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Chief Editor's Note

The International Journal of Emerging Perspectives in Education (IJEPE) publishes original, empirical research that explores various key themes and topics that are crucial to contemporary education. We are particularly excited to feature articles that offer new perspectives and innovative solutions to relevant challenges. *IJEPE* is one of the first online journals introduced by the Islamic University of Maldives.

We are delighted to publish the inaugural issue of our journal, *Volume 1, Issue 1*. This issue features five research papers that offer valuable insights on various educational topics. Among the most important topics are improving the quality of life and promoting sustainable development through Muslim retirement villages, looking into how teachers deal with bad behavior among students in Maldivian secondary schools, comparing the digital skills of accounting students in Malaysian universities, and looking into the roles of cooperating teachers in supervising student teachers during practicum. These studies collectively contribute to advancing knowledge and practices in education.

To ensure that the submitted papers are thoroughly assessed for relevance and quality, *IJEPE* maintains a highly dedicated and experienced team of editors and reviewers. The journal's pursuit of indexing in popular databases necessitates this approach. Experts in the field of education comprise the team. Therefore, the Editorial Board would like to extend its gratitude to the authors and researchers who made contributions to the inaugural volume (Issue 1) of *IJEPE*. We are also deeply appreciative of the invaluable assistance provided by the *IJEPE* advisory board, peer assessors, the Centre of Research and Publication, Kulliyyah of Education, and all other pertinent departments during the publication process. In the forthcoming issues, we anticipate constructive suggestions and critical feedback that will enhance the *IJEPE*.

We are grateful for your interest in *IJEPE-International Journal of Emerging Perspectives in Education* as a publication outlet. The Editorial Board is pleased to accept original research-based articles and anticipates your contribution, suggestion, and support for the forthcoming issue.

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Harnessing Emotional Intelligence in Understanding How Malaysian College Students Manage Stress, Enhance Focus, and Improve Study Habits

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ABSTRACT

Emotional Intelligence (EI) is increasingly recognized as an important skill influencing students' academic performance and well-being. However, there remains limited understanding of how students consciously utilize EI to manage stress, maintain focus, and build effective study habits. Therefore, this study explores Malaysian college students' perspectives on how EI assists students in coping with academic stress, enhancing focus, sustaining study habits, and balancing emotional well-being with academic demands. A qualitative phenomenological approach was employed to understand the lived experiences of 15 college students selected through convenience sampling. Data were collected using semi-structured interview and analysed using Braun and Clarke's (2006) thematic analysis framework. Findings revealed that students with strong EI demonstrated greater resilience to academic stress, more adaptive and disciplined study habits, and higher levels of sustained focus. The analysis revealed themes such as perception of EI in managing stress, influence of EI on concentration, relationship between emotional response and academic productivity, strategies to balance emotional well-being with academic responsibilities. The findings suggest that EI significantly shapes students' ability to navigate academic stress and maintain productive study behaviours. Enhancing EI among students can contribute to healthier academic lifestyles and improved academic performance. These insights hold practical implications for educators, counsellors, and policymakers to integrate EI training into academic support services, thereby promoting student resilience, academic success, and overall well-being in higher education environments.

Keywords: Academic stress, College students, Focus, Emotional Intelligence, Study habits

INTRODUCTION

In today's competitive and fast-paced academic landscape, college students are increasingly confronted with overwhelming levels of stress and emotional pressure. From managing academic tasks to balancing social life and preparing for their future, students face numerous challenges that affect both emotional well-being and academic performance. When students are unable to manage stress effectively, motivation decreases,

and cognitive functions such as concentration, memory, and decision-making are disrupted. These emotional burdens accumulate, negatively affecting students' ability to develop and sustain effective study habits that are essential for academic success. Emotional Intelligence (EI) has emerged as a critical construct in this context, enabling students to navigate emotional complexity, sustain concentration, and develop study habits conducive to learning and performance. Understanding

how students harness EI is not only relevant in educational settings but also significant within broader psychological frameworks emphasizing emotional regulation, cognitive control, and personal development.

Existing empirical studies suggest that students with higher EI tend to experience lower levels of academic stress, as EI enhances self-confidence, happiness, and sociability, enabling more effective coping with academic demands (Stevens, 2020). EI-based interventions have also been shown to reduce academic stress significantly (Ibrahim et al., 2024). Moreover, EI moderates the effects of stress on depression, particularly during challenging periods such as the COVID-19 pandemic (Cheema, 2022; Robbins et al., 2024). Prior studies further indicate that EI enhances students' ability to regulate emotional responses, thereby improving concentration and cognitive functioning (Caesarania et al., 2024; Khorasani et al., 2023). Additionally, EI positively influences study habits by fostering motivation (Tang & He, 2023), effective coping strategies (Iqbal et al., 2021), and strong social support systems (Shuo et al., 2022).

While the importance of EI is widely acknowledged, research in the Malaysian context remains limited in scope and depth. Existing studies highlight the need for institutional programs and classroom interventions to raise emotional awareness and equip students with coping skills (Abdul Patah & Harun, 2024; Yee Von et al., 2022). Yet, many students continue to struggle with recognizing and managing their emotions effectively, particularly in post-pandemic academic environments. Much of the existing research is quantitative, relying on surveys often limited to single institutions or specific programs, which restricts generalizability (Sook Khuan & Chai Lin, 2021). Furthermore, inconsistencies in reported findings on the relationship between EI and academic performance emphasize the need for further investigation, particularly involving larger

and more diverse samples from both public and private universities (Dasor et al., 2023; Yee Von et al., 2022).

Filling these research gaps is vital as higher education institutions struggle with rising rates of student anxiety, burnout, and detachment. A deeper understanding of how EI operates in students' daily academic lives can inform targeted interventions, improve support services, and influence pedagogical practices. This study contributes by exploring students' lived experiences of using EI to regulate stress, sustain concentration, and optimize study habits. The findings provide insights that can enrich theoretical perspectives, strengthen institutional support programs, and guide education policy.

The study aims to answer the following research questions:

1. How do college students perceive the role of emotional intelligence in managing academic stress?
2. In what ways does emotional intelligence influence students' ability to maintain concentration?
3. How do students describe the relationship between their emotional responses and their academic productivity?
4. What strategies do emotionally intelligent students use to balance emotional well-being with academic responsibilities?

LITERATURE REVIEW

Emotional Intelligence (EI)

Emotional Intelligence (EI) is widely recognized as a critical factor in both personal and academic success. Salovey and Mayer (1990) originally defined EI as the ability to monitor one's own and others' emotions, discriminate among them, and use this information to guide thinking and action. Later scholars expanded this definition, describing EI as a learned ability

to think constructively and act wisely (Nelson & Low, 2011), or as an array of non-cognitive skills and competencies that influence one's capacity to cope with environmental demands and pressures (AL-Qadri & Zhao, 2021; Qualter et al., 2007).

The conceptual foundation of EI draws on early theories that recognized the importance of non-cognitive aspects of intelligence. David Wechsler (1943) emphasized “non-intellective” elements such as social and emotional functioning, while Robert Thorndike (1930s) introduced the idea of “social intelligence” (Cherniss et al., 2006a). Howard Gardner's (1983) theory of multiple intelligences, particularly intrapersonal and interpersonal intelligences, laid additional groundwork (Cherniss et al., 2006b; Petrides et al., 2016). Daniel Goleman popularized EI in the mid-1990s, later extending it to leadership and organizational contexts alongside Richard Boyatzis (Cherniss et al., 2006b; Goleman & Boyatzis, 2017). Reuven Bar-On contributed significantly with his EI model, framing EI as a set of emotional and social competencies essential for success in life (AL-Qadri & Zhao, 2021). Nelson and Low (2011) further emphasized EI's role in academic and career development, describing it as one of the most influential variables in personal achievement.

Several models have attempted to conceptualize EI. Salovey and Mayer's four-branch model identifies perceiving, using, understanding, and managing emotions as core abilities (Salovey & Grewal, 2005). Nelson and Low (2011) categorize EI into interpersonal, intrapersonal, leadership, and self-management competencies, including skills such as stress regulation, empathy, and time management. Goleman and Boyatzis (2017) highlight twelve competencies grouped under self-awareness, self-management, social awareness, and relationship management. Similarly, Bar-On's model (2006) outlines intrapersonal skills, interpersonal skills, stress management, adaptability, and general mood as critical

dimensions.

Empirical evidence consistently demonstrates EI's impact on academic outcomes. Students with higher EI tend to perform better academically, remain motivated, and manage negative emotions such as anxiety and frustration more effectively (Al-Qadri & Zhao, 2021). Beyond academics, EI contributes to overall well-being by fostering emotional regulation, resilience, and positive relationships (Nelson & Low, 2011).

Academic Stress among College Students

Academic stress is defined as a psychological condition in which students perceive academic demands as exceeding their available coping resources. It reflects how students interpret present academic challenges, such as examinations, workloads, and expectations relative to their personal resources (Nakalema & Ssenyonga, 2014). Research highlights several contributors to academic stress. One of the most significant is academic workload and performance pressure. Demands such as coursework, assessments, and internships have been found to create psychological distress by increasing academic expectations (Dada et al., 2019; A. Liu et al., 2024). Students often experience increased pressure to maintain high performance, which intensifies stress levels.

Financial burdens also contribute to stress, particularly among international students who face tuition fees and living expenses alongside academic responsibilities. These financial challenges may lead to anxiety about sustaining studies while meeting daily living costs, especially for students from lower socioeconomic backgrounds (Sasikumar, 2023). In addition, social isolation and lack of support can increase feelings of loneliness and depression, particularly during crises such as the COVID-19 pandemic (Hamza et al., 2021).

Expectations from family and society can also amplify stress, pushing students toward perfectionism. Such expectations often lead to chronic anxiety as students fear failure and

its consequences (A. Liu et al., 2024). Social support, however, can serve as a protective factor. Positive peer and family interactions provide emotional reassurance and buffer the effects of stress, underscoring the importance of supportive academic and social environments.

Importance of Focus and Concentration

Focus, often equated with sustained selective attention, refers to the ability to direct and maintain attention on relevant academic tasks while filtering out distractions. This cognitive process is crucial for managing workload and maximizing learning outcomes (Hobbiss & Lavie, 2023). Research demonstrates that impaired concentration disrupts cognitive functioning and exacerbates stress, ultimately harming academic achievement (He et al., 2022). Conversely, strong focus enhances study habits, organization, and academic outcomes (Avisar & Shalev, 2011).

Focus also contributes to emotional regulation. Students who maintain attention during challenging tasks tend to demonstrate greater resilience and reduced negative emotional responses (Huang et al., 2025). Cognitive flexibility, an ability intertwined with focus, allows students to shift between tasks efficiently, a skill vital in complex academic environments (He et al., 2022). Studies also show that EI interacts with focus. Students with higher EI regulate emotions more effectively, sustaining concentration and reducing susceptibility to distractions (Wen et al., 2020). On the other hand, negative emotional responses, such as frustration from academic feedback, can hinder focus and reduce study effectiveness (Hill et al., 2021).

Nonetheless, focus can be undermined by emotional overload, stemming from academic pressure, social expectations, and digital distractions. Excessive use of social media, for example, has been shown to reduce focus and impair academic success (Masood et al., 2022). Similarly, technostress from constant digital

engagement decreases concentration and academic outcomes through emotional overload (Yu et al., 2019).

Study Habits and Academic Behaviours

Study habits refer to consistent, strategic practices that students use to improve academic performance. These strategies vary by individual personality and external factors, but common effective practices include time management, motivation, note-taking, self-testing, collaborative learning, and environmental control. Time management is one of the most effective habits, enabling students to allocate sufficient time across subjects and meet deadlines. Structured study schedules enhance learning and retention (Jafari et al., 2019; Prasetyo et al., 2019).

Note-taking techniques also play a critical role by helping students synthesize and organize information. Active engagement through effective note-taking improves retention and recall during examinations (Mukherjee & Pal, 2024; Uslu & Körükcü, 2021). Collaborative learning is another key habit, allowing students to clarify doubts, exchange perspectives, and learn through peer interaction. Group study fosters motivation and a shared sense of responsibility (Kinoti & Mwita, 2021).

Finally, environmental management such as creating a quiet, well-lit, and distraction-free study space significantly impacts focus and academic performance (Fergina et al., 2022). Overall, effective study habits combine cognitive, behavioural, and environmental strategies that enhance students' ability to meet academic demands successfully.

Review of Relevant Theories

Bar-On's Emotional-Social Intelligence Model (2006) conceptualizes EI as a multidimensional construct comprising five key components: intrapersonal skills, interpersonal skills, stress management, adaptability, and general mood

(Bar-On, 2006). These components are highly relevant in understanding how Malaysian college students navigate academic demands. For instance, intrapersonal skills, such as emotional self-awareness and assertiveness, help students recognize their stress triggers (Richiteanu-Năstase et al., 2024) and express academic concerns constructively (Iqbal et al., 2021). Effective stress management through emotional self-regulation and impulse control enhances students' ability to handle academic pressure and emotional overload (Alwesmi et al., 2024), thereby supporting sustained focus and productive study habits.

The Transactional Model of Stress and Coping developed by Lazarus & Folkman (1987) underpins this study by framing stress as a dynamic interaction between the individual and their environment. The model emphasizes two key cognitive processes: primary appraisal, where individuals assess whether an event poses harm, threat, or benefit, and secondary appraisal, where they evaluate their resources and coping options. These appraisals guide the use of coping strategies, which can be either problem-focused (aimed at addressing the stressor) or emotion-focused (managing the emotional response). The model also recognizes that emotional states, including positive emotions, can play a critical role in restoring coping resources (Folkman & Moskowitz, 2004). In the academic context, this theory helps explain how students assess academic stressors and utilize EI to regulate their responses and maintain performance under pressure. This recursive process supports adaptive functioning over time.

Theoretical Framework

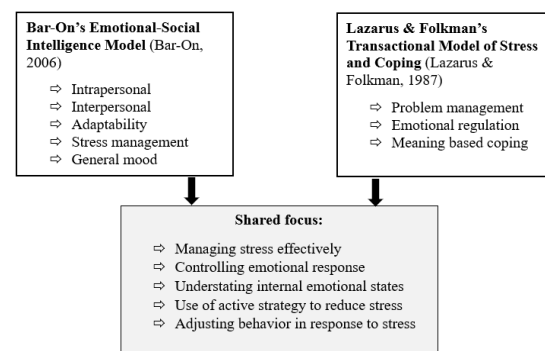


Figure 1: Research theoretical framework

2.6 Conceptual Framework

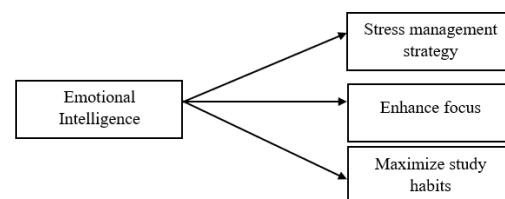


Figure 2: Conceptual framework

The conceptual framework illustrates how Emotional Intelligence (independent variable) influences students' ability to manage stress, enhance focus, and maximize study habits (dependent variables) to improve academic performance and well-being.

METHODOLOGY

Research methodology and approach

This study adopts a qualitative research design grounded in phenomenology, aiming to explore the lived experiences of Malaysian college students in harnessing EI to manage stress, enhance focus, and optimize study habits. A qualitative approach was chosen because it captures rich, detailed narratives that reveal participants' perceptions, feelings, and coping strategies, which quantitative methods may overlook (Creswell et al., 2007). Phenomenology focuses on understanding how individuals make sense of their experiences (Neubauer et al., 2019), making it particularly suitable for investigating how students consciously apply EI in their academic lives. This design allowed for an in-

depth exploration of students' inner thoughts and emotions regarding stress, concentration, and study practices, providing holistic insights. Importantly, the phenomenological method ensured that participants' voices were central, offering authentic perspectives on how EI functions as a protective shield in their academic journey.

Sampling and participants

This study used convenience sampling to select participants, allowing easy access to students who were willing and available to share their experiences. A total of 15 students from diverse fields such as education, behavioural finance, computer science, business, and psychology were selected from different universities to ensure variety in perspectives and academic backgrounds. Convenience sampling was appropriate for this qualitative phenomenological study as it facilitated access to participants who could provide rich, in-depth insights into the role of EI in managing academic stress, maintaining focus, and developing effective study habits. Recruiting students from various disciplines enabled a broader understanding of how EI operates across different educational contexts in Malaysia. While convenience sampling may limit generalizability, it served the purpose of this exploratory research by prioritizing depth over breadth and capturing the unique lived experiences of students in Malaysian higher education.

Data collection method

For this study, data were collected using a semi-structured interview method, which allowed for in-depth exploration (Kakilla, 2021) of the lived experiences of college students in Malaysia. Semi-structured interviews were chosen because they provide the flexibility to explore individual perspectives while maintaining a consistent structure across participants. Each interview was guided by a set of pre-determined questions aligned with the study's research questions.

Data Analysis

Thematic analysis was used to analyse the data collected through semi-structured interviews. Braun & Clarke's (2006) six-step approach was followed to identify patterns and themes from interview transcripts. The table below explains how each step was applied in this study.

Steps	Description
1. Familiarising with the data	Reading and re-reading transcripts to understand the content and take initial notes.
2. Generating initial codes	Systematically labelling meaningful features of the data.
3. Searching for themes	Grouping similar codes to form broader themes.
4. Reviewing themes	Checking if themes make sense in relation to the data.
5. Defining and naming themes	Giving clear names and explanations for each theme.
6. Producing the report	Writing up the findings with supporting quotes.

Validity and Reliability

Validity and reliability were ensured through several measures. Credibility was enhanced via member checking, allowing participants to review and confirm the accuracy of their responses. A transparent audit trail, including interview guides, transcription procedures, and coding steps, supported reliability. Thematic analysis was systematically conducted using Braun and Clarke's (2006) approach. To minimize researcher bias and enhance dependability, a second researcher reviewed the coding and theme development. These steps ensured that the findings accurately represent the lived experiences of Malaysian college students in using EI to manage stress, maintain focus, and enhance study habits.

FINDINGS

Demographic information

Table 1 Demographic information of participants

Student	Gender	Age range	Year of College	Field of study	Living arrangement	Employment	Previous exposure to EI training
1	Male	18-25	4th Year	Computer Science	In dorm	Unemployed	no
2	Female	36-45	2nd Year	Education	Alone	Unemployed	no

3	Female	36-45	2nd Year	Education	With family	Working part-time	no
4	Female	25-35	4th Year	Sport Science	With family	Full time	no
5	Female	46-55	3rd Year	Behavioural Finance	With family	Self employed	no
6	Male	25-35	1st Year	Aviation	Alone	Full time	no
7	Female	25-35	2nd Year	Science	Alone	Unemployed	no
8	Female	25-35	2nd Year	Biology	In dorm	Full time	no
9	Female	25-35	1st Year	Business	With family	Full time	no
10	Female	18-25	4th Year	Computer Science	In dorm	Working part-time	no
11	Female	18-25	3rd Year	Computer Science	Alone	Unemployed	no
12	Female	36-45	2nd Year	Psychology	Alone	Unemployed	yes
13	Male	18-25	4th Year	Computer Engineering	Alone	Full time internship (5.5 months)	no
14	Male	18-25	2nd Year	Computer Science Specialisation in Data Analyst	Alone	Unemployed	no
15	Male	46-55	3rd Year	Education	Alone	Full time	no

Research Question -1 How do college students perceive the role of emotional intelligence in managing academic stress?

Theme 1 - Academic Overload as a Major Stressor

Most participants described being overwhelmed by the volume of academic tasks such as assignments, presentations, thesis work, and examinations.

“Too many assignments, presentations, and exams...” - [student 1]

“...Doing all the assignments along with presentations...” – [student 9]

“...A lot of assignments due the same week...”

– [student 10]

Another student reflected,

“During my first semester, I felt particularly overwhelmed when I had to submit the complete research proposal. I wasn’t sure about my research topic and was struggling to manage my time. The pressure to perform well led to anxiety and sleepless nights.” – [student 2]

For students who worked part-time, the clash of academic and professional responsibilities was stressful. One student expressed,

“When both work and assignment deadlines were clashing, I felt completely exhausted and unable to give my best to either.” - - [student 3]

Thesis and research work were significant stress contributors,

“During the final stages of my proposal defense, I was juggling data collection planning, multiple readings, and continuous feedback from my supervisors. At one point, I felt extremely overwhelmed because I questioned whether my research was heading in the right direction and if I could meet the expectations set by my committee.” – [student 4]

Group work also emerged as a stress factor. One student noted,

“My groupmates made no effort to do an assignment even when it was close to being due. It was a 4 person assignment. One had no clue what was to be done. Another had only worked on the introduction. The last one promised to deliver but then only added 2 points into the document. I had to pull through and finish it all on my own...” – [student 11]

Theme 2 - Emotional Awareness and Self-Regulation in Coping with Stress

Students expressed that being emotionally aware enabled them to control reactions and manage stress more effectively.

