p-value	
CDC -> MLS	0.083	0.083	0.041	2.036	0.042	Supported
CDC -> MWB	0.204	0.201	0.073	2.798	0.005	Supported
DIE -> MLS	0.201	0.196	0.049	4.107	0.000	Supported
DIE ->MWB	0.186	0.182	0.078	2.381	0.018	Supported
EA -> MLS	0.740	0.742	0.037	19.823	0.000	Supported
EA -> MWB	0.263	0.269	0.062	4.248	0.000	Supported
HWA -> MLS	-0.109	-0.099	0.044	2.507	0.013	Supported
HWA -> MWB	0.232	0.238	0.058	2.546	0.005	Supported
CDC -> EA	0.351	0.350	0.057	6.114	0.000	Supported

"CDC = Complete dedication to her child; DIE = Direct involvement in Education; EA = eLearning Anxiety; HWA = Home-based work activities; MLS = Mothers Life Satisfaction; MWB = Mothers Well-being"

In above Table 5, shows that 1st hypothesis CDC -> MLS (B = 0.083,  $p < 0.042$ ), so this hypothesis is also accepted. 2nd hypothesis shows CDC -> MWB (B = 0.204,  $p < 0.005$ ), so this hypothesis is accepted. Third hypothesis shows DIE -> MWB (B = 0.186,  $p < 0.018$ ), so this hypothesis is accepted. Fourth hypothesis shows DIE -> MLS (B = 0.201,  $p < 0.000$ ), so this hypothesis is accepted. 5th hypothesis shows EA -> MLS (B =

0.740,  $p < 0.000$ ), so this hypothesis is accepted. 6th hypothesis shows EA -> MWB (B = 0.263,  $p < 0.000$ ), so this hypothesis is accepted. 7th hypothesis shows HWA -> MLS (B = -0.109,  $p < 0.013$ ), so this hypothesis is accepted. 8th hypothesis shows HWA -> MWB (B = 0.232,  $p < 0.005$ ), so this hypothesis is accepted. Last hypothesis shows CDC -> EA (B = 0.351,  $p < 0.000$ ), so this hypothesis is accepted.

**Table 6: Moderator hypothesis testing**

Path	B-value	(STDEV)	t-value	p Value	Decision
CDC -> EA -> MWB	0.093	0.028	3.323	0.001	Supported
DIE -> EA -> MLS	0.185	0.046	3.983	0.000	Supported
HWA -> EA -> MWB	0.234	0.060	2.686	0.002	Supported
CDC -> EA -> MLS	0.260	0.043	6.039	0.000	Supported
HWA -> EA -> MLS	0.296	0.050	2.898	0.008	Supported
DIE -> EA -> MWB	0.066	0.024	2.795	0.005	Supported

The Table 6 above shows that moderating 1st hypothesis  $t$  CDC -> EA -> MWB (B = 0.093,  $p < 0.001$ ), so this hypothesis is accepted. 2nd moderating hypothesis shows DIE -> EA -> MLS (B = 0.185,  $p < 0.000$ ), so this hypothesis is accepted. 3rd moderating hypothesis shows HWA -> EA -> MWB (B = 0.234,  $p < 0.002$ ), so this hypothesis is accepted. 4th moderating hypothesis shows CDC -> EA -> MLS (B = 0.260,  $p < 0.000$ ), so this hypothesis is accepted. 5th moderating hypothesis shows HWA -> EA -> MLS (B = 0.296,  $p < 0.008$ ), so this hypothesis is accepted. 6th moderating hypothesis shows DIE -> EA -> MWB (B = 0.066,  $p < 0.005$ ), so this hypothesis is accepted.

**DISCUSSION**

The research objective of this study was to investigate a mother's lifestyle activities (i.e., direct involvement with her child, home-based work activities, and complete dedication to her child) and their impact on life satisfaction and well-being outcomes. Furthermore, extending the current body of literature, the moderating impact of eLearning anxiety on the relationship between a mother's lifestyle & life satisfaction and well-being was investigated in this study. All of the hypotheses were supported by the findings of this research.