“Try to calm myself down and try to do small things that I can do first” – [student 1]

Another described,

“I divided each chapter into manageable parts and prioritized the most pressing deadlines to develop a clear strategy. I also made sure to chat to my mother about how I was feeling, take little breaks that included naps, and do more prayers. I felt more rooted and less alone as a result. Those techniques helped me restore control and go through the week with a clearer head, even though it was still a difficult period...” – [student 2]

Some students admitted struggling with managing their emotions. One said,

“Emotionally, I cried a lot. Mentally, I tried to compartmentalize and prioritize what was urgent,” – [student 3]

while another admitted, “Not well. I cried for quite some time every whenever I take breathers in between my work” – [student 11]

Research Question 2 - In what ways does emotional intelligence influence students' ability to maintain concentration?

Theme 1 - Emotional Disturbance as a Barrier to Focus

Participants revealed that negative emotions such as anxiety, frustration, and sadness significantly impaired their focus. One participant reflected,

“When I am stressed out or exhausted, I can't do anything, so I just go to sleep and after that I will be much better” – [student 1]

“There was a period when I received multiple rejections from journal submissions, which really affected my confidence. I found myself rereading the same paragraph for hours without progress. Emotionally, I felt frustrated and mentally exhausted.” – [student 4]

Another shared,

I was stressed out during a tight deadline and it made me panic more to the point where I could not do any work till, I shut myself off under my bed sheets for few hrs” – [student 14]

Personal and family-related worries further hampered attention,

“There were tough times managing things with my son as he is staying away that left me feeling emotionally drained and distracted. I found it really difficult to concentrate on my assignments” – [student 2]

“If there are family issues or situations affect my ability to concentrate on work” – [student 6]

Theme 2 - Emotional Regulation Enhancing Concentration

On the other hand, students who employed emotional regulation techniques demonstrated improved focus. One explained,

“... I often take a step back and check in with myself through journaling or mindfulness meditation. Sometimes, I switch to a different academic task like organizing references or reviewing literature which feels more manageable and helps me regain emotional control. Exercise, especially walking, also helps reset my mindset. [student 4]

Another said,

“I remove all distractions, like putting my phone away, and set a timer for focused work sessions with short breaks in between” – [student 15]

Research Question 3 - How do students describe the relationship between their emotional responses and their academic productivity?

Theme 1: Positive Emotions Boosting Productivity

Several students described that positive emotions like confidence, curiosity, or satisfaction improved their productivity.

“There is a strong connection between my

mood and my ability to study effectively. When I am in a positive and relaxed, I am more focused, absorb information more easily, and stay motivated for longer periods.” – [student 2]

“When I am in a positive or calm emotional state, I find it much easier to concentrate, process complex readings, and stay organized.” – [student 5]

“My mood has a direct impact, when I feel calm and positive, I can focus better and work faster.” – [student 5]

“I focus way more and able to understand easily when I am feeling better” – [student 10]

Another noted,

“I work decently well under a bit of stress, but to a limit.” – [student 13]

Theme 2 - Negative Emotions Reducing Productivity

Negative emotions were associated with procrastination, carelessness, and detachment from studying. A participant said,

“... Negative emotions may slow down my work due to lack of attention span and me keep overthinking things.” – [student 1]

“On the other hand, when I am feeling anxious, frustrated, or overwhelmed, it becomes much harder to concentrate or retain what I am learning. My mind tends to race or focus on worst-case scenarios, which can make even simple tasks feel overwhelming. Frustration, especially when I am struggling to understand something, can lead to procrastination or second-guessing my abilities.” – [student 2]

“But when I am anxious or emotionally overwhelmed, my productivity drops. I either procrastinate or spend too long on simple tasks.” – [student 4]. Student further explained “negative emotions significantly disrupt my work. Anxiety makes it hard to focus, and I tend to second-guess my writing. Frustration usually kicks in when I feel stuck or unclear about what is expected, and

that leads to avoidance. It creates a cycle where the longer I avoid it, the more stressed I become”

“negative emotions slow me down, make me overthink, and sometimes lead me to avoid tasks altogether” – [student 5]

“Negatively. Poorly. I would not even start it when I am feeling bad” – [student 11]

“When I feel anxious, I tend to overthink everything and end up delaying things. It makes simple tasks seem impossible.” – [student 14]

Another explained,

“There a strong link, when I am in a low mood, I often find myself distracted or unmotivated, making study sessions less efficient and longer” – [student 15]. The same student mentioned “Anxiety makes it difficult to start tasks, leading to procrastination, while frustration causes me to lose focus and make more errors.”

The student also remarked on long-term effects,

“I have noticed that sustained frustration with a particular research problem can snowball into general academic apathy if not addressed promptly” – [student 15]

Research Question 4: What strategies do emotionally intelligent students use to balance emotional well-being with academic responsibilities?

Theme 1 -Use of Emotional and Spiritual Coping Mechanisms

Many students used spiritual and emotional strategies. One shared,

“Zikrullah, breathing, take some breaks and then continue do the work” – [student 1]

Another noted,

“When I'm feeling overwhelmed, one of the most helpful things I do is make lots of dua.... Talking to my mother, praying, and reciting the Quran all help me process my feelings and keep

things in perspective” – [student 2]

“Exercise and praying” – [student 12]

“... prayers before returning with a fresh perspective” – [student 15]

Journaling and mindfulness practices were also reported:

“I have adopted several strategies over time. Mindfulness meditation and reflective journaling help me process my thoughts and emotions. Journaling helps me process overwhelming thoughts and convert them into actions.” - [student 4]

“Sometimes journal to clear my mind when emotions pile up.” – [student 5]

“Mindfulness and journaling help a lot” – [student 10]

Student 12 also has mentioned journaling as a technique to manage emotions.

Theme 2 - Behavioural Strategies and Social Support

Time management techniques like scheduling, to-do lists, and the self-regulated breaks were popular among students.

“One of my favourites is time-blocking, where I schedule focused study periods followed by short breaks. This helps me stay productive while preventing burnout.” – [student 2]

“I also use time-blocking in my calendar manage workload, reduce last minute stress, ensure that breaks, meals, and even moments of reflection are planned and respected” – [student 4]

“... I use time-blocking to stay organized...” – [student 5]

Social support was also emphasized by majority of the students:

“They do help a lot because I can release my stress when I am with them laughing and smiling” – [student 1]

“Social support from friends, family, and

mentors is incredibly important in helping me maintain emotional balance. Having people, I can talk to openly about my struggles or achievements makes a huge difference in how I cope with stress and stay motivated. Friends and family provide emotional comfort and encouragement, which helps reduce feelings of isolation during tough academic times. Mentors offer guidance, perspective, and practical advice that not only help me navigate challenges but also inspire me to keep pushing forward. Knowing I am not alone and that there are people who believe in me gives me strength and reassurance. This network of support is a vital part of maintaining my mental well-being and staying resilient in the face of academic pressure.” – [student 2]

“It’s crucial. Having someone to talk to when I feel stuck or overwhelmed can make a huge difference. My friends provide emotional release, while my supervisor and mentors offer guidance that reduces uncertainty. Just knowing that support is available creates a sense of emotional safety, which helps me focus better” – [student 4]

“It’s very important just having someone to talk to when I feel low helps me stay grounded and motivated.” [student 5]

“Very important. I would say I am sane because of the unwavering support of my parents.” – [student 11]

“It’s moderately important, while I live alone, occasional check-ins with friends or family help prevent feeling of isolation.” – [student 15]

Physical self-care routines such as short walks, exercise, and sleep were cited as useful:

“I make sure to include physical activity like walking or stretching between study sessions to help reset my mindset” – [student 4]

“I use deep breathing, positive self-talk, and short walks to reset my mind.” – [student 5]

“Power naps. Talking to someone close or taking a walk or break.” – [student 7]

“Taking 10 mins walk after an hour of staring at the laptop screen” – [student 10]

“Walk back and forth in my room and take naps sometimes when it’s too much” [student 14]

“I try to step away from my desk and do something physically active like a quick walk or going to the gym or listen to the music to reset my mind.” – [student 15]

Theme 3 - Reflection and Positive Mindset towards Setbacks

Regarding responses to academic failures, most students emphasized reflection and learning from mistakes.

“Maybe stressed but need to calm down myself,” – [student 1]

while another detailed, “But I try to calm down myself by concentrating on what I can get from the circumstance. For example, if I receive a lower-than-expected mark, I would thoroughly study the criticism to see where I went wrong and how I may improve” – [student 2]

Many students demonstrated growth mindsets, as reflected in “I have learned to take feedback objectively rather than personally” – [student 4]

and “I reflect on what went wrong, talk to my lecturer if needed, and plan better for next time.” – [student 5]

Others shared emotional responses before regaining composure, such as “I cry, then figure out what I can do differently,” – [student 3]

or described perseverance despite frustration: “Poor grades are a huge punch in the gut. Takes me a while to recover mentally.” – [student 13]

Some resorted to intense efforts, saying,

“... set a plan and push myself to complete the tasks” – [student 7]

“work hard to improve for the upcoming exams.” – [student 9]

“I pull all-nighters” – [student 14]

Table 2 Summarization of themes emerged for each Research Question

RQ	Categories	Themes
1	Perception of EI in managing stress	⇒ Academic overload as a major stressor ⇒ Emotional awareness and self-regulation in coping with stress
2	Influence of EI on concentration	⇒ Emotional disturbance as a barrier to focus ⇒ Emotional regulation enhancing concentration
3	Relationship between emotional response and academic productivity	⇒ Positive emotions boosting productivity ⇒ Negative emotions reducing productivity
4	Strategies to balance emotional well-being with academic responsibilities	⇒ Use of emotional and spiritual coping mechanism ⇒ Behavioral strategies and social support ⇒ Reflection and positive mindset towards set back

DISCUSSION

The findings of this study highlight the important role of EI in how Malaysian college students navigate academic stress, sustain focus, and develop productive study habits. Using Bar-On’s Emotional-Social Intelligence Model (2006) and Lazarus and Folkman’s Transactional Model of Stress and Coping (1987) as guiding frameworks, the responses reveal how students perceive, utilize, and benefit from emotional competencies in the context of their academic demands and emotional well-being.

Perception of EI in managing stress

Students widely perceived EI as a personal asset in managing academic stress, which was most frequently triggered by workload, time constraints, and the need to balance multiple responsibilities. Postgraduate students in particular shared feelings of being overwhelmed by thesis writing, research work, and proposal defense as sources of academic stress. This supports prior literature reporting that graduate students commonly experience high level of anxiety and depression as a result of academic demands (Gin et al., 2021; Prakash et al., 2024). Similarly, students who worked part-time expressed difficulty in juggling professional and academic responsibilities, often leading to emotional exhaustion. Karaman et al. (2019) identified a comparable trend, finding that students who combine employment with studies are more vulnerable to stress due to the competing nature of

their responsibilities, which in turn compromises academic performance and emotional health.

The results also resonate with Bar-On's (2006) EI components, particularly stress tolerance (stress management) and emotional self-awareness (intrapersonal domain). Students who acknowledged their emotional limits were more likely to employ adaptive strategies such as deep breathing, prioritizing urgent tasks, or confiding in family members and friends. These coping behaviours align with Lazarus and Folkman's (1987) view of stress management as a transactional process, where individuals engage in emotion-focused or problem-focused coping based on their cognitive appraisal of a stressor. Interestingly, although some students admitted to crying or feeling emotionally overwhelmed, they were still able to identify their stress, indicating an awareness of their emotional state even if regulation was difficult. In contrast, students who managed their stress effectively exhibited behaviours such as task prioritization, time management, and seeking social support demonstrating higher EI and resilience in challenging situations.

Influence of EI on focus and concentration

Emotional regulation also emerged as a key facilitator of concentration and academic focus. Students reported that emotional dysregulation, particularly in the form of anxiety, frustration, or sadness, led to difficulties such as rereading the same content, halting tasks midway, or even withdrawing completely. These outcomes are consistent with Bar-On's stress management and impulse control domains, which emphasize the need for emotional stability to maintain attention and task persistence. Furthermore, several students cited personal or family-related concerns, such as loneliness or family responsibilities, as factors that negatively impacted their cognitive focus. However, these distractions were not necessarily tied to whether a student lived with family or alone, suggesting that emotional regulation rather than living circumstances was the key differentiator.

On the other hand, students who engaged in activities like journaling, mindfulness meditation, removing distractions, and taking restorative breaks were better able to sustain attention on their studies. These are examples of emotion-focused coping and reflect higher EI competencies, enabling students to regain clarity and reduce emotional interference in cognitive tasks. Rahmani et al. (2022) affirm that students with strong emotional regulation skills are better equipped to handle academic stressors, maintaining focus and academic performance more consistently than their peers.

Relationship between emotional response and academic productivity

A consistent theme across interviews was the link between emotional states and academic productivity. Students reported that positive emotions such as calmness, motivation, and curiosity directly improved their productivity by enhancing focus and cognitive flexibility. These findings align with Lv & Yang (2023), who emphasize that a positive emotional climate contributes to greater retention, understanding, and academic output. Similarly, Trigueros et al. (2019) found that positive emotions strengthen intrinsic motivation, leading to better academic participation and sustained effort over time.

Conversely, negative emotional states were found to reduce academic productivity. Students described becoming preoccupied with overthinking, procrastination, and self-doubt when experiencing anxiety or frustration. These emotional barriers led to diminished attention spans and lower academic performance. It is found that negative academic emotions impair self-efficacy and increase procrastinatory tendencies (Chen et al., 2024). Jung (2022) further supports the moderating role of emotional regulation, asserting that students with higher EI can better control these negative emotions, thereby protecting their academic performance.

Strategies to balance emotional well-being with academic responsibilities

To maintain emotional equilibrium alongside academic demands, students implemented various intentional strategies. Many adopted journaling and reflection to process thoughts, while spiritual coping methods, such as prayer and reciting the Quran, offered comfort and perspective during emotionally challenging periods. These practices are supported by Rani & Ghazi (2023), who found that personal and spiritual rituals can reduce depressive symptoms and foster emotional resilience. Likewise, Musa (2015) argues for the incorporation of spiritual well-being components in university programs to enhance students' emotional management capabilities.

In addition to spiritual and emotional strategies, time-blocking emerged as a practical method for organizing academic workloads. Students scheduled focused study sessions with planned breaks which is a self-regulated approach that helped maintain productivity. While students in this study cited self-directed breaks, Smits et al. (2025) suggest that structured breaks systems such as the Pomodoro technique or Flowtime are more effective in sustaining motivation compare to self-regulated breaks. Nonetheless, time management tools, including time-blocking, are associated with reduced psychological burden and greater task efficiency (Espina & Monte, 2022; X. Liu et al., 2019).

Students also reported using physical self-care techniques like walking, deep breathing, positive self-talk, and short naps as behavioural strategies to reduce emotional exhaustion. The literature consistently supports these practices, physical activity has been shown to improve mood, reduce depressive symptoms, and enhance self-esteem (Kirschner et al., 2022; Lin et al., 2022). Napping has been associated with improved emotional stability and overall well-being (Lin et al., 2022), reinforcing the idea that physical rest and movement are crucial components of emotional

balance.

Social support was another prominent theme. Students consistently emphasized the emotional strength and reassurance they gained from friends, family, and mentors. While family provided emotional grounding, mentors offered practical academic guidance. Abbas et al. (2023) confirmed that perceived social support positively influences psychological well-being. However, individual preferences varied hence some students preferred occasional check-ins rather than frequent interaction. Halimah & Suralaga (2021) found that peer support significantly impacts happiness, while family support may not always yield the same effect, indicating the importance of personalized support mechanisms.

The most emotionally intelligent students employed a balanced combination of emotion-focused and problem-focused coping, aligning with the principles of Lazarus and Folkman's model. Practices such as reflective journaling, adopting a growth mindset, and using self-discipline to recover from academic setbacks demonstrated how EI supports both emotional processing and behavioural adaptation. These adaptive strategies are not only effective but also teachable and scalable suggesting that structured EI development programs could significantly enhance students' academic performance and emotional resilience in higher education settings.

Implications and recommendation for future research

Based on this study's findings, it is evident that EI plays a pivotal role in helping Malaysian college students manage stress, maintain focus, and adopt effective study habits. Therefore, universities are encouraged to embed structured EI trainings such as mindfulness sessions, reflective exercises, and workshops into student development programs to enhance emotional regulation and motivation. Institutions should also integrate emotional well-being assessments into academic counselling to

identify students at risk of burnout. For future research, expanding the scope to include diverse student groups can deepen understanding of EI's role across different contexts. Longitudinal and mixed-method studies are recommended to track the development of EI over time. Additionally, exploring mediating factors like self-efficacy, social support, and cultural identity may provide richer insight into how EI influences academic outcomes. Finally, with digital learning on the rise, investigating how EI helps students manage technostress and digital distractions could inform strategies for sustaining emotional resilience in tech-driven environments.

CONCLUSION

This study shows that EI plays an important role in helping Malaysian college students handle their academic challenges. Students with strong EI are better at managing stress, staying focused, and building good study habits. Using Bar-On's Emotional-Social Intelligence Model and Lazarus & Folkman's Stress and Coping Theory, the research found that emotionally intelligent students are more resilient when facing pressure from heavy workloads and responsibilities. Being aware of their emotions and knowing how to manage them helped students stay calm, concentrate better, and avoid procrastination. Positive emotions were linked to better performance, while negative emotions made it harder to focus. The students used different coping strategies like journaling, prayer, time management, self-care, and support from friends and family to stay emotionally balanced. These findings suggest that EI is not just a personal trait but a skill that can be taught. Therefore, universities should consider including EI training in student programs to support academic success and well-being.

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Perceptions of Gym and Exercise in Supporting Mental Health: A Multicultural Perspective in Malaysia

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ABSTRACT

While gymnasium subscription continues to increase across the globe and the general benefit of exercise routine for mental health is evident, evidence specific to gymnasium routine remains scarce. Gymnasium users engage in higher frequency and intensity of exercise and take extra supplements to achieve their body target. Hence, this study aims to identify multicultural Malaysian gym users' perceptions towards the usability of the gym and exercise as a mechanism to improve mental health. A qualitative narrative study is employed to explore the perceptions, attitudes, behaviors, and beliefs of participants via the use of semi-structured interviews. 10 participants were selected through purposive sampling with targeted respondent criteria; gym regulars who visit the gym 3 to 5 times a week, and aged 21 to 40. Respondents comprised major ethnic groups in Malaysia which are Malay, Chinese and Indian and religions which are Muslim, Buddhist, Hindu, and Atheists. Primary data were analyzed using Thematic Analysis with deductive reasoning. Findings indicated that gym users from all races and religions perceived that exercising and using the gym to relieve stress, anxiety and depression, experience catharsis and provided them with sense of accomplishment. It is conclusive that gym users perceived significant improvements to their mental health because of exercising in the gym. It is recommended that a larger scale, quantitative research is required to enable generalization to the whole community of gym users.

Keyword (s): Mental Health , Gymnasium Use , Multicultural Perceptions , Stress Management , Qualitative Study.

INTRODUCTION

Exercise, a collective activity that has been conversed to all of us since we were young, as a form of activity that brings various benefits to our physical health. Exercise comprises of various forms of structured physical activity which helps either maintain or improve any one or more aspects of fitness (Caspersen et al., 1985). Regardless of one being physically active in their respective lifestyle, exercising has no doubt various benefits for our bodies. However, many mature into adulthood solely maintaining the idea that exercising brings benefits mostly to the physical body; neglecting its importance and what it could offer for our mental

health wellbeing.

This can attribute to the fact that mental health issues prevalence in Malaysia has always been an issue the country has been struggling with. Malaysia commonly suffers from an array of challenges in public attitudes towards mental health, as various ethnic cultures have beliefs contrary to the importance of mental health alongside conservative mindsets where mental health problems 'do not exist' (Hassan et al., 2018). A study found that the prevalence of mental health disorders such as stress, worry and uncertainty, has drastically increased in the past decade due to globalization factors which result in rapid socio-

economic-political changes (Raaj et al., 2021).

The question remains, does exercising play a role in improving mental health, especially with very accessible gyms nowadays? The original intent of the gym was built as a place for people who wanted to improve their physical fitness, strength and appearance (Heffernan, 2020). In today's gym culture, it is widely accepted that exercising is good for your mental health. As the years progressed, more studies have highlighted the benefits of going to the gym for mental health. For instance, Mikkelsen et al. (2017), studied the effects of exercise on mood disorders and found that exercising has shown to have numerous benefits for our cognition and psychological health, although, it is unclear if that is practised in Malaysian gyms.

From what is known, gym culture in Malaysia is still not clear as studies on the country's gym culture and fitness industry are far from maturity. Observations by fitness professionals such as gym enthusiast and trainer Zhi Dong, said in an interview that Malaysian gym culture in contrast to other countries in Asia, is "still very immature" (Tan, 2021). In fact, a grading tool for Malaysia's fitness facilities, The Malaysia Fitness Facility Grading Scale (MFFGS), had just only begun its development in late 2021 (Aznan et al., 2021). He further emphasized the fact that the country lacked a general understanding on gym culture and its environment.

These pieces of puzzle being combined, indicated a need to attain a deeper understanding towards the presence of gym going habit and exercising can be beneficial towards the mental health of Malaysians. Given its lack of research, understanding and cultural context, there shows a rise in mental health issues and poor mental health awareness in Malaysia (Raaj et.al, 2021). Therefore, this study was conducted to understand Malaysian gym users' personal experience of the gym and exercising, and how it has impacted their mental health and wellbeing.

REVIEW OF LITERATURE

Gym was initially built as a place for people to improve upon their physical fitness, to grow stronger, and for bodybuilding where they aim to achieve their dream physiques (Heffernan, 2020). Nowadays with the concept of mental health being brought into the picture, modern-day gyms have introduced facilities to cater for consumer needs such as mind-body and CrossFit studios (ClubReady Fitness, 2022).

Over the years, many studies have been done regarding the outcomes of gym activities and exercise. Most evidence support exercise and physical activity in improving physiology of human body as far as developing brain functions which prevent various psychological diseases (Rueggsegger & Booth, 2017). Strength training which is widely popular in gyms has been shown to prevent cognitive degeneration in the hippocampus which in return strengthens cognitive and memory functions in the long run (Reiner, 2020). Evidence as such is supported by studies such as one done in the UK to learn the experiences of gym users of Barrow Community Gym, on mental health and exercise found that the majority (81%) of their respondents perceive not only physical, but mental health improvements such as relief of depression and anxiety, a boost in self-esteem and confidence, and overall feeling good about themselves (Truman & Raine, 2001). Hence, gym activities play a significant role in developing the physique and mental health of the users.

To understand the issue of mental health in Malaysia, a press statement from the Minister of Health Malaysia reported in 2015 depicted that mental health problems amongst Malaysian citizens may have risen two-fold over the past decade prior to 2015 (Minister of Health Malaysia, 2016). The National Health and Morbidity Survey 2015 found that mental health illnesses could potentially be the second largest health problem after cardiovascular disease by 2020 (Institute for Public Health (IPH), 2015). According to the

Mental Health Foundation (2022), our bodies are not separated as mental and biological health issues can affect one another. All the more should this matter be investigated knowing that Malaysia is both unhealthy physically and mentally according to the former Health Minister, Khairy Jamaluddin (Bernama, 2021).

There are very few related studies on the area of mental health and gym activities; however, two main studies stood out. A study on mood disorders and the impact of exercise and mental health amongst elderly Northern Malaysians found that most elderly have alarming rates of mental health issues which go unnoticed (Theingi, 2022). The study found that after participating in a 12-week exercise program—depression, anxiety and stress scores reduced significantly—like the effects of antidepressants (Theingi, 2022). Besides, another study done using an experimental method, group Mindfulness-Based Cognitive Therapy and an exercise program for stress reduction amongst medical students in Malaysia found that psychological distress scores were significantly lower by the end of the program, showing that implementing exercises in therapy methods may show potential in reducing stress among students (Phang, 2016). Malaysian gym users consistently describe exercise as a primary mood regulation strategy. Yew et al. (2022) found that among 842 Malaysian adults during COVID-19, positive mood and exercise motivation were significantly linked to lower depression, anxiety, and stress scores, indicating that exercise behavior both influences and is influenced by emotional states.

Personal accounts emphasize exercise as an active coping mechanism, with users deliberately engaging in gym activities to manage daily stressors and maintain emotional equilibrium. These studies managed to show possibilities that going to the gym and exercising are beneficial for mental health, even when hybridizing with intervention methods and programs. Hence, findings from this study further explore mental health improvisation

from the perspective of gym users.

Theoretical Framework

This study adopted the endorphin hypothesis to explain the science behind going to the gym and exercising in improving mental health. The hypothesis suggests that exercising triggers a release of endorphins in the brain, which creates a euphoric sensation which elevates moods (Anderson & Shivakumar, 2013). This is in line with the biochemical processes of mood disorders as individuals with depression are known to have low levels of endorphins, particularly serotonin and dopamine which are mood-regulating neurotransmitters (Djurović et al., 1999; Monitijo, 2021). Studies have shown that depression scores can be improved by the regulation of endorphin levels, as is the mechanisms of antidepressants (Djurović et al., 1999).

MATERIALS AND METHODS

This study utilized a qualitative research method to enable the study to explore and provide in-depth analysis of understanding the gym users' experiences, attitudes and behaviors in order to attain their perception of mental health and exercising in the gym. A qualitative narrative design was adopted in this study. Narrative analysis is a qualitative method of analysis by understanding, interpreting and constructively analyzing a story, account, experiences or any form of narrative by individuals (Earthy & Cronin, 2008). Narrative analysis provides the ability to collect vast amounts of respondents' perceptions and experiences on various layers and depth to understand and makes sense of them, and form transparent and interpretive conclusions (Bamberg, 2010).

Ten participants were recruited from a local community gym in Bangsar Sports Complex, as it was a relatively smaller gym compared to other commercial gyms. Besides, this was to support the nature of qualitative studies' mode of inquiry of

in-depth analysis on specific samples (Vasileiou et al., 2018). There were a few inclusion and exclusion criteria participants must meet to be fit for the study. Firstly, participants had to be a citizen of Malaysia. This is according to the context of the study on gym users of Malaysia, and to answer the problem and justify the significance of the study. Besides, participants must be gym regulars, where they must visit the gym at least 3 to 5 times a week. The age group of participants were between 21 to 40 years of age as statistics in 2020 showed that majority of regular gym users in Malaysia fall under the age group of 24 to 34 years of age (Statista Research Department, 2022). Finally, the participants must be from Malaysian ethnics such as Malay, Indian, and Chinese. Hence, the sampling method, purposive sampling was utilized. Purposive sampling is a common qualitative method for choosing participants based on the qualities they possess that are sought after by the study (Etikan et al., 2016). Hence, 10 participants were selected for the purpose of the study.

Research Instrument

This study was carried out using a set of nine semi-structured interview questions prepared by the researcher. Semi-structured interviews are commonly the most sought-after source of data collection for qualitative studies (DiCicco-Bloom & Crabtree, 2006). They allow for flexible answering which provides in-depth layer so information to be drawn from understanding participants' points of view from different angles, body language and social cues (George, 2022; Opdenakker, 2006). Moreover, it gives the ability to lighten up the atmosphere in case of participants who feel pressured or worried of what to say next, by assurance of confidentiality and non-judgemental acceptance (Adams, 2015). Questions designed by the researcher covers all study inquiries from research objectives, questions, significance and problem. Interview protocol was validated by the research supervisor.

Data Analysis

The data collected through interviews was analyzed using thematic analysis, this method allowed researchers to identify, analyze, and interpret patterns of meaning within qualitative data. Following Braun and Clarke's (2006) six-phase approach, the analysis began with familiarization through repeated reading of the transcripts, followed by systematic coding of meaningful data segments. Codes were then collated into potential themes, which were reviewed and refined to ensure they accurately represented the data set. Finally, the themes were clearly defined and organized to provide insights into multicultural gym users' perceptions of the role of gyms and exercise in improving mental health. This process ensured a rigorous and transparent analysis, enhancing the trustworthiness of the findings.

FINDINGS

Data was coded through thematic analysis with a total of seven main themes and one sub-theme. Sub-themes were considered as more specific themes amongst participant responses under a main theme. Coded themes were arranged under the research questions in order for objective analysis to satisfy the research objectives.

Under Research Question 1, two main themes were observed, (1) Relieves stress, anxiety and depression, with sub-theme (1.1) Experience catharsis/ Clears the mind/ Stress and emotional management, and (2) Sense of satisfaction from accomplishment. Under Research Question 2 there was one theme: (3) Improves self-esteem and confidence.

The interview sought to explore respondents' perspective and personal opinion on how exercising in the gym affects their mental health. Moreover, respondents elaborated on their personal experiences with exercising and how it has affected their mental health. Two main and one sub-themes were generated from interview

questions 2 to 5 under research question 1. The main themes derived are discussed below.

Relieves Stress, Anxiety and Depression

This first dimension explores whether or not respondents of the study experience any relieve from either stress, anxiety or depression as a result of exercising in the gym.

F: “I think for me it relieves my stress because uni for an early 20-year-old is very draining going to classes.”

I: “Basically, all the academic pressure is so over saturated. The gym, I usually do it after all these classes, so it allows me to forget about everything and just focus on lifting heavy weights like at that point of time.”

N: “Going to the gym relieves all of that for me”

S: “Yes, I think I think because of the distressing impact, like the relaxing effect, I always feel better.”

K: “Even though I have very shitty day or whatever makes me feel much better after workout”

J: “Yeah, I'm upset about something and they have they you might be upset about it for months at a time but at the end of the day after my workout, I feel a little bit better.”

All respondents agreed that exercising in the gym has a positive effect in relieving stress, anxiety and depression. Some respondents such as respondent F and T experience benefits to their academic stresses. Some respondents such as respondent S, K and J report to feel better after the gym with addition to respondent S experiencing a relaxing effect. Respondents D, R and C promptly agrees it has a destressing effect, while respondent N agrees to experience relief in all stress, anxiety and depression. Although not all respondents mention to have experience relief in all three areas: stress, anxiety and depression, they all share the common perspective that exercising in the gym

helps in at least one of the three areas.

Experience Catharsis/Clears the Mind/ Stress and Emotional Management

These three themes are shared across respondents when elaborating their experiences on how it helps with their stress, anxiety or depression. Respondents describe their relief in stress, anxiety or depression in a form of catharsis, a general relief as a result of releasing pent up emotions (American Psychological Association, n.d.), while also being able to clear up their mind to help remain calm. Some explain that it helps them to manage their emotions and stresses better.

I: “I definitely found improvement in terms of managing my emotions because I have an outlet now with the gym.”

R: “It helps me find solution to whatever I'm going through in life that affects my mental health.”

S: “So, it actually allows me to kind of calm down, keep my mind focused on the breathing exercise, so for that one hour in the gym there's an energy outlet.”

D: “I feel like the gym is like a place where I can internalise and blow off steam from all the angsty-ness pent up in me.”

K: “And the feeling after working out is like, you know, they always say that and dopamine shot or whatever not. But it really works for me.”

J: “I mean off the internet you get stuff like you work out and endorphins are released that after that you feel better and true enough.”

Responses all share similar themes of catharsis, clearing of mind, and stress and emotional management. For instance, respondents T, I and R describes exercising in the gym helps manage or find solutions for their stress related problems.

Respondents N, F, J and S describe the gym helps to clear their mind and calm down. For instance, respondent N describes it as being able

to regulate their psyche.

Moreover, respondent F mentions that it keeps their mind at an optimal state for longer periods. Respondents D, K and J experience a sense of catharsis by releasing psychic energy described as “angsty-ness pent up”, “edgy”, and “cranky” from exercising in the gym. Moreover, respondent K and J shared similar responses of relating their feelings of relief to the release of endorphins.

Sense of Satisfaction and Accomplishment

This dimension explores respondents’ sense of feeling satisfaction or relief as a result of exercising in the gym. Most report to experience satisfaction from a sense of accomplishment as a result of going to the gym.

K: “Finishing a good workout always gives me a sense of accomplishment. Like, okay, I’ve done something for myself today, check that, it’s something for myself.” D: “But even so, I feel a sense of satisfaction, relief, and most of all coming from the sense of accomplishment? That even if I was not my best that day, I did put in the work as compared to sitting at home doing nothing and allowing myself to slack.”

J: “Satisfaction? Yeah, I guess because you brought something extra done for the day, which is our routine.”

T: “I just feel more happy and satisfied, because I’ve done something that is that I’m working towards every day.”

R: “But more a sense of accomplishment when we’re done working out. So, like the weights increasing, you can do better energy, your performance improving.”

C: “So ideally, we want to feel a sense of relief, a sense of I did manage to achieve something I did manage to give my all I did manage to work harder than last time in the gym.”

Similar responses were shared amongst the respondents as they experience satisfaction from

the sense of achievement and accomplishment by going to gym. For example, respondents K, J, F and D experience satisfaction by going to the gym as they see it as accomplishing something productive for themselves rather than not doing anything and wasting time. Respondents T, N, C and R perceives satisfaction from seeking achievement from working towards a goal which is achievable by going to the gym.

Researcher sought to understand gym users’ perceived benefits of exercising in the gym. Benefits may include that of their respective perceived physical and psychological benefits. Two main themes surfaced from participants’ responses from interview question 8 under research question 2.

Improves Self-esteem and Confidence

This dimension shows that respondents benefitted from gaining self-esteem, which was defined as the positive evaluation of the individuals’ overall self (Rosenberg 1965, as cited in Abdel-Khalek, 2016), and their overall confidence.

F: “Compliments is a big thing. Everyone’s telling you, you look fitter, you look healthier.”

C: “I definitely look more confident and do better in the mirror. There are some used to be a very skinny kid, but now at least I have some muscles around I look myself in the mirror, at least I do decently.”

N: “So yeah, so after working out, definitely. Self-esteem, confidence levels, it definitely went up hundred percent.”

D: “It also affects my mental health that I have more confidence, self-esteem as a result I can stand up for myself more overtime.”

K: “I think you have more self-confidence and your self-esteem is okay. I think for me, it’s more like getting it from a low to a standard level of self-esteem.”

Responses showed that self-esteem and

confidence were a common benefit shared amongst many respondents. Respondents F, C and N gained more confidence and self-esteem as a result of looking better after going to the gym. Respondents T and D experience a gain in confidence and self-esteem in being able to carry out various

activities and stand up for themselves more. Respondent K experiences improved self-esteem and confidence from diminished to an optimum level, which also translates as beneficial for their career and job nature.

Table 1: Coded Findings from Thematic Analysis

Superordinate themes	Subordinate themes
Relieves stress, anxiety and depression	Destressing effect Relieves academic stress Relieves anxiety Relieves depression
Experience catharsis/ Clears the mind/ Stress and emotional management	Place for escape Stress management Emotional management Clears the mind Catharsis/outlet Calms the mind Endorphin hypothesis
Sense of satisfaction from accomplishment	Satisfied from accomplishing something Satisfied from achieving gym/fitness goals Productive Socialize
Improves self-esteem and confidence	Boost self-esteem More confidence self More confidence in looks Improves self-esteem needed for career

DISCUSSION

Overall, all respondents agreed that exercising in the gym has a positive effect in relieving stress, anxiety, and depression as is also reported by Mikkelsen et al. (2017), that going to the gym has a positive effect on our cognitive and psychological health. Justifications by Mikkelsen et al. (2017) was also in line with some of the responses as some respondents perceive to experience the

activation of endorphin receptors from exercising in the gym, which has positive effects to their mood. Moreover, previous study done by Truman & Raine (2001) on Barrow Community Gym also supports the findings as all respondents report to feel relief from stress, anxiety, and depression after going to the gym.

Some described exercising in the gym allows them to manage their stresses and emotions better. This can be referenced from supporting evidence of Ruegsegger & Booth (2017) regarding exercising improves and develops cognitive and mental functions which in return aids in coping with psychological disorders. Besides, respondents mentioned to have experienced a sense of catharsis and allows them to calm down and clear their mind.

This study in return also proves the notion of Mikkelsen et al., (2017) regarding the biochemical processes in releasing endorphins after physical activity which alleviates mood disorders and elevates mood. This was also mentioned by respondents experiencing a sense of calmness and relaxation post gym. Hence, this provides valid evidence to Mikkelsen et al., (2017) and their physiological explanation on why exercising improves mood, while also proving the endorphin hypothesis model. Moreover, findings were also aligned with the theoretical and conceptual framework proposed for this study. For instance, respondents experience a sense of catharsis as prior feelings of “angsty-ness pent up”, “edgy”, and “cranky”, resolved after exercising in the gym. This comes in line with the framework’s explanation of sublimation; channeled frustrations and stresses displaced in a healthy manner (Burger 2019), in addition to the endorphin hypothesis which some respondents acknowledge the presence of dopamine and endorphin—a “dopamine shot” according to one respondent—releasing during their exercise as explained by Mikkelsen et al., (2017).

CONCLUSION AND IMPLICATIONS

Findings of this study were believed to be significant in understanding Malaysian gym users' perception on using the gym and its mental health benefits. As mentioned in 1.2 Statement of the Problem, there were limited studies published in Malaysia regarding exercise and mental health, and the role of the gym in exercising and mental health. Thus, this study provided a baseline information hoping to establish more useful information and knowledge for the good of the public health of Malaysia.

The study's findings confirmed that gym users perceived significant improvements to their mental health as a result of exercising in the gym. Much more can be discussed regarding mental health being a priority in gym users' reasons to exercise, or whether the benefits experienced were a by-product of exercising in the gym. Nevertheless, all findings indicated that exercising and using the gym has positive effects on mental health. Therefore, bodies such as Malaysia Mental Health Association (MMHA), Malaysian Psychiatric Association and others similar, should start implementing the usage of the gym and exercising as a coping mechanism or as a part of intervention plans for individuals who may struggle with mental health issues. This is in line with a study by Theingi (2022), whereby elderly Malaysians with critical mental health issues, started exercising and have shown to have improvements to their mental health like the effects of antidepressants.

LIMITATIONS

Despite having an in-depth discussion which yielded detailed information on how gym and exercise can improve one's mental health, the limitation of this study lies in the small size of sample, which inhibits the generalization of these findings to the larger population in Malaysia.

Furthermore, due to the immature gym culture in Malaysia, most accessible gyms in Lembah

Klang were private, commercialized gyms, thus, the samples were gym users from higher socio-economic groups. Their experience might differ from those from lower socio-economic groups that were using public gyms as the conflicts affecting their mental health and their coping mechanisms are different. For example, while the private gym users were worried about their grades, the public gym users might as well worry about their unpaid school fees on top of the grade itself.

RECOMMENDATION FOR FUTURE

RESEARCH

An improvement that can be done by future studies in order to further develop this field of study, by conducting a larger scale of quantitative study involving more sample groups. Besides, this study was conducted in a public community gym which belonged to the smaller class of gyms in Malaysia as most gyms in Malaysia are private, commercialized gyms. Thus, future studies on similar topic should be done within private, commercialized gyms as this would allow to target a larger population where findings can represent a wider range of gym users in Malaysia.

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Women's Education in Islamic World: A Bibliometric Review of Scholarly Discourse on Afghan Context between 1980 to 2024

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ABSTRACT

This study explores the current state of knowledge on women's education in the Islamic world, with a particular focus on Afghanistan. Using a bibliometric and science mapping approach, the researchers analyzed 708 publications from the SCOPUS database to assess trends, key contributors, and the intellectual structure of research in this field. Data analysis was conducted using Excel and R software. Findings reveal that academic interest in Afghan women's education only began to rise significantly after 2001. Notable contributors include Sayeed Naqibullah Orfan and Terence M. Kean, whose work often centers on mental health, gender inequality, and leadership. Leading institutions in this field are based in the U.S., particularly Boston and California universities, while Afghan universities like Kandahar and Takhar are emerging players. The U.S., UK, Australia, and Germany have the most citations, primarily focusing on PTSD and mental health issues rather than educational challenges specific to Afghan women. The body of literature is fragmented, with underexplored themes such as patriarchy and gender-based violence. Additionally, the research lacks presence in high-impact journals and excludes non-Scopus literature. The study highlights the need for more nuanced, locally informed research that considers political, cultural, and economic barriers to women's education in Afghanistan, urging stronger international collaboration.

Keywords: Women's Education, Islamic World, Bibliometric analysis, Afghanistan

INTRODUCTION AND BACKGROUND

Women's education is a global challenge shaped by challenges that limit access, yet addressing these challenges can contribute to economic growth, enhanced health systems, and the advancement of gender equality through shared collaborations (Nussbaum, 2004). It is also a complex and developing platform of educational opportunities and challenges faced by women in Muslim-majority societies. Stemming from a rich historical context, women's education has undergone noteworthy revolutions from pre-Islamic times to the present day. According to Islamic philosophy, knowledge, its application, and acquisition are key prerequisites for all Muslims to empower

them to think, act, and believe in its principles. Nevertheless, conflicting interpretations of the Quran and other Islamic texts often challenge core principles of Islam. Traditionally, male dominated the interpretation of the Quran, as critiques recognized it as the main cause of the literature that devalued and undermined women's rights in the Quran (Scott, 2009; Wadud, 1999). Truly understanding women's rights in Islam requires differentiating between authentic Islamic traditions and the cultural norms practiced by Muslims in their societies (Abukari, 2014).

Despite the stress on knowledge and learning within Islamic practices, access to opportunities, particularly for quality education

for women in certain Islamic countries, remains a challenge (Alharbi, 2014; Ikhwan et al., 2024; Maulana & Erihadiana, 2024; Najibi & McLachlan, 2023; Sadia, 2021; Wardiana et al., 2024). These include challenges related to societal norms (Ibrahim et al., 2023; H. K. Smith, 2025; Yaqoob, 2012), which are deeply ingrained in certain cultural practices (Ahmad et al., 2014; Andiem, 2021; Dualle et al., 2022; Yewande & Olawunmi, 2023). Socio-economic disparities (Ahmad et al., 2014; Mehmood et al., 2018; Shah & Shah, 2012). These challenges come in various shapes, such as inadequate access to schools, significant dropout rates in higher education, and gender segregation among women. Most importantly, protracted conflict and turmoil in certain parts of the Islamic world have intensified these challenges, resulting in displacement, school closures, and damage to educational institutions.