This research was based on the self-determination

theory regarding the mother's lifestyle, life satisfaction, and mother's well-being. Involvement mothers of typical mothers manage their children's careers (e.g., helping them choose courses), provide active support (e.g., assisting with homework), support their children's academic aspirations, and participate in school-related activities (Hornby and Blackwell, 2018). According to this viewpoint, life happiness involves a person's subjective assessment of their particular and overall life condition (Stanley and Gilzene, 2022; Zhang, 2022). The study's main findings revealed that mothers' lifestyles are positively associated with mothers' life satisfaction. On the other hand, mothers' lifestyle was also significantly associated with mothers well being. The extended investigation of moderated relationships has revealed that eLearning anxiety moderated between mothers' lifestyles and outcomes in the Jordanian collectivist cultural context. It also revealed that previous research reported the influence of anxiety on students, but in the case of current research, the eLearning anxiety and its influence on mothers have been significantly revealed in the Jordanian study context. This brings a major advance to educational psychology and social sciences literature. 1st hypothesis proved that a mother's lifestyle has a significant positive impact on the mother's life satisfaction, so this hypothesis was accepted, and the findings were indirectly aligned with the conceptualization of previous studies (Hornby and Blackwell, 2018; Zhang, 2022). This has also revealed some related economic benefits for the family; if e-learning anxiety is well managed, mothers' well-being and life satisfaction will be increased. It will ultimately save the family and community financial burdens of health expenditures.

The second hypothesis that a mother's lifestyle has a significant positive impact on a mother's well-being was also held from the study findings. As a result, the functionality of a mother's lifestyle and the mother's well-being concepts may lead to an improvement in the mother's lifestyle. In past literature, a mother's well-being may also have been employed as a substitute for the mother's lifestyle. Investigations on a mother's well-being were scarce, considering distinct ideas, including joy, satisfaction, enthusiasm, and pleasant moods, concentrating on why people think their lives are good (Stanley and Gilzene, 2022). Thus

findings of this research made an advance to the literature related to these constructs. The last hypothesis is that e-Learning anxiety moderates the relationship between a mother's lifestyle and life satisfaction and well-being. It can help the students to communicate their educational experiences and express their ideas. E-Learning is a cutting-edge tool for students that promotes more high school senior education, aids in informing activities, and offers new, more adaptable methods of instruction but eLearning methods cause anxiety for mothers of grade 1-3 students (Al Kurdi et al., 2020; Kolski and Weible, 2018). This anxiety affects mothers' well-being and life satisfaction due to increased pressure from home affairs and additional pressure on a child's educational growth and concern. As per the author's knowledge, none of the previous research has attempted to explore this extended link between lifestyle and life satisfaction. The moderation results' findings indirectly confirmed the conceptualizations pitched in previous literature (Hornby and Blackwell, 2018; Owusu, 2021; Singletary et al., 2022; Skene et al., 2022). The current study is incremental to extend the field on relevant constructs by theorizing and testing the unique associations.

#### **Theoretical Implications of the Study**

Theoretically, this paper contributes to a mother's lifestyle (direct involvement with her child, home-based work activities, and complete dedication to her child) & life satisfaction as well as well-being theories. Social science theories focus on individual lifestyles and life satisfaction, while public health theories focus on individual well-being issues. Current research made a theoretical advance by bridging the gap between published health and well-being literature and theories and life satisfaction and lifestyle theories. Integrating diverse theoretical constructs into a single logical framework is incremental to the literature in both fields.

On the other hand, the impact of emerging online and eLearning factors, along with the satisfaction and well-being of early-age students and their influence on mothers' attitudes and behaviors, is scarcely investigated. Current research attempted to bridge the research gap by testing the moderating role of eLearning anxiety among Jordanian mothers of grade 3. Finally, the current study has been based on the self-determination theory. This theory has been incorpo-

rated due to mothers' determination and commitment to child education and learning. Current research opened several new theoretical directions for future explorations in the field. Hence providing room for the pitched conceptualizations to help the field grow for the relevant literature on life satisfaction, well-being, and lifestyle. Another unique contribution of this research was to consider well-being, satisfaction, and lifestyle from a child education perspective that how it affects the health of caretaker mothers. Such explorations are novel to the body of literature and confirm the significance of this research in the current post covid era when the education system has already moved towards hybrid learning methodologies.