Afghanistan is a key example of many countries undergoing the profound effects of long-term conflict. Women's education in Afghanistan has a complex and tumultuous history shaped by cultural, political, and social factors (Mings, 2017). A country with multifaceted geopolitical dynamics has been an epicenter of both regional and global politics, marked by a history of protracted conflict within and beyond (Sakhi, 2023). This long-lasting conflict has affected women and girls as primary victims, limiting their access to personal, professional, and educational development (Abdurahimzai, 2023; Hamidi, 2024; Sahar, 2024).

In retrospect, since the 1920s, the educational journey for women was a nightmare of roller coasters transitioning with each political power change. In 1975, 24% of Afghan schools were enrolled in primary schools, and girls represented 30% of the above figure, with an increase of 3% per year in the 1970s in comparison to other Asian countries (Samady, 2001). The enrolment in the following decades declined because of instability though in the 1990s, boys' enrolment accumulated

but that of girls reduced dramatically.

Scholarly discussions highlight systemic challenges to women's education in Afghanistan, mainly under the Taliban rule, banning women to attend school or employment reversed decades of progress (Alvi, 2004; Bukhari, 2023; Mohammadi et al., 2024). These policies, violating universal human rights (Universal Declaration of Human Rights, 1948), worsened gender disparities in health, employment, and mobility (Mashwani, 2017; Qaderi et al., 2023). More challenges include early marriage, insecurity, inadequate infrastructure, and teacher shortages that further impede access (Pherali & Sahar, 2018; Shayan, 2015). However, post-2001 reforms led to considerable advancements: primary enrolment reached 40% of girls and higher education experienced significant expansion (Easar et al., 2023). This contrast highlights the instability of progress within political shifts, a recurring theme in scholarly discussions.



Figure 1. Adopted from (Najam et al., 2024, p. 4)

Since the Taliban took power again in 2021, females are banned from almost all walks of life in 2022. The Taliban has further restricted Afghan women's voices in public (ABC News., 2024; BBC News., 2024; CNN., 2024; The Guardian., 2024).

Women's education in Afghanistan has faced key challenges, with progress achieved over the past 20 years because of international support in certain areas, while others remain unnoticed due to inaccessibility and protracted conflict. This disproportion has resulted in an under-researched field. The justification for this study lies in the lack of bibliometric analyses of women's education within the Islamic world, especially in Afghanistan,

despite its significant importance amidst political restrictions. Although some studies address broader gender and educational issues, they often neglect the specific concern women face in their education.

Despite the increasing attention of researchers and policymakers to women's education in the Islamic world over the last few years (Abukari, 2014; Ahmad & Tak, 2020; Ahmed, & Yusuf, 2020; Ibrahim et al., 2023; Khurshid, 2015; McClendon et al., 2018) limited comprehensive studies on this topic have been conducted in the Islamic world, particularly in Afghanistan. By engaging bibliometric and science mapping analyses, this study aimed to identify the vital contributors, institutions, networks, and countries involved in this field, highlighting the emerging themes and gaps within the existing literature over the last few decades. By offering a data-driven and objective overview, this study provides insights into the field of Afghan women's education and highlights the need for further research in this critical field. The findings of this study will inform future researchers and policy makers to address this critical issue and its barriers in the field of women's education in Afghanistan and in the Islamic World. Considering the aim of this study, it addresses the following research questions:

1. What is the trend in publications and citations on women's education in Afghanistan between 1980 and 2024?
2. What is the research output of authors, institutions, affiliations, and countries towards publications on women's education and associated fields such as mental health and psychological concerns in Afghanistan between 1980 and 2024?
3. Which authors have had the greatest impact on publications on women's education in Afghanistan between 1980 and 2024?
4. What are the most cited sources on women's education in Afghanistan?
5. What is the conceptual thematic map of

keywords that researchers have used in women's education in Afghanistan between 1980 and 2024?

METHOD

This study aims to offer a panoramic view of literature published between 1980 and 2024 on women's education in the Islamic world, with a specific focus on the Afghan context. To realize this aim, this study employed bibliometric and science mapping analyses. A bibliometric review approach is a systematic review method that offers an unambiguous, impartial, and empirically validated approach to study trends of knowledge production in a particular field of study (Aung & Hallinger, 2022). Unlike integrative and scoping reviews, with the intention of synthesizing the findings from a body of literature (Hallinger et al., 2020), bibliometric reviews specifically focus on interpreting and analyzing bibliographic data found within a collection of scientific publications. Bibliometric review enables researchers to thoroughly understand the research topic, identify knowledge gaps, build on novel research directions, and effectively place their contributions within the current body of the literature (Donthu et al., 2021)

The use of analytical tools, such as Biblioshiny, enables us to determine patterns and trends within the literature. Biblioshiny is a web application that offers an entry to the Bibliometrics package of R for non-programmers. Bibliometrics offers many tools that allow researchers to conduct in-depth bibliometric analyses (Rodríguez-Soler et al., 2020). These tools enabled the investigation of networks among key authors, journals, higher education institutions, and countries, in addition to keywords through citations and frequency procedures. This study's analysis incorporates a summary of the existing literature overview, annual article output, citation indicators, and three field plots visualizing the interplay between various fields such as author keywords, authors, countries, cited sources, and affiliations, to identify

interrelated concepts within the dataset.

Identification of Sources

The researcher used the “Elsevier SCOPUS” database to search for publications relevant to this study. Other key bibliometric databases such as Web of Science (WOS), Dimension, and Google Scholar, are broadly used for the evaluation of this research. (Martín-Martín et al., 2018; Sumanth et al., 2024). Nonetheless, this study has only focused on the usage of the SCOPUS database, as it includes 96.42% of its indexed journals, also covered by dimensions. (Sumanth et al., 2024). SCOPUS, which covers many of the publications compared to other databases was selected. Scopus offers a wider range of exclusive journals across all fields than WOS, primarily because of its indexing of a wider variety of journals (Karen & Alexander, 2019; Mongeon & Paul-Hus, 2016). Regarding Google Scholar, the researcher did not use Google scholar because of inconsistent search results and its indexing criteria are not as critical (Halevi et al., 2017) as WOS and Elsevier Scopus. The electronic search was performed on February 22, 2024, in the SCOPUS database utilizing the query string as follow:

Search String

The search was conducted using the following keywords in the field, title, abstracts, and keywords: TITLE-ABS-KEY (("Afghan" OR "Afghanistan" OR "Kabul" OR "Taliban" OR "pre-Taliban" OR "post-Taliban") AND ("women" OR "woman" OR "girls" OR "girl" OR "female") AND ("education" OR "culture" OR "educational" OR "access" OR "school" OR "high school" OR "higher education" OR "university" OR "Kankoor" OR "institutions" OR "tertiary school" OR "institute" OR "distance education" OR "Educational technology" OR "refugee" OR "community-based education" OR "early childhood education" OR "primary education" OR "conflict" OR "war")). A total of 53560 articles were retrieved using the search string described

above. Subsequently, the results were filtered, as illustrated in Figure 2, and explicated under the inclusion and exclusion criteria.

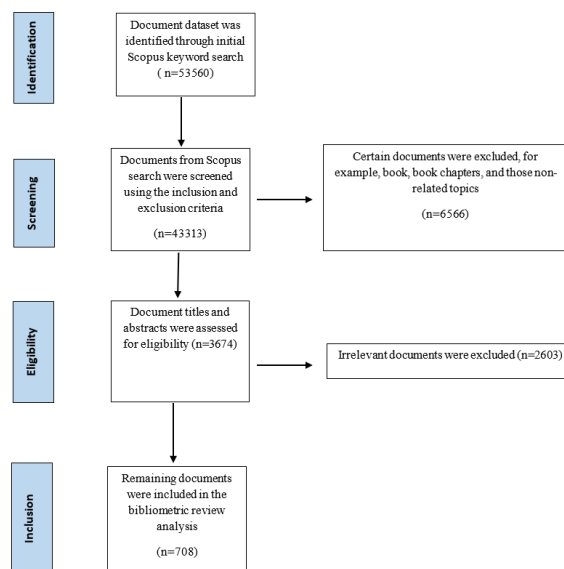


Figure 2. PRISMA flow diagram showing the procedures in identifying, screening of the documents on women education in Afghanistan (Moher et al., 2009).

Inclusion and exclusion criteria

In this study, numerous inclusion and exclusion criteria were employed (see Table 1): books, book chapters, and conference proceedings; non-English; and those on non-related topics. Second, non-English documents were excluded, despite some major parts being in English language. Third, the scope was largely refined to peer-reviewed journal articles and conference proceedings, ensuring high-quality work. Fourth, the study only considered fully published articles written in English and was excluded from the scope of the research. Fifth, other cross-fields focusing on health-related issues were systemically excluded, such as Nursing, Medicine, Immunology, Biochemistry, Pharmacology, Health Science, Neuroscience, Veterinary science, and dentistry. The resulting 3674 dataset was downloaded in csv format. This set of data was then screened by title and abstract for relevance leading to the identification of 708 relevant journal articles.

Table 1. Inclusion and Exclusion Criteria

Criteria	Details	Type
Source Type: Journal or Proceedings	LIMIT-TO (SRCTYPE, 'j') OR LIMIT-TO (SRCTYPE, 'p')	Inclusion
Publication Stage: Final	LIMIT-TO (PUBSTAGE, 'final')	Inclusion
Document Type: Article or Conference Paper	LIMIT-TO (DOCTYPE, 'ar') OR LIMIT-TO (DOCTYPE, 'cp')	Inclusion
Language: English	LIMIT-TO (LANGUAGE, 'English')	Inclusion
Subject Area: Medical	EXCLUDE (SUBJAREA, 'MEDI')	Exclusion
Subject Area: Nursing	EXCLUDE (SUBJAREA, 'NURS')	Exclusion
Subject Area: Immunology	EXCLUDE (SUBJAREA, 'IMMU')	Exclusion
Subject Area: Biochemistry	EXCLUDE (SUBJAREA, 'BIOC')	Exclusion
Subject Area: Pharmacy	EXCLUDE (SUBJAREA, 'PHAR')	Exclusion
Subject Area: Health	EXCLUDE (SUBJAREA, 'HEAL')	Exclusion
Subject Area: Neurology	EXCLUDE (SUBJAREA, 'NEUR')	Exclusion
Subject Area: Veterinary	EXCLUDE (SUBJAREA, 'VETE')	Exclusion
Subject Area: Dentistry	EXCLUDE (SUBJAREA, 'DENT')	Exclusion

RESULTS AND DISCUSSIONS

This research critically explores the existing academic discourse on women's education in Afghanistan (1980–2024) using five research questions (RQs). The findings are prepared accordingly, and the first research question unpacks the temporary patterns in academic engagement with relevant topics that indicate publication and citation trends. The second research question maps geographic and institutional contributions including intersections with mental health and psychological concerns, covering the research output of authors, institutions, and countries. The third research question involved citation analysis, highlighting key voices in the field showing influential authors. The fourth research question assesses trace foundational and frequently referenced works that show high-impact sources. Finally, Research Question 5 visualizes the dominant and emerging research foci that portray a conceptual thematic map of keywords.

Table 2. Data Summary

General description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1980-2024
Sources (Journals, Books, etc)	406
Documents	708
Annual Growth Rate %	3.73 %
Document Average Age	8.41
Average citations per doc	16.5
DOCUMENT CONTENTS	
Keywords Plus (ID)	2167
Author's Keywords (DE)	1714
AUTHORS	
Authors	2027
Authors of single-authored documents	219
AUTHORS COLLABORATION	
Single-authored documents	240
Co-Authors Per Document	3.26
International Co-authorships %	19.09%
DOCUMENT TYPES	
Article	700
Conference paper	8

Table 2 summarizes the bibliometric analysis of previous literature on the female education in Afghanistan covering the period from 1980 to 2024. The data encompass a certain period that covers the research published in 406 journal publications. A thorough examination of 406 journals produced a dataset of 708 relevant documents on female education. Analyzing the aforementioned 708 documents reveals the development of research domains in the field with an annual expansion of 3.73%. The average document was cited 16.5, with an average time span of the documents is 8.41 indicating a considerable academic impact.

With regard to document content, this research found that a total of 2,167 keywords plus (ID) displayed the vital topics along with 1,714 author keywords (DE), demonstrating their research focus. Collectively, 2,027 authors have contributed to the field and 219 authors have published a single author document. This research also acknowledges the production of 240 documents independently by a single author. Collaborative research is also evident by the authors, with an average of 3.26 per documents. Moreover, the authors' international collaboration was also noticed and underscored by 19.09% of co-authorship, which is an indication of beyond country and beyond continent interest in this area of research. An overwhelming majority of this dataset is published as articles of 700 out of 708 documents, with minimal fraction of only eight conference papers. In short, the data provided a thorough summary of the active research on women's education in Afghanistan, signifying steady growth, diverse authorship and paramount collaborative partnership.

Volume of publications and citation

The first research question identifies the volume, citations and geographic distribution of publications on women's education in Afghanistan published between 1980 and 2024.

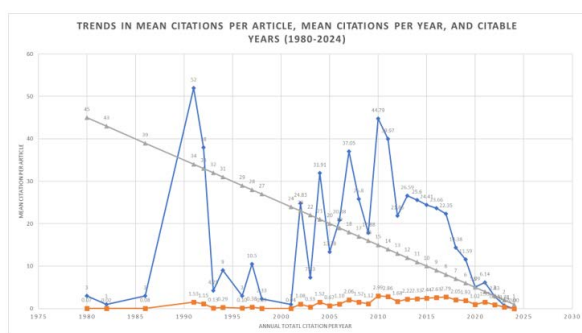


Figure 3. Analysis of annual article and average citation per article

The dataset focused on three main metrics: Mean Citations per year (MeanTCperYear), Mean Citations per article (MeanTCperArt), and Citable Years. The MeanTCperArt metric varies considerably, with noteworthy peaks in 1991 (52 citations per article) and 2010 (44.79 citations per article), demonstrating the time of exceedingly cited publications. The growing citation impact from the early 2000s to the mid-2010s has increased scholarly attention, with MeanTCperArt exceeding 20 citations per article over numerous years. Nevertheless, a decreasing trend was noticed from 2018 forward, reducing to single-digit standards in 2020 and beyond, indicating either a change in research focus, decreasing citation windows, or a general decline in article impact.

MeanTCperYear followed a parallel pattern, reaching its highest point in 2010 at 2.99 and portraying a descending trajectory over the last few years. The highest values between 2007 and 2017 indicate a period in which published articles received constant annual citations, indicating the significance and longevity of the research during that period. Citable Years demonstrate that the number of years a research article remains cited naturally declines, as more recent publications have had less time to get more citations. Earlier articles from 1980 and 1982 remained citable for over four decades, whereas recent articles from 2020 have shown considerably shorter citation lifespans. This trend is in line with bibliometric principles, where earlier foundational research is likely to

accumulate long-term acknowledgement, whereas recent studies compete in a developing academic landscape with unstable citation dynamics (Feijoo et al., 2014).

The fluctuating illustrations and the number of articles published each year in figure 3 portray the time of high-volume publication followed by the time of relative stagnation. On the one hand, a noticeably high point in publication indicates socio-political events or international aid aimed at improving women-related initiatives in Afghanistan. This improvement has also been highlighted in other studies (Baiza, 2013; Burde & Linden, 2013; Najam & Johnston, 2023). However, in years when there is little publication, there is turmoil, conflict, and lack of funding that could not accelerate publication output especially before 2001. In addition to the volume of articles, the average citations per article offer new insights into the impact and relevance of the research produced. Data variation indicates that in some years, there are a high number of articles published that have no strong influence on women education's in Afghanistan.

Next, in the research question one, we investigated the most cited countries for women's education in Afghanistan. Figure 4 and table 2 show two crucial bibliometric indicators for each country.

Table 3. Most cited countries

Country	TC	AAC
USA	5613	24.70
UK	1043	24.30
AUSTRALIA	600	18.20
GERMANY	320	18.80
NORWAY	236	18.20
AFGHANISTAN	168	5.40
SWEDEN	124	17.70
AUSTRIA	100	20.00
NETHERLANDS	90	10.00
CANADA	78	5.20

Total Citations (TC) and average article citations (AAC). The former (TC) reflects the general scholarly influence of a country's research on a particular area, whereas the latter (AAC) shows the typical impact of the individual article published by researchers from that specific country. These metrics provide an understanding of the quality and quantity of research articles produced across various nations. The USA States has the highest number of Total Citations (5613), which reflects its dominant presence in this field. Given its large academic infrastructure and extensive research output, American scholars have had a significant influence on the discourse around veterans, PTSD, military, trauma, and mental health, rather than on women's education in Afghanistan. The USA has a high Average Article Citation (24.70), which means that, on average, each article published in the United States has been cited nearly 25 times.

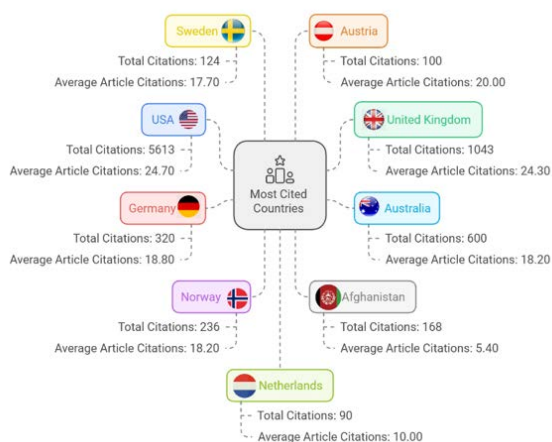


Figure 4. Most Cited Countries

The United Kingdom also shows robust performance with 1043 citations, an average of 24.30 citations per article. Australia, Germany, and Norway had moderate levels of both TC and AAC. For instance, Germany “320 citations, average 18.80” and Australia “600 citations, average 18.20” have respectable citation counts and article impact, although their research output and citation rates are not as extensive or influential as those of the USA or the UK. However, countries like

Afghanistan, Sweden, Austria, and Canada show more varied results. Afghanistan, with only 168 citations and an average article citation of 5.40, appears to have relatively low visibility in the global research landscape on this topic. This could be due to a variety of factors, including a smaller body of research being produced, limited access to international academic networks, and challenges in the academic infrastructure within Afghanistan.

Similarly, Canada “78 total citations, 5.20 average” and The Netherlands “90 total citations, 10.00 average” exhibit lower levels of both total citations and average article impact, suggesting that while these countries contribute research in this area, their work does not have as much international reach or citation influence as those from larger or more established research hubs. Overall, this figure and table reveal the discrepancies in research productivity and impact among countries. The USA and the UK lead in terms of both TC and AACs, indicating their strong scholarly assistance to the field. Conversely, Afghanistan, Canada, and the Netherlands have lower citations and averages, signifying that their research contributions are less often cited with lower visibility in global academic network.

Authors' Production over Time

To address research question 3, this study explored the publications trends of the top 10 authors that reveal different patterns considering the research output and citation impact, indicating the reach and recognition of their research within various fields. Sayeed Naqibullah Orfan, an Afghan author, stands out for his growing influence in the fields of leadership, administration, and equity and justice with a key increase in research output over the past three years, publishing four papers and receiving 18 citations, which resulted in an average of 9.000 citations per year (TCPY). This shows a rise in his work compared to his previous work, where he received a total of 38 citations in 2022 per two articles, with a higher TCPY of 12.667. In 2021, he received 15 citations

with a TCPY of 3.750. Seven papers and 71 citations, his total impact has witnessed steady growth, highlighting the increasing relevance of his research contribution to his field of study.

Sayed Naqibullah Orfan's interest lies in the academic areas of leadership, administration, power dynamics in higher education, gender inequality(Orfan, 2023c; Orfan, 2023a) and equity and justice (Naqibullah Orfan & Niazi, 2022; Orfan & Samady, 2023). His work also explores Afghan female undergraduate married female students in higher education (Noori & Orfan, 2021), sexual harassment of female student in higher education (Orfan et al., 2022), gender voices in Afghanistan at the school level (Orfan, 2023b), addressing women by their given name in public in Afghanistan (Orfan & Rahimi, 2022), gender differences (Hashemi et al., 2022), and female students' challenges in Taliban-run universities (2024).His research mostly addresses Afghan female students academic, social, and family related challenges that they confront in Afghanistan.

Table 4. Authors' Production over Time

Author	Country	Field of Study	Year	Number of publications	Total Citations TC	Normalized TCPY
Sayed Naqibullah Orfan	Afghanistan	leadership & administration, Equity and justice	2023	4	18	4.500
Terence M. Keane	American	PTSD	2022	2	8	2.000
Brian Marx	American	PTSD	2022	2	8	2.000
Sayed Naqibullah Orfan	Afghanistan	leadership & administration, Equity and justice	2022	2	38	9.500
Terence M. Keane	American	PTSD	2021	1	1	0.333
Brian Marx	American	PTSD	2021	1	1	0.333
Sayed Naqibullah Orfan	Afghanistan	leadership & administration, Equity and justice	2021	1	15	5.000
Abigail H Gewirtz	American	Psychology	2020	1	7	1.750
Bryann Baker DeBeer	American	Suicide Prevention	2019	2	61	6.100
Abigail H Gewirtz	American	Psychology	2019	1	13	2.600

The second author in line is Terence M. Keane, an American author who is famous for his research on PTSD. He experienced a modest increase in his research publication trends. In 2022, Keane published two papers that together garnered eight citations, giving him a TCPY of 2.667. Similarly, Brian Marx, another American similar to Keane's within the field of PTSD, published two papers in 2022 that garnered eight

citations, achieving a TCPY of 2.667. Abigail H. Gewirtz, an American psychologist, has had a limited number of publications. She authored one paper in 2020, which garnered seven citations, resulting in a TCPY of 1.400. Bryann Baker DeBeer, known for his work in suicide prevention is a strong academic whose work focuses on suicide prevention and shows a strong academic presence, particularly in 2019. DeBeer published two papers that year, which together garnered impressive 61 citations, resulting in a TCPY of 10.167. Her total citation count was 61, which reflects significant academic recognition within the first year of publication. These trends highlight the diverse paths to academic impact, whether by increasing publication volume, high citation rates, or the significant influence of a few well-received papers.

Most Relevant Affiliation

To answer research question two in relation to affiliation, this study indicates global and local engagement in this bibliometric analysis which reveals the contributions of academic institutions to research. 1381 total publications are associated to numerous affiliations, out of those, 245 article are the contributions of top 15 institutions, stressing the focus of research within a few entities. Boston University School of Medicine (N=43 articles), University of California (N=34 articles), and Boston University (N=29 articles). Research is always geographically diverse, with notable key contributions from universities in the U.S. such as Duke University and Baylor College of Medicine).

Table 5 Most Relevant Affiliation

Affiliation	Articles
Boston University School of Medicine	43
University of California	34
Boston University	29
Duke University School of Medicine	18
Durham VA Medical Centre	18
UNITED STATES (other affiliations)	18
University of Minnesota	18
University of Vienna	15
Baylor college of medicine	14
Duke University Medical Centre	14
Kandahar University	14
Medical University of South Carolina	14
Western Sydney university	14
Oregon Health and Science University	13
Takhar University	13

Contributions from international institutions, such as the University of Vienna, were also witnessed. In Afghanistan, Kandahar and Takhar University have also contributed, indicating increasing attention in the discourse. This geographically diverse contribution underscores international collaborations, with key intersections among health, psychological issues, and medical perspectives. This analysis demonstrates the significance of both global expertise and local engagement in advancing this vital area of research. Based on the above-mentioned data, it is conceivable that research and studies on women's education in Afghanistan from 1980-2024 on have been minimal. In addition, there has been no research on women's education in Afghanistan from 1980-2024 period in Scopus indexed journals, as shown in table 5.

Visualizing Collaboration Patterns Through Sankey Analysis

To answer Research Question 2, the Sankey diagram demonstrates the thematic progression to visualize the flow and distribution in scientific research (Lupton & Allwood, 2017). In this case, the Sankey diagram employing Biblioshiny systematically visualizes the interplay between various fields, such as author keywords, authors, countries, cited sources, and affiliations, in aiding the identification of interrelated concepts within the dataset. DE stands for descriptors, AU_CO for country affiliations, and TI_TM stands for Title and terms or keywords.

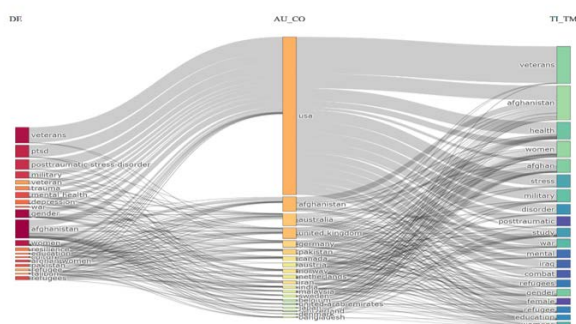


Figure 5. Three Field Plots

This diagram illustrates the fundamental disparities in scholarly research contributions in various fields. The diagram's limited number of descriptors (DE) illustrates inadequate research output related to women's education in Afghanistan, which indicates a lack of extensive research on women's education in Afghanistan. Certain terms related to women education are "gender", "women", and "education" are less prevalent or underrepresented when compared to more commonly research area such as "PTSD" and "veterans" of foreign troops. This disparity underscores a fundamental gap in academic and scholarly discourse focusing on women's education which is especially concerning in the context of Afghanistan in the 21st century.

Depriving women from education by the Taliban has drastically restricted access to education and other opportunities to broaden their horizons, requiring academic attention to this matter direly. Given the key role of education in empowering women and advancing gender equality, the inadequacy of scholarly research is alarming. Addressing this pressing concern is paramount for Afghan women and their upcoming generation. Several studies highlighted the importance of education for Afghan women highlighting the fact that education empowers women to make informed decisions, enhances gender inequalities, opens up economic opportunities for better employment, foster social development, advances inclusivity and equity, and resists oppressive practices and norms (Lemmon, 2012; Hussain & Amin, 2018; Moravej, 2022; Hamed, 2023; Najam, 2024)

The diagram's Country Affiliations (AU_CO): While Afghanistan is the center of attention in this study, especially in the field of women's education, the volume of scholarly research does not reflect the fundamental nature of this pressing issue. In contrast, countries with a high volume of research publications on PTSD and Veterans, such as the USA and Australia, indicate a dominant academic portion that focuses on mental health

issues affecting their military personnel. Despite the multifaceted challenges faced by Afghan women, scholarly research does not match the gravity of this problem. Looking at the highest contributing countries like USA, UK, Germany, their research efforts paid attention veterans, PTSD, military personnel and their health issue, as opposed to Afghan women education. This shows that combat and mental health receive more attention and funding in comparison to the big challenge that women's education confront and their access and equity remains disproportionately low in research output.

The diagram's titles and themes (TI_TM) demonstrates the lowering position of the terms such "Education, "Women, "refugees" indicates a substantial lack of research output as compared to "veterans" and "health." This underrepresentation underscores a critical gap in attracting the attention of scholars in the field of education to engage in and prioritize this pressing issue in future research endeavors.

Most Relevant Sources:

To answer research question 4, the most relevant cited sources in this Scopus literature search came from the fields of psychology and social sciences and provided significant insights into various aspects of health, trauma, and gender studies.

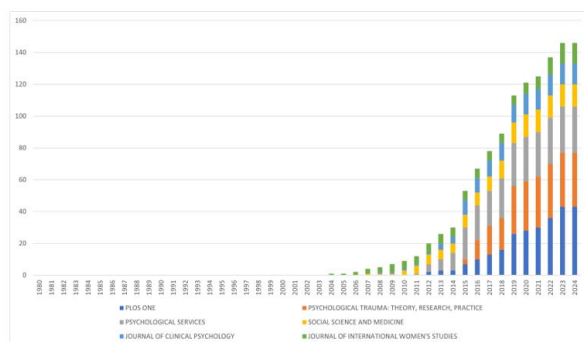


Figure 6. Most relevant source

PLOS One, a non-profit open access publisher, has an impact factor of 2.9 and aims to advance scientific research communication. Psychological Trauma: Theory, Research, Practice, and Policy, with an impact factor of 2.7, is a journal affiliated with APA Division 56 and focuses on trauma psychology. Similarly, Psychological Services, with an impact factor of 1.9, addresses the intersection of psychological services and public policy and is published by the APA Division 18. Social Science and Medicine, which boasts an impact factor of 4.9, serves as an interdisciplinary forum for research on the social determinants of health. The Journal of Clinical Psychology, with an impact factor of 2.5, covers clinical psychological science, including research, assessment, and practice. Finally, the Journal of International Women's Studies, though with a lower impact factor of 0.655, is an open-access feminist journal that explores critical gender and sexuality theories and their intersection with activism and organizing. These sources collectively contribute to diverse, high-impact research across multiple domains of the psychological and social sciences.

Conceptual map of keywords

3.6.1 keywords Frequency

Next, this exploration answers research question 5 regarding most frequent keywords extracted from the search in bibliometric analysis reveals a solid stress on the gender aspect in Afghanistan, as shown by the frequent manifestation of the word "Female." The name "Afghanistan" and "War" emphasizes the multifaceted socio-political situations which shaped the educational opportunities in the country. The presence of the "United States" indicates the health implications of war and conflict on female American veterans (Ames-Chase, 2010; Breyer et al., 2016; Koo & Maguen, 2014; Mohanty et al., 2015; Newins et al., 2019). While comparatively low frequency of "mental health" underscores a potential scholarly research gap, it is highly important to highlight the

limited scholarly research on women education in Afghanistan by the western countries, amplifying the voices for women education in every recognized international platform including UN secretary General, world leader's, Amnesty international, various media outlets, and concerned UN Agencies (Aljazeera, 2022; MyNEWS, 2024; Reuters, 2022) and it remain just words "Action speaks louder than words". A more in-depth investigation of the corpus is required to understand the nuances and intricacies of emerging opportunities in research on women's education in the Afghan context.

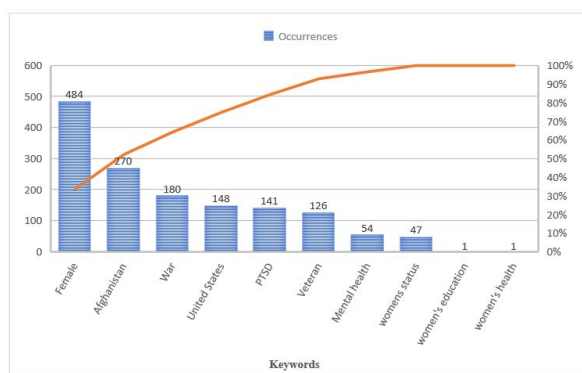


Figure 7. Most Frequent Words

Words Frequency Over Time

This section explores Research Question 5, regarding words frequency over time. The frequency of words over time shows how the frequency of specific keywords evolved from year to year. Keywords such as Afghanistan, Gender, Veterans, Women, PTSD, Mental health, etc., represent the main themes of the research. First, the frequency of Afghanistan in the available literature has increased from zero occurrences from 1980 to 2003, with the peak occurrences in Afghanistan, with the highest recorded frequency appearing in 2024 with 135 occurrences. This means that global research interest has increased in different spheres of Afghanistan, particularly since 2001.

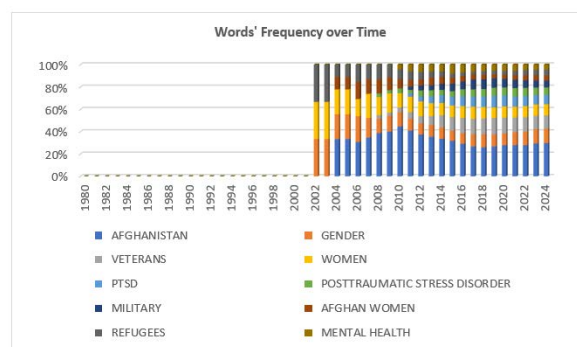


Figure 8. Words' Frequency Over Time

Another key term is gender, which follows the same trajectory as Afghanistan, with zero occurrences since the 1980s and gradually increasing in 2000, with a peak increase in 2024, reaching 59 occurrences the highest among the rest of the key words which shows growing attention to gender related concerns in Afghanistan including gender inequality, women's rights, and the status of women in educational and social contexts. The surge after 2001 is likely connected to the worldwide discourse on women's empowerment, and the stress that the international community placed on gender within the educational and social context.

The next term is veterans although it is relatively low, yet reaches to its peak occurrences of 54 times. This term is associated with the context of female international security forces that have suffered psychologically during war, such as PTSD (Armenta et al., 2018; Castillo et al., 2021; Peterson, 2022; Peterson et al., 2021). Consequently, research on female veterans has increased and attracted attention to health-related issues such as trauma, mental health, and post-war rehabilitation ((Ames-Chase, 2010; Breyer et al., 2016; Koo & Maguen, 2014; Mohanty et al., 2015; Newins et al., 2019). Another key term is the word women, which also attracts attention in research output, reaching 45 occurrences, probably within the army and military personnel. Post-Traumatic Stress Disorder (PTSD) appeared more prominently in the literature after 2010,

with a noticeable rise after 2015. By 2024, the cumulative frequency reached 38 occurrences. Military is another term in the literature that is connected with the last 20 years of wars, foreign interventions that reach the peak of 28 occurrences are seen in 2024. It could also reflect research on the role of military women and female soldiers and their involvement in post-conflict rebuilding.

Afghan women's literature in this Scopus search started to appear around 2004 and grew steadily thereafter, reaching 22 occurrences by 2024. Despite its wide range of media attention, there is limited scholarly research on women's education in Afghanistan. Refugees are another frequent term that appeared in 2002, reflecting the growing number of Afghan refugees due to conflict, which rose gradually, peaking at 22 occurrences by 2024 (Adelman, 2016; Monsutti, 2008; Qazi Zada & Qazi Zada, 2024; Varghese et al., 2024). The refugee situation, particularly for Afghan women displaced by conflict, may be closely tied to the broader literature on women's education, as refugees often face significant barriers to education (Khan et al., 2024; Sharifian et al., 2021).

The growing frequency of this term reflects the research on the challenges faced by Afghan refugees, including issues related to schooling and reintegration into society. Mental health is also highlighted in the literature which shows gradual growth over time, particularly post-2001, with a peak 21 occurrences in 2024. This has become an increasingly important area of research, especially in conflict zones. The rise of this term reflects growing concerns about the psychological effects of war and trauma in Afghanistan, especially among military personnel, who face unique challenges in accessing mental health care and education (Adler et al., 2017; Bergmann et al., 2019; Schreiber & McEnany, 2015; R. T. Smith & True, 2014).

3.6.3 Thematic Map

To answer research question 5 regarding the

conceptual thematic map according to the authors' keywords, this research plotted a conceptual map (See Fig.9) using the two main dimensions. The first dimension is density, which indicates the degree of development the themes measured by the internal connection among the keywords, or density determines the extent of articles' development according to the network's internal strength (Alsmadi et al., 2023).

The centrality dimension, shows the relevance of the themes measured by outsider links among the themes. Centrality (degree of relevance) indicates the significance of a theme in the entire research field (Hu, 2024). The map has four quadrants: First, the motor themes are located in high density and centrality. Second, basic themes are located at low density and high centrality. Third, the niche themes are located in high density and low centrality. Fourth, merging/declining themes are located at a low density and centrality (Bretas & Alon, 2021).

This portion of the analysis displays representation that provides authors with visualization of dominant research topics, highlights the research topics' proximity and relationships, and presents patterns and trends. These research topics were drawn from the keywords used by the author at the initial stages of this research. The representation in figure 9 consists of four quadrants, each portraying a unique degree of density and centrality of the research topic.

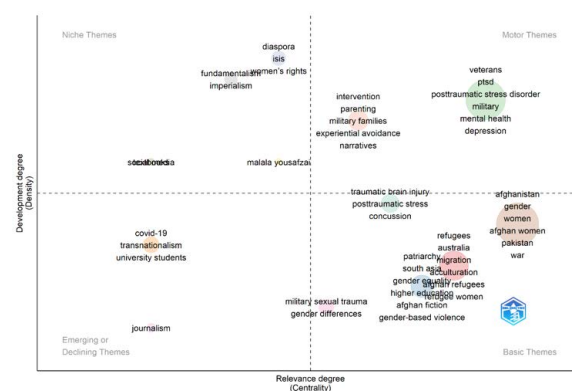


Figure 9. Conceptual thematic maps (Source: Biblioshiny)

As we can see in (fig. 9), the basic themes quadrant placed topics with a high centrality degree but not significantly high density, indicating critical research topics that are overwhelmingly discussed in the existing literature. This quadrant consists of many critical issues: gender-based violence, higher education, refugee women, patriarchy, gender equality, migrations, acculturation, and refugees in Australia. The absence of women's education in Afghanistan, as shown in the basic theme quadrant in the conceptual map above indicates that this topic is underrepresented in the existing literature. This shows that the discussion on women's education in Afghanistan is fragmented and scattered in subtopics, rather than being addressed as the main theme. This underrepresentation and fragmentation highlights the need for more scholarly research that addresses the dynamics of women's education in Afghanistan. The largest node in basic themes indicates surrounding topics such as Afghan women, gender, and women, demonstrating the existing literature focus.

The motor theme quadrant included research topics with high centrality and density signifying areas with an extensive research focus. This highly researched topic is attributed to the protracted conflict, which is a highly researched area due to the conflict and international security forces in Afghanistan. The second largest nodes in motor themes indicate topics that include veterans, PTSD, post-traumatic stress disorder, mental health, and depression of the military presence (Harper et al., 2022). This scholarly discussion attracted researchers from several countries to conduct research on the psychological and social impact of conflict on military personnel (Dyball et al., 2022; Phillips & Albanesi, 2022). This indicates a focused scholarly discussion on the mental health consequences confronted by military personnel, reflecting the dire need to address challenges within the context of longitudinal conflict and its aftermath. These themes highlight the significance of longstanding research and

intervention strategies to advance the well-being of veterans and those affected by PTSD and other psychological concerns in the battleground.

IMPLICATION AND CONCLUSION

The findings of this bibliometric study yield valuable insights that require in-depth engagement and reflection among practitioners, policy, and academics. This study's research questions predominantly indicate the fragmentation and evolution of scholarship on women's education in the Islamic world, with a particular focus on women's education in Afghanistan, revealing a critical gap that calls urgent attention. The purpose of this bibliometric analysis is to examine the intellectual structure of women's education in Afghanistan by employing a bibliometric analysis from 1980 to 2024. The findings highlight the urgent need for a contextually grounded, more inclusive, and sustained approach to addressing the barriers facing the Afghan women's education system.

Publication and citation trends from 1980 to 2024 demonstrate a delayed but growing scholarly engagement with Afghan women's education, particularly in the post-2001 era. This trend highlights the significance of strengthening policy frameworks that advance sustained academic inquiry, especially in contexts affected by conflict and fragility. As research production in such a context is frequently sensitive to political transitions and external interventions, there is a dire need for more funding mechanisms and protection to exercise academic freedom. Scholars are encouraged to examine how international assistance, security conditions, and geopolitical interests influence research priorities in post-conflict contexts.

There is an uneven distribution of research contributions from Western countries, with Afghan scholars and institutions playing a minimal role in academic scholarly discussions in reputable journals such as Scopus on women's education in

Afghanistan. This skewed representation indicates a critical gap in local scholarly engagement and calls for certain initiatives within Afghan higher education institutions to build capacity. Policymakers and international funding agencies should prioritize collaborative research activities, provide training opportunities, and develop an infrastructure that permits local researchers to participate in global research networks.

It was also found that there is a limited circle of scholars, mainly from the United States and its allied nations, who lead citation networks when it comes to Afghan women's education. This concentration highlights the inadequacy of diversity in authorship and scholarly influence, potentially reinforcing externally imposed interpretations. To address this concern, academic institutions and networks should incorporate inclusive authorship by mentoring Afghan researchers and amplifying their perspectives in global discussions. Promoting collaborative authorship and regional academic exchange can also assist in redistributing academic influence and improving the field with locally grounded insights.

The most cited sources of Afghan women's education are predominantly published in journals focused on psychology and trauma, while targeted educational journals have limited visibility. This finding posits a disciplinary gap that might limit the visibility of education-specific insights in large-scale academic and policy debates. Therefore, journal editors and academic hubs should consider launching special issues or thematic call that concentrate on women's education in conflict-affected contexts to amplify this marginalized area. Concurrently, it is imperative that scholars explore an interdisciplinary publishing strategies that bridge education, political science, and gender studies.

The conceptual analysis demonstrated that emerging but critical themes such as gender-based violence, refugee education, and acculturation were insufficiently represented despite their high

contextual relevance. These thematic areas signify a fertile ground for future inquiry, particularly in understanding how displacement, conflict, and sociocultural shifts shape women's educational access and outcomes. Prioritizing this intersection can expand the theoretical and practical knowledge of educational equity in fragile contexts.

We suggest that future research examine specific barriers impeding women's education, such as the root causes of political deprivation of women's education, cultural norms, security concerns and the impact of poverty on women's education in Afghanistan. Future research should assess the impact of international policies and aid on women's education in Afghanistan. Similarly, researchers could examine advanced strategies to promote girls' education, particularly community-based initiatives, scholarship programs, professional development and teacher training.

In short, the implications of this bibliometric analysis highlight the dire need for a more inclusive, context-driven, and supportable research ecosystem of Afghan women's education. Promoting this agenda requires a planned transition toward raising local scholarly voices, endorsing regionally driven collaborations with interdisciplinary perspectives that replicate the complex nature of women's educational barriers in fragile contexts. By prioritizing local agencies, enhancing global partnerships, and aligning research objectives with the lived realities of Afghan women, academic initiatives can genuinely contribute to transformative educational policies and practices.

This bibliometric review has some limitations. First, full literature search yielded a database of 53560 English sources. However, this review focused only on journal articles, thus limiting the size of the dataset to 708 journal articles in English. Therefore, this review's findings may not represent the full female education literature, especially from unpublished work, either master's or doctoral literature. However, we believe this review portrays

a rational representation of women's education in the literature and offers a solid foundation to begin (e.g., authorship, citations, and themes keywords), to identify future directions for the development of women education in the Islamic world.

Although we tried our best to surface all English journals on women's education in Afghanistan, our search does not cover all the literature/databases. Scopus, an international research database, often prioritizes English-language publications and chiefly incorporates Western literature. Therefore, certain journal publications along the way might be missing while searching the literature. Consequently, future research on women's education should incorporate Afghan local databases in both national languages to add more perspectives from the eastern and local perspectives.