### **Practical Implications of the Study**

Besides above mentioned theoretical implications, current research also brings multiple key policy directions and implications for school managers and leaders. These results might suggest that the inventive, even enjoyable, techniques used in active learning help parents feel better about their children's treatment. Additionally, this research offers pertinent data to executives, professionals, and policymakers. In conclusion, the researcher may assert that there is a link between mother's lifestyle and their life satisfaction. The mother's life satisfaction can be managed through the management of eLearning anxiety using multiple techniques available in digital learning methods. This research also offers important policy takeaways for parents, decision-makers, and human resource specialists to consider when managing mothers' lifestyles for direct connection with their kids, home-based activities, and total devotion to their kids. Besides focusing on children's professional grooming at early stages, school administrations should also consider innovative lesson plans, activities, and homework to help decrease mothers' eLearning anxiety during online sessions. These policy interventions may further be refined through focus group discussions and interview with mother for better outcomes. Spouses should also consider providing family support in handling household activities so that pressure on mothers may be decreased to overcome eLearning anxiety. A continuous check-up after selected intervals is needed for mothers involved in eLearning activities of their children, and multiple stress management techniques may help to manage eLearning anxiety among moth-

ers. During parents-teachers meetings, the school administration should run awareness campaigns to help decrease eLearning anxiety among mothers of young kids. Online lesson plans and activities should be reviewed and improved to help decrease anxiety and increase enjoyment for mothers engaged in the learning process. The school leadership, managers, and education policymakers should consider the recommendations based on the findings of this research for better parent-teacher relationships and enhanced learning outcomes. In addition to the above-generalized recommendations, the current study also suggests some practical insights for Jordanian education leaders and policymakers. Jordanian schools should not only focus on educating students but also adopt an inclusive approach to include mothers as stakeholders in students learning. A specific campaign to generate awareness among Jordanian mothers of grade 1-3 students about managing online or eLearning anxiety may result in better student learning outcomes and health outcomes for mothers.

### **Limitations and Future Research**

Like all prior studies, the current study had some limitations which need to be fixed in further research attempts related to the topics investigated in this research. Mothers from Jordan's Karak Governorate took part in the current study. Better insights could be gained from future studies that would include a wide sample of mothers' lifestyles from diverse cultural contexts to tap into the influence of cultural differences in lifestyle and outcomes. The data were gathered in a cross-sectional style despite the likelihood that future researchers would employ a longitudinal study design to determine causation more precisely. Investigators should look at factors that may also mediate the effects and associations in the context of this research to provide more significant results in subsequent studies. Current research highlighted the importance of home-based activities that investigators might consider to gauge how parental education and parental awareness affect students' learning. The usefulness of this assessment should be further investigated with parents from more varied racial and socioeconomic backgrounds, as well as with youngsters. An experimental study with suggested interventions could bring several unique policy insights for education policy development and effective manage-

ment of school relationships with parents. Lastly, the current study is limited only to mothers of grade 1-3 students, while in different cultures, fathers may also be the caretaking person during an online session. In future research, researchers may include fathers and mothers in both samples for more accurate results and gender differences related to this phenomenon.

## CONCLUSION

The purpose of the study, which is based on the self-determination theory, is to examine a mother's lifestyle dimensions (i.e., direct involvement with her child, home-based work activities, and complete dedication to her child), as well as life satisfaction, well-being, and the moderating role of eLearning anxiety among Jordanian mothers of grade 3 parents. In conclusion, it is logical to mention that the following elements that influence the participation of mothers are mothers' educational qualifications, lack of curricular understanding, language, and surroundings. This study may offer useful advice that mothers might share to help them lay the strong ground for their child's learning in grades 1-3. It has highlighted home-based activities promoting little children's training and expertise in eLearning through which eLearning anxiety can be managed tactfully. The research is incremental for school leaders and education scholars to recommend several key insights regarding significant associations theoretically proposed and empirically tested in this research. The study brings theoretical as well as practical advances to literature related to mothers' lifestyles, mothers' life satisfaction, and mothers' eLearning anxiety. Additionally, the role of eLearning anxiety has been proposed and tested to be held for key research policy directions and future research agendas in this stream of literature.