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Impact of work-life balance on teacher's satisfaction, performance and retention in public schools of Male Region, Maldives.

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ABSTRACT

Researchers highlight the importance of a healthy work-life balance for teachers in promoting job satisfaction, enhancing performance, and reducing turnover in the education sector. In the context of the Maldives, where teachers often face high demands, understanding how to manage their work-life balance may influence their job satisfaction and the work commitment. This study examines the impact of work-life balance (WLB) on teachers' performance, retention and satisfaction among teachers at public schools in Male' region, Maldives. Data was collected using a questionnaire and analyzed using SPSS 22.0 to find the relationships between work-life balance, job satisfaction and retention. The analysis revealed a negative relationship between work-life balance and teachers' satisfaction, suggesting that interference of work with personal life leads to lower job satisfaction. This study highlights the need for well-tailored policies addressing teachers' workload and stress related to that to enhance WLB along with the wellbeing of teachers in the educational sector.

Keywords: Work-life balance, Teacher retention, Performance, Satisfaction.

INTRODUCTION

Research Background

In recent times, work-life balance (WLB) has become an important area in current organizational and educational research. Work-life balance is referred to the stability of professional responsibilities and personal life demands, significantly influencing the success of the organization and individuals' well-being. In the profession of education, particularly for teachers balancing work and personal life is challenging due to work demands and increase in dual responsibilities while fulfilling the commitments of family and personal needs (Çobanoglu et al.,2023).

Globally, retention is a pressing issue, as education systems face the loss of experienced and skilled teachers. Several research shows that high

turnover intention and retention among teachers are often related to job satisfaction, work stress and imbalance of work and life responsibilities (Boamah et al.,2022; Ademola, Tsotetsi et al.,2021). Further the retention of teachers is important, as it not only affects organizational growth, but also the students' academic performance (Saraih et al.,2019). Teachers who are unable to balance work and life experiences stress and burnout, resulting in dissatisfaction. Teachers' performance is another key factor that is directly linked to the ability to manage stress and work and personal life demands. When teachers are overburdened with work, it depletes the Physical well-being of a teacher, affecting their performance. Several studies have revealed that teachers who are able to manage stress and balance work and life are higher in engagement, which positively affects the classroom management and students' performance

(Khadka and Khadka ,2023; Boakye et al.,2023; Manalo et al.,2020). In addition, life satisfaction covers overall happiness and success and is deeply connected to balance of work and life. Teachers who have a balance of work and life report in greater life and job satisfaction, which enhances their motivation towards the profession (Bhatia and Jain 2024).

In Maldives, teachers face numerous challenges specially in male region due to a higher student-teacher ratio, limited resources and higher work demand. The requirements of teaching, combined with the pressure of living in Male region have become a stressful situation for many educators. Stress is linked to poor performance, dissatisfaction and increasing teacher turnover, calls attention to address work life balancing (Saraih et al.,2019). Although stress is an important aspect of teachers' well-being, this study focuses on the direct influence of work-life balance on satisfaction, performance, and retention, as remains less explored in Maldivian context. Therefore, this study aims to fill the gap by examining the direct impact of work-life balance on teacher satisfaction, performance and retention.

PROBLEM STATEMENT

The profession of teaching is globally regarded as one of the challenging professions, that requires a balance of high workload and personal responsibilities. In Maldives, particularly in Male region, public school teachers face many challenges due to high student-teacher ratios, administrative demands and limited resources. Turnover rate of teachers in Maldives has become a national issue where some measurements such as prompting policy efforts to improve retention and attract new entrants to the profession are now taken to motivate teachers to remain in profession and students to choose teaching as profession. Factors such as high levels of stress among teachers are often linked to increased turnover intention, low job satisfaction and poor performance (Boakye et al.,2023; Manalo et al.,2020).

Work life balance (WLB) influences teacher performance and satisfaction. Research on work life balance shows work life balance enhances job satisfaction, reducing the turnover intention of teachers (Kreitner et al.,2001; Suib et al.,2022; Hasanah et al., 2020). Further teachers with balance work and life have higher level of job commitments contributing to better performance (Boamah et al., 2022 and Ordu 2021). In addition, studies indicate that stress directly impacts teachers work life balance affecting teachers performance, satisfaction and retention (Shell et al., 2023; Paramita and Supartha , 2022). Existing research on work life balance shows work life balance is linked globally to teachers satisfaction, performance and retention. However, in the context of Maldives limited studies exist in understanding how work-life balance directly influences teacher satisfaction, performance, and retention. This gap will help the stakeholders improve the education system. It is important to address this problem to understand the dynamics of WLB, Retention, performance and satisfaction. Hence, the aim of this study was to find the impact of work-life balance on teacher satisfaction, performance, and retention. Although stress is acknowledged as a contributing factor, the primary focus was on understanding how WLB directly shapes key professional outcomes in the Maldivian public education system.

RESEARCH OBJECTIVES

General objective: To examine the impact of work-life balance on teacher satisfaction, retention and performance among teachers in public schools of Male Region Maldives

Specific objectives: The aim of this study is to:

1. To identify the relationship between the work-life balance and teacher satisfaction.
2. To examine the relationship between work-life balance on teacher performance.
3. To explore the relationship between work-life balance on teacher Retention.

RESEARCH QUESTIONS

- 1.What is the relationship between the work-life balance and teacher satisfaction?
- 2.What is the relationship between work-life balance on teacher performance?
- 3.What is the relationship between work-life balance on teacher retention?

SIGNIFICANCE OF RESEARCH

This study anticipated in examining the impact of Impact of work-life balance on teacher's satisfaction and performance. As evident from literature, work life balance is a global concern specifically in the profession of teaching. Furthermore, few studies have been done in particularly in Maldives to examine the impact of work life balance of teachers. Hence, the result of this study has implications for management of schools and policy makers in designing and making positive and supportive environments reducing stress and enhancing work-life balance.

LITERATURE REVIEW

Review of key concepts

work-life balance

Over 20 years several scholars attempted to define and conclude work life balance as a key concept. However, there are no similar or agreed definitions of work life balance in the literature (Kalliath & Brough, 2008). There are at least two domains of life, which is work and personal life. The table below shows some of the definitions.

Table 1: definitions of work- life balance

Author(s)	Definitions
Greenhaus et al., (2003).	The extent to which an individual is equally satisfied with his/her work and family role in terms of time balance, involvement balance and satisfaction balance
Kirchmeyer (2000).	Distributing all personal resources (time, energy, commitment) to achieve satisfying experience in all life domains.
Clark (2000).	Individual satisfaction and function well at home and work with no or minimum of conflict.
Fleetwood (2007).	Individuals have control of when, where and how they work.
Kalliath and Brough (2008)	Individual perception about work and non work activities that promote growth in accordance with their life priorities.
Keelan (2015).	Individuals' beliefs about the balance in their personal and professional obligations without sacrificing any.

Work life balance can be defined as individuals' level of satisfaction with multiple roles (Kirchmeyer 2000). Similarly, Clark (2000) also defined work life balance as individual satisfaction within the description of border theory. Adding to this, Greenhaus, Collins & Shaw (2003) also studied multiple roles defining work life balance further with a scope on equity of time across individuals' multiple roles. Further defined it as individuals level of engagement and satisfaction with family and work role in term of three components which are time balance, involvement balance, and satisfaction balance' (Greenhaus, Collins and Shaw 2003). In addition, Work- life balance can also be defined as having control of when, where and how individual work (Fleetwood 2007). It could also be a result of individuals freedom over the roles most important to the individual. Similarly, Kalliath and Brough (2008) defined Work life balance as Individual perception about work and non-work activities that promote growth in accordance with their life priorities. More recently Work life balance is defined as Individuals' beliefs about the balance in their personal and professional obligations without sacrificing any (Keelan 2015).

The definitions about work life balance in past have indicated individual satisfaction, equal time in multiple roles and minimal conflict. Therefore, in this study, work life balance is defined as individual's ability to balance their personal and work life to enable them to enhance satisfaction, attend multiple task and manage conflicts affectively.

Teacher's job satisfaction

Job satisfaction is a concerning issue for many researchers, as it has a direct connection with organizations such as turnover and absenteeism (Nguni et al., 2006). In contrast, life satisfaction is a broader concept that covers overall assessment of life, covering various domains like health, relationships, and personal achievements. Although there are many definitions to job satisfaction there is no consensus on how it should

be defined. The table below shows some of the definitions of Teachers job satisfaction.

Table 2: definitions of Teacher's job Satisfaction

Author(s)	Definitions
Zembylas and Papanastasiou (2004)	Teacher's job Satisfaction referred to the relationship between a teacher and their role of teaching. And the expectations of a teacher and what the teacher perceives.
Kreitner et al., (2001).	Teacher's job Satisfaction defined as attitudes of employees towards the work that includes positive as well as negative behavior.
Schermerhorn et al., (2011).	Defined as general attitudes of an individual towards their work, which states job satisfaction as the general attitude of individuals to their work.
Hasanah et al., (2020).	Job satisfaction is the result of work experience or assessment of work.
Lambrou et al., (2010)	A positive state of mind resulted from individuals job experience
Hoppock (1935)	combination of psychological, physiological and environmental circumstances that results in individuals' happiness towards the work.

Teachers' satisfaction is defined by many scholars in various perspectives. One of the definitions is by Hoppock (1935). He defined job satisfaction as a combination of psychological, physiological and environmental circumstances that results in individuals' happiness towards the work. It is the internal factors that play the major role in individual satisfaction towards the work along with minimal effect of external factors (Hoppock 1935). However, Kreitner et al., (2001) defined job satisfaction as individual's attitudes towards the work that includes positive and negative behavior. Similarly, Schermerhorn et al., (2011) also defined it as the general attitudes of an individual towards their work. Adding to this, job satisfaction is defined as a relationship between a teacher and their role in teaching (Zembylas and Papanastasiou 2004). And the expectations of a teacher and what the teacher perceives. Many recent scholars define it as result of one's job or work experience (Lambrou et al., (2010), Hasanah et al., 2020).

The past definitions of job satisfaction indicate it is related to one's internal factors and job experience. Therefore, it can be concluded that job satisfaction of a teacher is the result from one's job experiences with a positive set of minds.

Teachers' performance

Employees job performance is a vital part of organizational success (Keelan 2015). Vinchur and Koppes (2011) defined job performance as individuals behavior that can be supervised and assessed. While Werang et al., (2017) defined job performance as quality achieved by an individual after completion of a given task. But in this research, performance is referred to teacher's job performance. The table below shows some of the conceptual definitions of teacher's performance.

Table 3: definitions of Teacher's performance

Author(s)	Definitions
Abwalla (2014).	Teachers' performance refers to the involvement of the teacher in teaching, in term of making schemes, lesson plan, assessment of students and participation in co- curricular activities.
Hassan et al., (2017).	Ability of the teacher to teach skills, knowledge by using appropriate methods to improve students' achievement and learning.
Danasabe (2018).	Management of classroom, efficient teaching, punctuality to work, and good team work.
Limon and Nartgün (2020).	Defined as teachers' contribution to achieve goals and objectives of the institution.
Suib et al., (2022).	Teachers work towards the tasks assigned to achieve organizational objectives.

A teacher's job performance is defined in many ways by different scholars. From the definitions listed above all the scholars define teachers job performance as fulfilling the tasks assigned in teaching, as well as effective delivery of teaching methods along planning and reaching organizations objectives. Abwalla (2014) defined teachers' performance as the involvement of the teacher in teaching, in terms of making schemes, lesson plan, assessment of students and participation in co- curricular activities. In addition, Hassan et al., (2017) also defined it as the ability of the teachers to skills, knowledge by using appropriate methods to improve students' achievement and learning. Further teachers' performance was defined as Management of classroom, efficient teaching, punctuality to work, and good team (Danasabe, 2018). Moreover, Limon and Nartgün (2020) defines performance as the contribution of teachers in achieving the goals of an institution. Similarly, Suib et al., (2022) also defined it as the work of

teacher in achieving organizational objectives.

The past definitions of teacher's performance indicate it is related to doing the tasks assigned to teaching. Therefor for this study teacher's performance refers to effectiveness and competency in fulfilling their responsibilities.

Teachers' retention

Recent years teachers' retention has gained significance attention due several global challenges. Although there are many definitions to teachers' retention there is no consensus on how it should be defined. The table below shows some of the definitions of Teachers retention.

Table 5: definitions of teacher's retention

Author(s)	Definitions
Buchanan, Prescott, Schuck, Aubusson, and Durke (2013).	Teacher retention is referred as positive environments of the schools that fosters a supportive environment where teachers are valued. And it reduces retention rate, enhancing commitment to their profession
Nguyen, (2018).	Teacher retention is defined as the commitment of teachers to remain in their career focusing on psychological and professional development.
Reitman and Karge (2019).	Teacher retention is defined as teachers continued service in same school supported by school leadership, recognition and opportunities for growth.
Shuls and Flores (2020).	Teacher Retention refers to the extent or the longevity of teachers in a specific organization.
Shell, Thurt and White (2023).	Retention is defined as the ability of the schools to hold their teachers in that organization through support and growth opportunities.

Teacher retention is an important concept in educational research, as it has direct impact on organizational development and students' performance (Zembylas & Papanastasiou 2004). As seen in the table above the definitions of teacher's retention emphasis on different dimensions. Buchanan et al., (2013) described it as result of positive work environment where teachers are valued and appreciated. And this adds to the commitment to remain in that particular organization. Similarly, Reitman and Karge (2019) also emphasized the work environment defining teachers' retention as continued service in one school which is supported by school leadership, recognition and opportunities for growth. Adding

to this, Shell et al., (2023) also defined retention as the ability of the schools to hold their teachers in that organization through support and growth opportunities. Nguyen (2018) highlighted teacher retention as one's commitment to remain in one organization for psychological and professional development. From a broader perspective, Shuls and Flores (2020) defined Teacher Retention as the extent or the longevity of teachers in a specific organization.

Collectively, these definitions underline that teacher retention is influenced by a combination of work environment, school leadership, institutional support and individual motivation. Therefor for this study teacher retention refers to the ability of the schools to sustain teachers by fostering a positive work environment, organizational support, and opportunities for development.

2.3 Critical review of underline theories

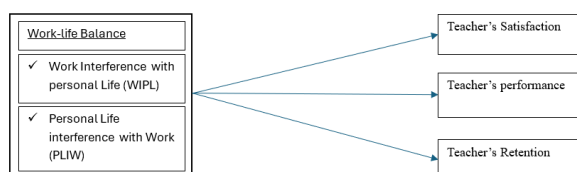
Work life balanced is a broad concept which consists of three elements "work", "life" and "balance". Although no single theory has been universally accepted, various researchers have investigated work life balance through several frameworks and theories such as enhancement, facilitation, spillover, social identity, conflict, border, segmentation, and ladder theories (Boamah et al., 2022; Ordu 2021; Adriano and Callaghan 2020; Sari and Seniati 2020; Kakar et al.,2021).

Segmentation theory posits that work and life are separate broad concepts and experiences that do not influence or affect the experience of one another (Kakar et al.,2021; Young & Kleiner, 1992). In contrast, enrichment and facilitation theory highlights that involvement in one role (work) will enrich the resources of another role (Boakye et al.,2023; Jaharuddin and Zainol ,2019; Manalo et al., 2020). While these theories emphasize the positive aspects of work life and personal life, they were criticized for not emphasizing the causes and failure to provide a framework for work life balance (guest, 2002). Work – family border

theory proposed by Clark (2000) focuses on the domains of work and family, defining “balance” as satisfaction and functioning of work and family with minimum conflict. And individuals as “border crossers” that shift daily from the world of work to the world of family or personal life. This theory is applicable to teachers, as individuals who constantly navigate from personal to professional responsibilities.

Given the aim of this study, which is to examine the impact of work life balance on teachers’ performance, retention and satisfaction, Work-Family Border Theory was chosen as theoretical framework. This theory offers a complete understanding of the deep connection between work and personal life, focusing on the management of changes in boundaries. Further, applying this theory in this study addresses effective management of boundaries that contributes to increasing satisfaction of teachers, performance and retention.

Conceptual Framework



2.4.1 Work life balance and teachers’ satisfaction

Teachers’ satisfaction in their work has a strong impact on the quality of education (Boamah et al., 2022). It was found that a healthy work-life balance among teachers lead to satisfaction in their jobs reducing stress level (Çobanoglu et al., 2023). A study by Ordu (2021) revealed the importance and high effect of teacher’s job satisfaction on achieving organizational goals and work-life balance. Another research conducted in Indonesia found that educators who have perceived balance of their work and personal life shows remarkable association between job satisfaction and organizational commitment (Sari and Seniati, 2020). Similarly, Attar et al. (2020) reported that work-life balance has a positive impact on teachers’ satisfaction. In line with these findings, a study by Sailatha and Swathi (2022) highlighted that the work-life balance of teachers impacts their level of satisfaction. In light of the findings, this study formulates the following hypothesis.

H1: There is a significant impact of work-life balance on teachers’ satisfaction.

Work life balance and teachers’ performance

Performance is result of employee’s work considering the responsibilities assigned at work, which is influenced by the various factors such as ability to fulfill work and family commitments (Panda and Sahoo ,2021). It was found that teacher’s performance has a positive and a significant impact on work-life balance. And work stress had a negative effect on teachers’ performance (Paramita and Supartha,2022). Similarly, a study by Dankwa (2020) revealed a positive and significant relationship between work-life balance and employees’ performance. Stating that employees who perceive a balance between work and home life tend to perform better. Adding to these findings, research conducted in Malaysia highlighted that work-life balance have a significant impact on teachers’ performance (Johari et al., 2018). In line with these findings

Chana et al., (2022) found work-life balance has a greater influence on teachers' performance. It was found that a healthy balance of work and life increases the level of job performance, adding to job satisfaction (Krishnan et al., 2018). Moreover, a study by Mwangi et al., (2016) concluded that work-life balance impacts the performance of teachers and as an important aspect that should be accepted to improve teachers' performance. Therefor this study formulates the following hypothesis.

H2: There is a significant impact of work-life balance on teachers' performance.

Work life balance and teachers' retention

Work life balance (WLB) is an important component in teachers' retention as evident I several studies. Panda and Sahoo (2021) found a positive relationship between WLB and employees' retention. Also, it is revealed that WLB has a major role in employees' decision in increased involvement and to leave or remain at the company. Similarly, a study by Abdulaziz et al., (2022) pointed out that WLB has shown positive changes in organizational commitment supported by personal and professional growth. Research by Mathews et al., (2021) also revealed that positive and supportive environments of the schools promote WLB and are more likely to engage teachers in a long-term role. Moreover Khalil et al., (2020) revealed that imbalance of work and life negatively affects stress level of employees, which directly influences the turnover intentions. This aligns with the findings of Rathi and Kumar (2023) who highlighted the strong association between work stress of teachers and the turnover intention of the teaching employees. Furthermore, Sailatha and Swathi (2022) found a significant relationship between teachers' retention, work satisfaction and work life balance. Similarly, Chong et al., (2021) also revealed that WLB and employees turn over intention have a significant relationship. Therefor this study formulates the following hypothesis.

H3: There is a significant impact of work-life balance on teachers' retention.

METHODOLOGY

Research Design

There are three research designs: exploratory, descriptive, explanatory (causal) design. The chosen research design to examine the impact of work life balance on teachers' performance and satisfaction is explanatory or Causal research design. This design was chosen for several reasons. Firstly, explanatory research focuses on determining the impact of work life balance (independent variable) on teachers' performance (dependent variable). Secondly, this explanatory research directs empirical study, as it focuses on empirical evidence to connect variables using statistical analysis.

EXPLORATORY	DESCRIPTIVE	EXPLANATORY (Causal)
Become familiar with basic facts, setting and concerns.	Gives in depth and a precise picture	Investigate a theory's projections.
Takes a general picture of conditions	Uncover new data that undermine past data	Detailed and enhance description of the theory's
Create and focus questions for future research	Create a set of categories or categorize types	Extend a theory to new issues or topics
Creäte new ideas connectors or hypothesis	Explain a series of steps or stages	Validate or prove false of an explanation or projection
Find out the possibility of conducting research	Records a casual process or system	Connect problems or topics with a common principle
Create methods for measuring and identifying future data	Details on the background or setting of a situation	Establish which of different explanations is best.

MEASURES OR ITEM CONSTRUCT

There are five variables in this study. Each variable is measured using the relevant measure of items. A sixth variable stress is added only for background study and descriptive understanding of teachers' experience. Work interference with personal life is measured using 5 items adopted from Shukla and Srivastava (2016); Singh (2014) and Hayman (2005). Personal Life interference with Work (PLIW) was measured using 5 items which are adopted from Singh (2014) and Hayman (2005). Teacher's Satisfaction was measured using 5 items which are adopted from Demirtas (2010) and Bhatnagar et al., (2011). Further Teacher's performance was measured using 5 items which are adopted from Cho et al., (2023). Teacher's Retention was measured using 7 items which are adopted from Kaya and Argon (2011). And last though stress was no included for hypothesis testing, stress was measured as a background variable using 4 items which are adopted from Rincy and Panchanatham (2010).

WLB DIMENSIONS	SCALE ITEMS	SOURCES
Work Interference with personal Life (WIPL)	1) I have unachievable deadlines at school. 2) My job takes up time meant to be spent with family. 3) I change family activities due to Job related strains. 4) I often feel emotionally drained trying to balance home and work. 5) My Job demands make it difficult to maintain the relationship with family as I want.	Shukla and Srivastava (2016). Singh (2014). Hayman (2005).
Personal Life interference with Work (PLIW)	1) My home life interferes with responsibilities at work. 2) I put off things at work due to family demands on time. 3) My family related stress interferes with job related duties. 4) My Personal life drains me of energy for work. 5) I am too tired to be effective at work.	Singh (2014). Hayman (2005)
Teacher's Satisfaction	1) Being a teacher is close to my ideal. 2) My conditions as a teacher are excellent. 3) I am satisfied with being a teacher. 4) I am happy that I took this job. 5) I do not force myself to go to work.	Demirtas, Z. (2010). Bhatnagar et al., (2011).
Teacher's performance	1) I achieve the objectives of the job. 2) I demonstrate expertise in all job-related tasks. 3) I fulfil all the requirements of the job. 4) I could manage more responsibility than typically assigned. 5) I am competent in all areas of the job.	Cho, Pyun and Wang (2023).
Teacher's Retention	1) I plan to continue teaching at my current school. 2) I plan to continue working in education, but I intend to leave this school. 3) The level of support I receive from school management affects my decision to continue teaching at this school. 4) My authority to make decisions about my classes affects my decision to stay at this school. 5) There is a positive teaching and learning environment at the school. 6) School management values teachers as professionals.	Kaya and Argon
Level of stress	1) I have a lot of work and fear that time is not enough. 2) I feel so burdened that even a day without work seems bad. 3) I feel that I never take a leave. 4) I am tired due to high demand at workplace.	Rincy and Panchanatham (2010).

POPULATION AND UNIT OF ANALYSIS

The unit of analysis is teachers who are currently teaching in Primary and secondary schools located in greater Male' Maldives. This group of teachers are chosen for this study due to the relevance in understanding the impact of work life balance on teachers' performance and satisfaction. Provided in the official website of Ministry of education as of year 2024, total of 1927 teachers are working in 10 schools of Male' region. This population is applicable to the objective of this study, as teachers work life balance, and the outcomes related to it can provide various performance trends.

SAMPLING TECHNIQUE AND SAMPLE SIZE

The sample size was determined by using Yamane's formular. Using Yamane's formular the sample size for this study is approximately 331. Further, to examine the impact of work life balance on teachers' satisfaction and performance, a non-probability sampling method was chosen. Convenient sampling method was used due to the time constraints and availability of the respondents. For this study participants were selected based on their willingness to participate and their availability.

$$n = N / (1 + N \cdot e^2)$$

Where,

n= required sample size

N= population size (1927)

e=Margin of error 5% for a 95% confidence interval.

$$n = 1927 / (1 + 1927 \cdot (0.05)^2)$$

$$n = 331.2$$

ANALYSIS AND FINDINGS

DEMOGRAPHIC ANALYSIS

DEMOGRAPHIC ANALYSIS					
Demographics		Frequency	Percent	Valid percent	Cumulative percent
Gender	Male	29	15.3	15.3	15.3
	Female	161	84.7	84.7	100.0
	Total	190	100.0	100.0	
Age	20 – 30	36	18.9	18.9	18.9
	30 – 40	88	46.3	46.3	65.3
	40 – 50	55	28.9	28.9	94.2
	50 – 60	11	5.8	5.8	100.0
	Total	190	100.0	100.0	
Number of dependents	1	52	27.4	27.4	27.4
	2	49	25.8	25.8	53.2
	3	28	14.7	14.7	67.9
	4 and more	23	12.1	12.1	80.0
	None	38	20.0	20.0	100.0
Marital Status	Married	88	83.8	83.8	83.8
	Divorced	7	6.7	6.7	90.5
	Single	10	9.5	9.5	100.0
	Total	105	100.0	100.0	
Educational qualification	Diploma	9	4.7	4.7	4.7
	Bachelor's degree	58	30.5	30.5	35.3
	Master's degree	123	64.7	64.7	100.0
	Total	190	100.0	100.0	
Years of experience	Less than one	1	.5	.5	.5
	1 – 3 years	18	9.5	9.5	10.0
	4 – 6 years	28	14.7	14.7	24.7
	7 – 10 years	42	22.1	22.1	46.8
	11 - 15 years	38	20.0	20.0	66.8
	More than 15 years	63	33.2	33.2	100.0
	Total	190	100.0	100.0	

The table above shows the distribution of participants by Age, Gender, Educational background, Number of dependents and Marital status. From the respondents of the study, 84,7% are female and 15.3% are male. The majority (46.3%) of the participants are from the age between 30 - 40. And the least are age 50 and above (5.8) %. Further the table shows the number of dependents of the participants. Most number of the participants have one dependent (27.4%) followed by 2 dependents (25.4%). Also, the least number of dependents is 4 and more which holds 12.1% of the respondents. In addition, 64.7% of respondents have educational qualification of master's degree, 30.4% have bachelor's degree and 4.7% have diploma. This distribution shows that Majority of the participants have master's degree. Moreover, majority (33,2 %) have more than 15 years of experience in teaching. Followed by 22.1% of respondents having experience of 7 to 10 years and 20% of respondents 11 to 15 years, 14.7% of respondents 4 to 6 years and 9.5% 1 to 3

years of experience in teaching.

NORMALITY AND RELIABILITY TEST

	Skewness		Kurtosis		Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items
	Statistic	Std. Error	Statistic	Std. Error		
WIPL 1	-1.892	.176	3.038	.351	.900	.897
WIPL 2	-.468	.176	-.421	.351		
WIPL 3	-.622	.176	-.496	.351		
WIPL 4	-.654	.176	-.531	.351		
WIPL 5	-.417	.176	-.892	.351		
WIPL 6	-.461	.176	-.564	.351		
WIPL 7	-.212	.176	-.894	.351		
WIPL 8	-.514	.176	-.670	.351		
WIPL 9	-.372	.176	-.848	.351		
WIPL 10	-.468	.176	-.705	.351		
WIPL 11	-.384	.176	-.837	.351	.876	.876
WIPL 12	-.157	.176	-.812	.351		
PLIW 1	-.838	.176	-.013	.351		
PLIW 2	.034	.176	-.739	.351		
PLIW 3	-.187	.176	-.811	.351		
PLIW 4	-.028	.176	-.985	.351		
PLIW 5	.050	.176	-.783	.351		
PLIW 6	.323	.176	-.755	.351	.873	.876
PLIW 7	.447	.176	-.426	.351		
TS 1	-1.104	.176	1.100	.351		
TS 2	-.687	.176	.012	.351		
TS 3	-.868	.176	.226	.351	.812	.823
TS 4	-.865	.176	.550	.351		
TS 5	-.496	.176	-.369	.351		
TS 6	-.391	.176	-.644	.351		
TS 7	-.631	.176	.151	.351		
TS 8	-.713	.176	-.224	.351		
TS 9	-.383	.176	-.214	.351	.440	.469
TS 10	-.675	.176	.072	.351		
TP 1	-.977	.176	1.510	.351		
TP 2	-.808	.176	.814	.351		
TP 3	-.924	.176	.648	.351		
TP 4	-.490	.176	-.004	.351		
TP 5	-.481	.176	.003	.351	.812	.809
TP 6	-.288	.176	-.641	.351		
TP 7	-.712	.176	.494	.351		
TR 1	-1.159	.176	.849	.351		
TR 2	.047	.176	-.987	.351		
TR 3	-.576	.176	-.264	.351		
TR 4	-.051	.176	-.783	.351	.812	.809
TR 5	-.699	.176	.450	.351		
TR 6	-.581	.176	-.110	.351		
LS 1	-.873	.176	.122	.351		
LS 2	-.307	.176	-.697	.351		
LS 3	-.276	.176	-.962	.351		
LS 4	-.467	.176	-.603	.351	Overall scale: .910	.904
LS 5	-.157	.176	-.945	.351		
LS 6	-.559	.176	-.070	.351		
LS 7	.103	.176	-1.061	.351		
LS 8	-1.168	.176	.752	.351		

To check the normality of the data, skewness and kurtosis values of each item was calculated. All the items are within the acceptable range of -2 to 2. Hair et al., (2010) and Bryne (2010) argued variables of a data set are normal for skewness -2 to 2 and kurtosis -7 to 7. Therefor all the items of the data set including stress which was added

only for background understanding are normally distributed as they are in the acceptable range of -7 to 7 kurtosis and skewness -2 to 2.

The reliability analysis was conducted to measure the internal consistency between items. Reliability of the scale items are normally tested using Cronbach's Alpha values. According to Hair et al (2012), the Cronbach's Alpha values must be equal or greater than 0.7. Based on the above table, the items in the scale construct are considered as acceptable because all the Cronbach's Alpha values are above 0.7, except TR (0.440). Despite this, it was decided to retain all the items as Cronbach's Alpha for the overall scale is 0.910.

FACTOR ANALYSIS

Rotated Component Matrix*						
	Component					
	1	2	3	4	5	6
WIPL 9	.882					
WIPL 10	.880					
WIPL 5	.874					
WIPL 11	.856					
WIPL 7	.820					
WIPL 6	.815					
WIPL 12	.754					
WIPL 4	.650					
WIPL 3	.608					
WIPL 2	.690					
WIPL 1	.802					
LS 5		.678				
LS 6		.544				
LS 7		.646				
LS 4		.640				
LS 8		.806				
LS 3		.483				
LS 2		.539				

Factor loading and Average variance extracted are essential metrics used to measure Convergent validity. According to Hair et al (2012) the minimum factor loading recommended is 0.5. However, under exploratory factor analysis values greater than 0.4 are acceptable for further analysis (Hair et al ,2012). In this study, the values generated as factor loadings through exploratory factor analysis are greater 0.4, justifying the retention of all the items for further analysis. Further, all the values are greater than 0.5, except LS (0.483) and TS (-0.460). Although with this exception, the results

as shown in the table above support that items in the construct are convergently valid.

In terms of Average Variance Extracted (AVE) all the values constructed are above 0.5, confirming that overall construct is convergently valid. Although stress was not examined as a mediator its construct validity was tested to ensure accurate background insights.

DISCRIMINANT VALIDITY

Discriminant Validity						
	WIPL	PLIW	TS	TP	TR	LS
WIPL	0.926					
PLIW	.682**	0.777				
TS	-.236**	.089	0.725			
TP	.051	-.009	.325**	0.824		
TR	.160*	.361**	.642**	.230**	0.840	
LS	.778**	.647**	-.154*	.087	.304**	0.787

Assessing discriminant validity of the item construct is important for validating the measurement model. According to the Fornell-Larcker criterion, the discriminant validity is established if the square root of AVE is greater than the correlation coefficient values. The table above shows the discriminant validity of the item construct. All the values, the square root of correlation coefficient is smaller than the Average Variance Extracted (AVE). Further, as the square root of AVE values are greater than the correlation coefficient, the item constructed is discriminant valid. Though stress is not part of hypothesis testing , its included to show acceptable discriminant properties.

DESCRIPTIVE MEANS

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
WIPL	190	3.5917	.79555	-.425	.176	-.661	.351
PLIW	190	3.0466	.87112	.022	.176	-.421	.351
TS	190	3.8258	.67786	-.683	.176	.363	.351
TP	190	4.1602	.35539	.032	.176	-.405	.351
TR	190	3.6289	.53908	.142	.176	-.057	.351
LS	190	3.5178	.74664	-.230	.176	-.618	.351
Valid N (listwise)	190						

The descriptive means of the survey provide valuable understandings of teachers work-life balance on various aspects. The results show that Teacher's performance (TP) had the highest Mean score (4.1602), reflecting teachers agree with this aspect. Further Teachers satisfaction (TS,3.82528) and Teacher's retention (TR,3.6289) also received a moderately high score reflecting agreement among respondents. In contrast, work-life interference with personal life (WIPL, 3.5917) and level of stress (LS, 3.5178) both the aspects reflected a moderate level of agreement among respondents. And last, personal life interference with work (PLIW) has a mean score of (3.0466) indicating that personal life has more impact on work. Although stress was not included in hypothesis testing, its moderate level supports the context of high workload pressures.

CORRELATION

Correlations							
		WIPL	PLIW	TS	TP	TR	LS
WIPL	Pearson Correlation	1	.682**	-.236**	.051	.160*	.778**
	Sig. (2-tailed)		.000	.001	.485	.028	.000
	N	190	190	190	190	190	190
PLIW	Pearson Correlation	.682**	1	.089	-.009	.361**	.647**
	Sig. (2-tailed)	.000		.224	.905	.000	.000
	N	190	190	190	190	190	190
TS	Pearson Correlation	-.236**	.089	1	.325**	.642**	-.154*
	Sig. (2-tailed)	.001	.224		.000	.000	.034
	N	190	190	190	190	190	190
TP	Pearson Correlation	.051	-.009	.325**	1	.230**	.087
	Sig. (2-tailed)	.485	.905	.000		.001	.231
	N	190	190	190	190	190	190
TR	Pearson Correlation	.160*	.361**	.642**	.230**	1	.304**
	Sig. (2-tailed)	.028	.000	.000	.001		.000
	N	190	190	190	190	190	190
LS	Pearson Correlation	.778**	.647**	-.154*	.087	.304**	1
	Sig. (2-tailed)	.000	.000	.034	.231	.000	
	N	190	190	190	190	190	190
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

The correlation table above shows the significant relationship between variables. There is a significant positive relationship between work life interference and personal life interference (0.682) indicating as work life interference increases, personal interference increases too. A moderate negative correlation is between work-life interference with personal life and teachers' satisfaction (-0.236) indicating work-

life interference with personal is associated with low satisfaction of teachers. Further, it shows that WIPL has a strong correlation with level of stress (LS) (0.778), indicating that an increase in WIPL increases the level of stress. In addition, the results show that there is weak correlation between WIPL and Teachers retention (TR), (0.160), reflecting that increase in WIPL may contribute to higher retention of teachers. Similarly, there is no significant relationship between WIPL and teachers' performance (TP) (0.051), indicating that WIPL does not affect the performance of teachers.

Moreover, the table above reveals that personal life interference with work (PLIW) is correlated (0.647) with level of stress and moderately correlated (0.361) with Teacher's retention (TR). The result indicates that increase in PLIW moderately affects teachers' level of stress and retention. Further, a moderate positive correlation (0.642) was found between Teacher's satisfaction and retention, revealing satisfaction level affects retention of the teachers. In contrast, there is no significant correlation (-0.009) between PLIW and teachers' performance. Teacher's satisfaction has a negative weak correlation (-0.154) with stress, though it's a weak correlation it indicates that higher level of satisfaction is linked to decrease in level of stress. Overall, the findings on the table above highlight that work life balance has a strong correlation with stress and a moderate correlation with teachers' performance and retention. Further it reveals that teachers' satisfaction is related to teachers' satisfaction and performance.

REGRESSION ANALYSIS

Model Summary ^a									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.379 ^a	.144	.135	.50143	.144	15.723	2	187	.000
a. Predictors: (Constant), PLIW, WIPL									
b. Dependent Variable: TR									

Based on the table above the Adjusted R-square of the model is 0.135 indicating that predictors Personal life interference with work (PLIW) and work interference with personal life (WIPL) together only explain 13.5% of the change in teachers' retention (TR). Therefore, this suggests that this is not a strong model fit as it does not explain 60% of changes in teachers' retention. However, the model is sound and valid to predict the outcomes, as F-change is highly significant (15.723). Additionally, the model does not exhibit autocorrelation, as indicated by the Durbin Watson value of 2.2, which falls between 1.5 to 2.5. Despite the limitation, the model shows consistent predictions of teacher's retention based on the predictors.

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.135	.170	18.448	.000		
	WIPL	-.109	.063	-.162	.082	.535	1.871
	PLIW	.291	.057	.471	.000	.535	1.871

a. Dependent Variable: TR

The table above explains the influence of independent variables (WIPL, PLIW) on the dependent variable (Teacher's retention) and its significance. The constant beta coefficient of constant (3.135) suggests that whether there is a variance or no variance in the independent variables, the teacher's retention will be enhanced by 3.135 units.

Further, the result above suggests that independent variables have varying significant impacts on teachers' retention. Among the variables, PLIW indicates a positive relationship with teachers' retention (0.291), meaning that increase in PLIW is connected to teachers' retention. In contrast, WIPL has a significantly negative impact on teachers' retention (-0.109).

Model Summary ^a										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
2	.078 ^a	.006	-.004	.35619	.006	.577	2	187	.563	.990

a. Predictors: (Constant), PLIW, WIPL

b. Dependent Variable: TP

Based on the table above the Adjusted R-square of the model is 0.135 indicating that predictors Personal life interference with work (PLIW) and work interference with personal life (WIPL) together only explain 13.5% of the change in teachers' performance (TP). Therefore, this suggests that this is not a strong model fit as it does not explain 60% of changes in teachers' performance. Further, the model is not valid to predict the outcomes, as F-change value is (0.577). Additionally, the model does not exhibit autocorrelation, as indicated by the Durbin Watson of 0.990, which falls out of the range between 1.5 to 2.5.

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
2	(Constant)	4.090	.121	33.889	.000		
	WIPL	.048	.045	.106	.1067	.535	1.871
	PLIW	-.033	.041	-.081	.816	.535	1.871

a. Dependent Variable: TP

The table above explains the influence of independent variables (WIPL, PLIW) on the dependent variable (Teacher's performance) and its significance. The constant beta coefficient of constant (4.090) suggests that whether there is a variance or no variance in the independent variables, the teacher's performance will be enhanced by 4.090 units.

The result above suggests that independent variables have a weak impact on teachers' performance. Among the variables, PLIW indicates a negative relationship with teachers' performance (-0.033), meaning that increase in PLIW has a very or low impact on teachers' performance. In contrast, WIPL has a positive relationship with impact on teachers' performance (0.048). However, it is statistically not significant.

Model Summary ^a										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
3	.415 ^a	.172	.163	.62013	.172	19.411	2	187	.000	1.945

a. Predictors: (Constant), PLIW, WIPL

b. Dependent Variable: TS

Based on the table above the Adjusted R-square of the model is 0.163 indicating that predictors Personal life interference with work (PLIW) and work interference with personal life (WIPL) together only explain 16.3% of the change in teachers' satisfaction (TS). Therefore, this suggests that this is not a strong model fit as it does not explain 60% of changes in teachers' satisfaction. Additionally, the model does not exhibit autocorrelation, as indicated by the Durbin Watson value of 1.945, which falls within the range is between 1.5 to 2.5. Despite the limitation, the model shows consistent predictions of teacher's satisfaction based on the predictors.

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
3							
(Constant)	4.415	.210		21.009	.000		
WIPL	-.472	.078	-.554	-6.087	.000	.535	1.871
PLIW	.363	.071	.467	5.127	.000	.535	1.871

a. Dependent Variable: TS

The table above explains the influence of independent variables (WIPL, PLIW) on the dependent variable (Teacher's satisfaction) and its significance. The constant beta coefficient of constant (4.415) suggests that whether there is a variance or no variance in the independent variables, teacher's satisfaction will be enhanced by 4.415 units.

Further the result above suggests that independent variables have a weak impact on teachers' performance. Among the variables, WIPL indicates a negative relationship with teachers' satisfaction (-0.472), meaning that increase in WIPL has low impact on teachers' Satisfaction. In contrast, PLIW has a moderate positive relationship with impact on teachers' satisfaction (0.363). indicating that increase in PLIW is associated with teachers satisfaction.

DISCUSSION

Discussion of findings

The profession of teaching is considered a

challenging profession that requires a balance of work and personal life. The work-life balance of a teacher has a direct impact on organizational success as well as on students' performance. This study aimed to explore the impact of work-life balance on teachers' performance, retention, and satisfaction. This study found a negative, not statistically proven, relationship between work-life interference with personal life and teacher retention. Particularly the results suggested that an increase in work-life interference with personal life decreases teachers' retention in that organization. This finding is in line with previous studies, Panda and Sahoo (2021) who found a positive relationship between WLB and employee's retention. Also, it revealed that WLB has a major role in employees' decision to increase involvement and to leave or remain at the company. Similarly, a study by Abdulaziz et al., (2022) pointed out that WLB has shown positive changes in organizational commitment supported by personal and professional growth. Although the effect was not significantly proven, the trend supports that an increase in work influences teachers' decision to leave the profession or the organization.

Moreover, this study revealed that work-life balance and teacher performance are not linked directly. Both WILP and PLIW showed varying relationships with teachers' performance. However, several studies show that work-life balance is strongly or moderately related to teacher's performance. Further organizational support and a positive work environment enhance their performance (Paramita and Supartha , 2022; Balbes and Quines , 2022; Roselin, 2024; Suci et al., 2022).

Furthermore, a healthy work-life balance among teachers leads to satisfaction in their jobs reducing stress level (Çobanoglu et al., 2023). This study found a negative relationship between work-life balance and teachers' satisfaction, suggesting that work-life interference with personal life

decreases the level of job satisfaction. This is in line with previous studies that indicated that work-life conflict issues can lead to demotivation, burnout, dissatisfaction, and increased intention to leave the profession (Boamah et al., 2022; Ordu, 2021; Sari and Seniati, 2020). Although the relationship was not significant in this study, it suggests that focusing on work-related issues and their interference with personal life is important to address to improve teachers' job satisfaction.