## REFERENCES

- Ahmad-Ur-Rehman M, Haq IU, Jam FA, Ali A, Hijazi ST; 2010. Psychological contract breach and burnout, mediating role of job stress and feeling of violation. *European Journal of Social Sciences*, 17(2):232-237.
- Al Kurdi B, Alshurideh M, Salloum S, Obeidat Z, Aldweeri R; 2020. An empirical investigation into examination of factors influencing university students' behavior towards elearning accep-

tance using SEM approach. *International Association of Online Engineering*, 14(2):19-41.

- Alkhwaja MI, Halim MSA, Afthanorhan A; 2021. Technology anxiety and its impact on e-learning system actual use in Jordan public universities during the coronavirus disease pandemic. *European Journal of Educational Research*, 10(4):1639-1647.
- Arora S, Chaudhary P, Singh RK; 2021. Impact of coronavirus and online exam anxiety on self-efficacy: The moderating role of coping strategy. *Interactive Technology and Smart Education*, 18(3):475-492.
- Azizi Z, Rezai A, Namaziandost E, Tilwani SA; 2022. The role of computer self-efficacy in high school students' e-learning anxiety: A mixed-methods study. *Contemporary Educational Technology*, 14(2):1-14.
- Barger MM, Kim EM, Kuncel NR, Pomerantz EM; 2019. The relation between parents' involvement in children's schooling and children's adjustment: A meta-analysis. *Psychological Bulletin*, 145(9):855-890.
- Bi Xb, He Hz, Lin Hy, Fan Xz; 2022. Influence of social support network and perceived social support on the subjective wellbeing of mothers of children with autism spectrum disorder. *Frontiers in Psychology*, 13:1-13.
- Boonk L, Gijsselaers HJ, Ritzen H, Brand-Gruwel S; 2018. A review of the relationship between parental involvement indicators and academic achievement. *Educational Research Review*, 24:10-30.
- Boonk LM, Gijsselaers HJ, Ritzen H, Brand-Gruwel S; 2022. Student-perceived parental involvement as a predictor for academic motivation in Vocational Education and Training (VET). *Journal of Vocational Education & Training*, 74(2):187-209.
- Bourke-Taylor HM, Joyce KS, Grzegorzczyn S, Tirlea L; 2022. Mental health and health behaviour changes for mothers of children with a disability: Effectiveness of a health and wellbeing workshop. *Journal of autism and developmental disorders*, 52(2):508-521.

- Calder N, Jafri M, Guo L; 2021. Mathematics education students' experiences during lockdown: Managing collaboration in elearning. *Education Sciences*, 11(4):1-16.
- Cava MJ, Buelga S, Musitu G; 2014. Parental communication and life satisfaction in adolescence. *The Spanish Journal of Psychology*, 17:1-8.
- Chienwattanasook K, Jermsittiparsert K; 2019. Impact of entrepreneur education on entrepreneurial self-employment: A study from Thailand. *Polish Journal of Management Studies*, 19:106-116.
- Chin WW, et al.; 1998. The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2):295-336.
- Chiu TK; 2022. Applying the Self-Determination Theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *Journal of Research on Technology in Education*, 54:S14-S30.
- Crosnoe R; 2001. Academic orientation and parental involvement in education during high school. *Sociology of Education*, 74(3):210-230.
- Davies EB, Beever E, Glazebrook C; 2018. A pilot randomised controlled study of the mental health first aid eLearning course with UK medical students. *BMC Medical Education*, 18(1):1-12.
- Etikan I, Musa SA, Alkassim RS, et al.; 2016. Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1):1-4.
- Farooq AJ, Rauf AS, Husnain I, Bilal HZ, Yasir A, Masood M; 2011. Combined effects of perception of politics and political skill on employee job outcomes. *African Journal of Business Management*, 5(23):9896-9904.
- Fauzia M, Farooq AJ, Farooq A; 2012. Consumer trust in e-commerce: A study of consumer perceptions in Pakistan. *African Journal of Business Management*, 6(7):2516-2528.
- Fornell C, Larcker DF; 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1):39-50.
- Gagné M, Parker SK, Griffin MA, Dunlop PD, Knight C, Klonek FE, et al.; 2022. Understanding and shaping the future of work with self-determination theory. *Nature Reviews Psychology*, 1:378-392.
- Gul F, Pathan S, Amur A, Solangi DA; 2021. Study of some hematological and biochemical parameters as a Bioindication in breast cancer patients of Sindh, Pakistan. *Pakistan Journal of Life and Social Sciences*, 19(1):27-33.
- Hair JF, Hult GTM, Ringle CM, Sarstedt M, Thiele KO; 2017. Mirror, mirror on the wall: A comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5):616-632.
- Hill NE, Witherspoon DP, Bartz D; 2018. Parental involvement in education during middle school: Perspectives of ethnically diverse parents, teachers, and students. *The Journal of Educational Research*, 111(1):12-27.
- Hornby G, Blackwell I; 2018. Barriers to parental involvement in education: An update. *Educational Review*, 70(1):109-119.
- Jager J, Putnick DL, Bornstein MH; 2017. II. More than just convenient: The scientific merits of homogeneous convenience samples. *Monographs of the Society for Research in Child Development*, 82(2):13-30.
- Jam FA, Donia MB, Raja U, Ling CH; 2017. A time-lagged study on the moderating role of overall satisfaction in perceived politics: Job outcomes relationships. *Journal of Management & Organization*, 23(3):321-336.
- Kempen E, Tobias-Mamina RJ; 2022. Applying behavioral reasoning theory to South African female consumers' emerging apparel-shopping behavior during COVID-19. *Journal of Global Fashion Marketing*, 13(3):1-17.
- Khan S, Jam FA, Shahbaz M, Mamun MA; 2018. Electricity consumption, economic growth and trade openness in Kazakhstan: Evidence from cointegration and causality. *OPEC Energy Review*, 42(3):224-243.
- Khan TI, Akbar A, Jam FA, Saeed MM; 2016. A time-lagged study of the relationship between big five

- personality and ethical ideology. *Ethics & Behavior*, 26(6):488-506.
- Kirke D; 1979. Unmarried mothers: A comparative study. *Economic and Social Review*, 10(2):157-167.
- Kolski T, Weible J; 2018. Examining the relationship between student test anxiety and webcam based exam proctoring. *Online Journal of Distance Learning Administration*, 21(3):1-15.
- Küçük EE, Küçük Alemdar D; 2018. Life satisfaction and psychological status of mothers with disabled children: A descriptive study. *Community Mental Health Journal*, 54(1):102-106.
- Lansford JE, Zietz S, Al-Hassan SM, Bacchini D, Bornstein MH, Chang L, et al.; 2021. Culture and social change in mothers' and fathers' individualism, collectivism and parenting attitudes. *Social Sciences*, 10(12):1-20.
- Malureanu A, Panisoara G, Lazar I; 2021. The relationship between self-confidence, self-efficacy, grit, usefulness, and ease of use of elearning platforms in corporate training during the COVID-19 pandemic. *Sustainability*, 13(12):1-20.
- Müller AM, Goh C, Lim LZ, Gao X; 2021. Covid-19 emergency elearning and beyond: Experiences and perspectives of university educators. *Education Sciences*, 11(1):1-15.
- Owusu GMY; 2021. Predictors of financial satisfaction and its impact on psychological wellbeing of individuals. *Journal of Humanities and Applied Social Sciences* (Just Accepted).
- Pascal SA, Blidaru S; 2021. The role of emotions in the development of anxiety symptoms: An educational perspective related to the Covid-19 pandemic. *The 17th International Scientific Conference eLearning and Software for Education*, Bucharest, Romania.
- Qureshi AW, Mansoor A, Mehmood S, Khan Z, Qureshi UUR; 2021. Genetic analysis of *Fasciola* isolates from buffaloes and cattle through ITS2 region sequencing of rDNA. *Pakistan Journal of Life & Social Sciences*, 19(2):62-68.
- Raeder J, Larson D, Li W, Kepko EL, Fuller-Rowell T; 2008. OpenGGCM simulations for the THEMIS mission. *Space Science Reviews*, 141(1):535-555.
- Ramayah T, Cheah J, Chuah F, Ting H, Memon MA; 2018. Partial Least Squares Structural Equation Modeling (PLS-SEM) using smartPLS 3.0. In: *An updated guide and practical guide to statistical analysis*. London, UK: Pearson.
- Rigby CS, Ryan RM; 2018. Self-determination theory in human resource development: New directions and practical considerations. *Advances in Developing Human Resources*, 20(2):133-147.
- Singletary B, Justice L, Baker SC, Lin TJ, Purtell KM, Schmeer KK; 2022. Parent time investments in their children's learning during a policy-mandated shutdown: Parent, child, and household influences. *Early Childhood Research Quarterly*, 60:250-261.
- Skene K, O'Farrelly CM, Byrne EM, Kirby N, Stevens EC, Ramchandani PG; 2022. Can guidance during play enhance children's learning and development in educational contexts? A systematic review and meta-analysis. *Child Development*, 93(4):1162-1180.
- Smith RE, Smoll FL, Cumming SP, Grossbard JR; 2006. Measurement of multidimensional sport performance anxiety in children and adults: The Sport Anxiety Scale-2. *Journal of Sport and Exercise Psychology*, 28(4):479-501.
- Stanley DA, Gilzene A; 2022. Listening, Engaging, Advocating and Partnering (LEAP): A model for responsible community engagement for educational leaders. *Journal of Research on Leadership Education* (Just Accepted).
- Steimer T; 2022. The biology of fear-and anxiety-related behaviors. *Dialogues in Clinical Neuroscience*, 4(3):231-249.
- Thibaut F; 2022. Anxiety disorders: A review of current literature. *Dialogues in Clinical Neuroscience*, 19(2):87-88.
- Thompson SJ, Bender K, Windsor LC, Flynn PM; 2009. Keeping families engaged: The effects of home-based family therapy enhanced with

- experiential activities. *Social Work Research*, 33(2):121-126.
- Tick A; 2019. An extended TAM model, for evaluating eLearning acceptance, digital learning and smart tool usage. *Acta Polytechnica Hungarica*, 16(9):213-233.
- van Tintelen AM, Bolt SH, Dalmijn E, Jansen DE; 2022. Life after teenage childbearing: A long-term view on teenage mothers' wellbeing. *Journal of Reproductive and Infant Psychology* (Just Accepted).
- Waheed M; 2011. Role of culture between influencing factors and student electronic learning satisfaction. *Journal of Educational and Social Research*, 1(3):133-133.
- Waheed M, Khan AZ, Khan HGA, Khalil MS; 2012. Creative learning environment and knowledge management. *International Journal of Academic Research in Business and Social Sciences*, 2(1):144-159.
- Waheed M, Khan Q, Ain N; 2013. Role of satisfaction, security and risk towards customer's turnover intention from traditional to internet banking. *International Arab Journal of Information Technology*, 3(2):83-89.
- Waheed M, Klobas JE, Kaur K; 2017. The importance of actual use in defining and measuring innovative behaviour: Comparison of e-book reader users and non-users. *Journal of Librarianship and Information Science*, 49(4):368-379.
- Waheed M, Leisyte L; 2020. Scandinavian students' perspective on learning from digital learning environment: The potential role of interactive quality. *EPiC Series in Education Science*, 3:262-268.
- Williams B, Williams J, Ullman A; 2002. *Parental involvement in education*. London, UK: Department for Education and Skills.
- Zhang F, Liu J, An M, Gu H; 2021. The effect of time management training on time management and anxiety among nursing undergraduates. *Psychology, Health & Medicine*, 26(9):1073-1078.
- Zhang X; 2022. Caregivers' perceived changes in engaged time with preschool-aged children during COVID-19: Familial correlates and relations to children's learning behavior and emotional distress. *Early Childhood Research Quarterly*, 60:319-331.
- Zhou J, Yu H; 2021. Contribution of social support to home-quarantined Chinese college students' well-being during the COVID-19 pandemic: The mediating role of online learning self-efficacy and moderating role of anxiety. *Social Psychology of Education*, 24(6):1643-1662.