Implications of the study

Based on the results of this study, the following implications could be considered for educational administrators, policymakers, and senior management members of the schools. As teachers' satisfaction is strongly influenced by the level of stress, policymakers and along with school management can implement wellness programs and most importantly emotional and school management support to enhance teachers' satisfaction and retention. Furthermore, considering the relationship between personal life interference with work, schools, and policymakers can offer flexibility as much as possible to accommodate teachers' personal lives. Moreover, the interference of work-life with personal life impacts teacher's satisfaction and retention emphasizing the importance of minimizing work-related stress. School management can try to create a positive work environment, minimizing work-life conflicts, and reducing the workload of teachers, promoting a supportive work environment.

This study also contributes to expanding the frame of research on the work-life balance of teachers, providing refined understanding of factors such as teacher satisfaction, performance, and retention on work-life balance. It indicates that the relationship between work-life balance and other factors is varied, with both negative and positive effects.

Conclusion

This study explored the impact of work-life

balance on teacher's retention, performance, and satisfaction of teachers in Male' region. This study revealed that work-life balance plays a significant role, particularly in teacher's retention and satisfaction. Teachers who can balance personal and work life are reported to have higher levels of job satisfaction and are more likely in the profession. Conversely, work-life conflicts are related to increased turnover intention and dissatisfaction, reflecting the importance of balancing work and personal life. However, this study found no direct relationship between teacher's work-life balance and performance.

Overall, the study draws the focus to the importance of cultivating work-life balance among teachers for their well-being, job satisfaction, and retention. Further, this study provides valuable understanding for future investigations of additional factors affecting teachers' performance.

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Youth Engagement in Voluntary Work for Community Development: A Systematic Literature Review of Motivations, Impacts, and Barriers

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ABSTRACT

Youth volunteerism plays a crucial role in fostering civic engagement and community development, yet factors influencing participation remain multifaceted. This study systematically reviews recent literature to identify motivators, barriers, and the broader impacts of youth volunteerism. A systematic literature review (SLR) was conducted using the PRISMA framework. Studies from 2015 to 2025 were retrieved from Scopus, ScienceDirect, and JSTOR using defined Boolean search terms related to youth, volunteerism, and community development. Inclusion criteria focused on peer-reviewed articles addressing youth motivations, impacts, and barriers. After screening 205 articles, 31 were selected through a two-phase review process. Data were manually extracted using a literature grid, and thematic synthesis was applied for analysis. Grey literature and prior SLRs were also considered to ensure comprehensive coverage of relevant studies. Findings reveal that youth engagement is driven by intrinsic motivations such as altruism, empathy, and social responsibility, alongside extrinsic factors like skill development and career advancement. Institutional support, educational integration, and organizational flexibility significantly influence sustained participation. Key barriers include time constraints, lack of recognition, and limited program accessibility. Policymakers and practitioners should design inclusive, flexible, and skill-oriented volunteer programs integrated into educational and community structures to enhance youth engagement and contribute to long-term community resilience.

Keywords: Youth engagement, Voluntary work, Community development, systematic literature review

INTRODUCTION

Over the past decade, youth volunteering in community development has gained significant attention in the fields of youth research. Udoma et al., 2024 states that youth volunteerism in community development is a rapidly changing and intricate field that is necessary for developing a resilient and sustainable community. The direct participation of youth in voluntary initiatives has been more recognized as an effective tool for civic and sustainable growth as communities

meet delicate social, economic, and environmental issues. In fact, Lanero et al., 2017 also states that an engaged and active citizen is one who is confident, holds an understanding of social responsibility and invests in civic engagements. Studies in this area have explored various aspects such as the motivations that drive youth to volunteer, the measurable and immeasurable effects that impact their engagement on society as a whole, and the structural or personal barriers that hinder the engagement (Mory, 2024). In the Maldivian

context, where community ties are strong, yet youth unemployment and disengagement are rising concerns, understanding both the motivations for and the decline in youth involvement in voluntary work is both timely and essential. This study responds to these gaps by systematically reviewing existing literature to explore the motivations, impacts, and barriers of youth volunteerism in community development.

Although numerous studies have been done for youth volunteerism, the literature remains inconsistent. Ferreira et al. (2022) presents on the systematic review on youth engagement and volunteer tourism, respectively, however none of the findings have addressed the cultural or development context. Bullen et al., (2021) reports civic engagement, citizenship and participation for the city of Melbourne. Focusing on different studies, it has been found that limited studies on volunteerism have been conducted in the Maldives, though youth volunteerism is an untapped area in the Maldivian context. Furthermore, the existing studies are not addressed to motivations, impact and barriers where a systematic approach is necessary to map these dimensions. The purpose of this systematic review is to critically examine and gather current studies on youth engagement in voluntary work, with a focus on understanding the motivations, barriers, and broader impacts of youth volunteerism on community development. The aim of this review is to assist the development of updated plans and strategies to encourage youth volunteerism, particularly within the Maldivian context. By the basis of this study, this provides a foundation for enhancing youth participation in community-based initiatives. The research questions will be addressed by a larger context:

1. What factors influence the decision of youth to participate in voluntary community work?
2. What impact does youth volunteerism have on community development initiatives?
3. What are the main barriers and motivators influencing youth involvement in community-

based voluntary programs?

From the recent studies focused on youth volunteerism, there is a lack of consideration for society and the growth of youth development contexts. In this regard, Muñoz-Llerena et al. (2025) stress that motivation and satisfaction in specific volunteering sectors differ significantly across social factors. Likewise, Padilla-Racero and Álvarez-García (2023) mentioned how social and cultural values such as collectivism versus individualistic behaviour influence youth engagement and perceived barriers. Yet, current reviews do not integrate and fail to systematically synthesize these Western, high-income environments. Furthermore, variations in research designs and lack of methodological transparency contribute to bias and reduce comparability. Conducting a systematic review using the PRISMA framework enables a rigorous synthesis of findings, reduces bias, and identifies critical gaps in motivation, impact, and participation barriers—particularly within underrepresented regions and cultural contexts. Such synthesis is vital for developing inclusive, evidence-based policies on youth and community development.

This research will provide major insights by integrating current research on youth engagement in voluntary work for community development, focusing on their motivations, the impact of their contributions, and the barriers they face. The study enhances academic understanding by emphasizing recent developments and research shortcomings additionally offering practical insights for community groups and youth efforts. The findings may assist practitioners in designing more focused volunteer programs that align with youths' intrinsic motivations, while also informing policymakers on strategies to promote sustained engagement. Furthermore, by incorporating recommendations specific to the Maldivian context, this review supports localized policy development and encourages culturally relevant interventions. Ultimately, this work

aims to advance both theoretical knowledge and practical approaches, laying the groundwork for future research and evidence-based decision-making in youth and community development sectors. This paper is structured into five main sections. Section 2 outlines the methodology employed to conduct systematic review. Section 3 presents the key findings, followed by a detailed discussion in Section 4, which explores their broader implications. Finally, Section 5 concludes the review and offers recommendations for future research, with particular emphasis on the Maldivian context.

METHODOLOGY

This study adopts a systematic literature review (SLR) approach to explore the motivations, impacts, and barriers related to youth engagement in voluntary work for community development. The review was conducted using a structured search strategy across major academic databases, focusing on peer-reviewed articles published between 2015 and 2025. Specific inclusion and exclusion criteria were applied to ensure relevance and quality. The PRISMA framework guided the selection and screening process. Data were then thematically analyzed to identify key patterns and findings. This rigorous and transparent method ensures the reliability and replicability of the review process.

Search Strategy / Data Sources

A systematic search was conducted across three major academic databases: Scopus, ScienceDirect, and JSTOR. To ensure the relevance of the review to youth engagement in voluntary community work, a strategic combination of keywords and Boolean operators was used. Keywords included “youth,” “voluntary work,” “volunteerism,” “community development,” “motivation,” “barriers,” “participation,” and “engagement.” The Boolean search string used was: (“youth engagement”) AND (“voluntary work”) AND

(“community service”) The search was limited to peer-reviewed articles published in English between 2000 and 2025. Grey literature relevant to the topic was also included to provide a broader contextual understanding. Table 1 summarizes the keyword combinations and the number of search results retrieved from each database as of April 2025.

Table 1: Search Results by Database and Keyword Combinations

Database	Keyword Combination	Search Results
Scopus	(“youth engagement”) AND (“voluntary work”) AND (“community service”)	339
ScienceDirect	(“youth engagement”) AND (“voluntary work”) AND (“community service”)	1728
JSTOR	(“youth engagement”) AND (“voluntary work”) AND (“community service”)	1724

Scopus yielded the highest number of relevant articles, suggesting a broader indexing of recent studies on youth volunteerism. The use of refined Boolean operators helped narrow the results to the most pertinent studies related to motivations, barriers, and impacts of youth engagement in voluntary community development.

Inclusion and Exclusion Criteria

The studies selected for this review were based on clearly defined inclusion and exclusion criteria, as shown in Table 2. Studies were included if they were empirical research or review articles focusing on youth engagement in voluntary work for community development. Eligible studies examined youth motivation, impacts, and barriers, were published in peer-reviewed journals, and written in English between 2000 and 2025. Studies were excluded if they were conference papers, focused on health-related civic duties among youth (e.g., blood donation), did not target the youth population specifically, or were non-English publications. After screening 205 articles based on titles and abstracts, 30 articles were identified as eligible. An additional three articles were included from previous systematic reviews and

two from grey literature.

Table 2: Inclusion and Exclusion Criteria for Article Selection

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> - Empirical research or review articles - Focus on youth engagement in voluntary work for community development - Examined youth motivation, impacts, and barriers - Published in peer-reviewed journals - Written in English - Published between 2015 and 2025 	<ul style="list-style-type: none"> - Conference papers - Focused on health-related civic duties among youth (e.g., blood donation) - Did not specifically target youth population - Non-English publications

Screening and Selection Process

All search results were imported into Mendeley for reference management. No duplicate records were identified. Full texts of the selected studies were reviewed in detail to confirm eligibility. At this stage, no discrepancies were reported between the reviewers. The review process adhered to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta Analyses) guidelines to ensure transparency and replicability. The full screening and selection process is illustrated in the PRISMA flow diagram presented in the Appendix (Figure 1). PRISMA MODEL

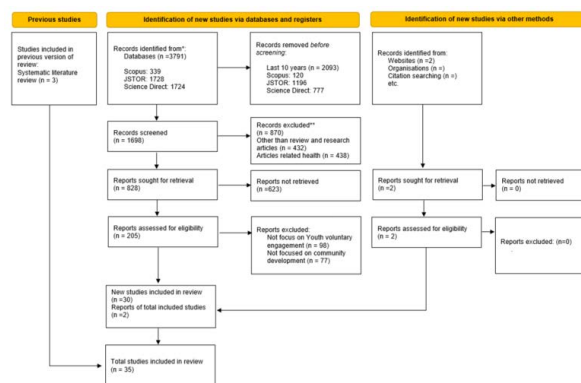


Figure 1. PRISMA MODEL

Data Extraction Process

A standardized data extraction form was developed to systematically collect relevant information from the 35 studies selected for inclusion. The extracted data included author(s), year of publication, study location, research focus, study design and methodology, key findings, and

relevance to youth volunteerism in community development. Any discrepancies in extracted data were resolved through discussion and verification. No automated tools were used in the process. The structured approach allowed for comprehensive comparison and synthesis of the studies.

Quality Assessment

The quality of the included studies was appraised using a combination of tools including SciSpace, ChatGPT, and Elicit. The assessment focused on key criteria such as research design rigor, validity of findings, sample size adequacy, and adherence to ethical standards. This multi-tool approach helped ensure a comprehensive evaluation of methodological quality and relevance. Studies that did not meet minimum quality thresholds were excluded to maintain the integrity and reliability of the systematic review findings.

Data Synthesis and Analysis

A thematic synthesis approach was employed to analyze and integrate the findings from the selected studies. This method was appropriate given the qualitative nature and heterogeneity of the included research, which varied in methodology, focus, and context. Data from each study were coded and organized into recurring themes aligned with the review's key objectives: motivations, impacts, and barriers to youth engagement in voluntary community work. These themes were further refined and categorized to ensure consistency and relevance in answering the research questions. Studies were grouped based on thematic focus and methodological approach to highlight patterns and differences across contexts. This synthesis allowed for a comprehensive understanding of the factors influencing youth volunteerism and its implications for community development.

FINDINGS

This section presents the key findings obtained from a systematic review of comprehensive

literature, aiming to answer the research questions: (1) What factors influence the decision of youth to participate in voluntary community work? (2) What impact does youth volunteerism have on community development initiatives? and (3) What are the main barriers and motivators influencing youth involvement in community-based voluntary programs?

Final analysis consists of 31 studies, including peer-reviewed articles, prior systematic reviews and relevant grey literature published between 2015 to 2025. The findings are organized into three major thematic areas: motivational factors, impacts on community development, and barriers to participation. The synthesis offers a comprehensive understanding of youth engagement in voluntary work across diverse contexts.

Motivational Factors Influencing Youth Engagement in Voluntary Work

Studies show that youth engagement in volunteerism is driven by a range of intrinsic and extrinsic motivations, formed by cultural and contextual factors and recent technological influences (Mokhzan & Yasin, 2023; Wondimu & Admas, 2024; Kadir et al., 2024; Utemisova, 2025).

Intrinsic Motivations

Recent studies indicate that youths are often motivated and driven to participate in voluntary activities due to intrinsic motivations; desires to help (altruism), emotional connection to people (empathy) and a strong belief of commitment to civic duties (Mokhzan & Yasin, 2023; Utemisova, 2025). Altruistic motivation induced by empathy encourages youth to contribute selflessly to community needs without any ulterior motives. Although, youths are also driven towards volunteerism because of personal growth, self-confidence and identity development, seeking to improve their skills and self-efficacy (Wondimu & Admas, 2024; Kadir et al., 2024).

Extrinsic Motivations

A mixed study conducted by researchers Wondimu and Adams (2024) at the University of Gondar, Ethiopia presented that the students engaged in volunteerism to enhance their resumes and gain career enhancing experiences. Similarly, in another study done in central and eastern European universities, identified youth volunteering is primarily motivated for career focused enhancements, aiming to gain work experience, professional knowledge development and networking opportunities (Fényes, Markos, & Mohácsi, 2021).

Cultural and Contextual Influences

Globally motivational factors vary; culture that resembles collectivism emphasizes community cohesion and shared responsibility, in contrast individualist societies often prioritize personal gains (Baillie Smith & Laurie, 2016; Smith et al., 2020). Furthermore, in comparison to developed countries, youth from developing countries may be motivated to volunteer due to the social change aspirations (Baillie Smith & Laurie, 2016; Ferreira et al., 2022). These findings indicate that volunteerism among youth varies across different regions.

Role of Technology

Volunteerism among youths is increasing due to the improvement of connectivity and easy access to opportunities, because of the facilitation of digital platforms and social media (Ghory & Ghafory, 2021). However, digital divides may limit this benefit for some groups. Together, these diverse motivators highlight the need for tailored volunteer programs that address both personal aspirations and broader cultural contexts.

Impacts of Youth Volunteerism on Community Development

Youth volunteerism helps the foster of a community due to the positive effects it has on improving social capital, enhancing

civic engagement and promoting sustainable development (Bekkers, 2016; Lanero et al., 2017; Bullen et al., 2021).

Social Capital and Community Empowerment

Studies have shown volunteering develops social networks and trust, resulting in strengthening of social cohesion and community resilience (Bekkers, 2016; Musick & Wilson, 2017). Moreover, youth volunteers often change into active civic leaders, influencing and mobilizing peers toward community goals (Bullen et al., 2021; Lanero et al., 2017).

Personal and Social Benefits

Findings also indicate that engaging in volunteer work improves youths' well-being, self-esteem, and interpersonal skills (Ducharme, 2023; Kadir et al., 2024). These personal gains enhance their future employability and social integration.

Sectoral Impacts and Sustainability

Youth involvement in sectors such as education, health, and disaster response addresses immediate community needs and supports development efforts. The volunteerism of youth in fields such as education, health and disaster responses addresses immediate community needs and facilitates development efforts (Whittaker et al., 2015; Shaw & Dolan, 2022). However, concerns arise regarding short-term volunteer projects or volunteer tourism, which may fail to provide lasting benefits unless they are well-aligned with community priorities (Avolio et al., 2024; Baillie Smith & Laurie, 2016). These effects highlight how crucial it is to implement consistent, situation-specific volunteer programs that optimize community and youth development results.

Barriers and Challenges to Youth Participation in Voluntary Work

Despite evident advantages, youths encounter several obstacles that hinder their complete participation in volunteer activities, including

personal, social, and organizational aspects.

Time Constraints and Competing Priorities

Academic obligations, professional duties, and family responsibilities often constrain the time available for voluntary work (Holdsworth & Brewis, 2014; Mori, 2024).

Lack of Awareness and Access

Studies indicate that within resource-constrained areas, a significant number of youths lack information about volunteering opportunities, or they face logistical challenges in accessing volunteering roles (Rais et al., 2021; Udoma et al., 2024).

Social and Cultural Barriers

Conventional norms and limiting societal expectations, particularly in conservative environments, may inhibit youth autonomy and reduce engagement (Baillie Smith & Laurie, 2016; Smith et al., 2020).

Organizational and Structural Issues

Recent research also shows that poor management, insufficient training and lack of recognition reduce the motivation of youth for the engagement of volunteerism (Smith et al., 2020; Mori, 2024).

Contradictory Effects of Policy and Technology

Research has shown that mandatory volunteerism policies can reduce youth's intrinsic motivation, reducing the enthusiasm and long-term involvement of civic activities (Smith & Lee, 2024). Furthermore, studies also show that when volunteering is made mandatory it affects the youth's perception on volunteerism, and feel voluntold (Kim & Morgül, 2017; Bekkers, 2020). In addition, recent research suggests that mandatory programs may result in civic apathy or disengagement, particularly when there is a lack of autonomy and choice in the experience (Smith & Lee, 2024). To address these barriers, it

is essential to implement comprehensive strategies such as flexible scheduling, awareness campaigns, enhanced volunteer management, and equitable access to technology to promote sustained youth engagement.

DISCUSSION

This systematic literature review aimed to synthesize current research on youth engagement in voluntary work, focusing on motivations, impacts, and barriers within community development. By analyzing findings across 31 peer-reviewed studies published between 2015 and 2025, this discussion explores the important dimensions such as motivational factors, the contributions of youth volunteering to development, youth inclusion, community engagement and empowerment, as well as challenges that hinder participation.

The first key theme, on the motivational factors driving youth engagement are consistent with prior research on intrinsic motivations such as empathy, altruism, and personal growth emerged as dominant drivers (Batson, 2010; Kadir et al., 2024). Extrinsic motivational factors like career advancement also play an important role in volunteerism, especially among university students (Handy et al., 2010). Notably, the review highlighted the importance of socio-economic factors and suggests that motivations vary substantially between societies that value collectivism versus individualism societies (Grönlund et al., 2011; Smith et al., 2020). This revelation underlines that volunteer programs must be designed to socio-cultural and economic contexts rather than adopting a one-size-fits-all approach. Additionally, the rise of digital platforms was identified as a developing enabling factor for youth engagement (Ghory & Ghafory, 2021).

The second theme addresses the impacts of youth volunteerism on community development and individual outcomes. The findings illustrate that volunteering reinforces and promotes social capital, civic engagement, and community

resilience (Bekkers, 2016; Musick & Wilson, 2017). The advantages for an individual's personality such as improved well-being and skills development were also evident (Ducharme, 2023). However, the sustainability of short-term volunteer initiatives such as volunteer tourism has been questioned and implies the need of aligning with long term community vision and goals to ensure more sustainable and meaningful impact (Avolio et al., 2024; Baillie Smith & Laurie, 2016).

The third theme explores barriers for youth engagement in volunteerism. Significant challenges have been cited to relate to constraints, lack of awareness, cultural restrictions, and organizational shortcomings (Holdsworth & Brewis, 2014; Rais et al., 2021). Interestingly, the review also reveals the unintended negative effects of mandatory volunteering policies on intrinsic motivation (Stukas et al., 1999), alongside accessibility of digital platforms further exacerbate inequities (Ghory & Ghafory, 2021). These barriers underscore the importance of flexible, inclusive, and well-managed volunteer programs.

In relation to existing literature, this review reinforces established theories on altruistic motivation and social capital but expands on them by integrating the role of modern technology and cultural nuances. Unlike earlier reviews that emphasized uniform frameworks, this study highlights the necessity of localized adaptation to optimize youth engagement outcomes (Smith et al., 2020; Ferreira et al., 2022). The findings also challenge assumptions that volunteering benefits are universally accessible, drawing attention to structural inequities that require targeted interventions.

IMPLICATIONS

The review contributes to a more contextual understanding of youth volunteerism and has important implications for theoretical models on motivation. It also sheds light on the need for youth

volunteerism and activism to incorporate cultural, technological, and policy dimensions. Practically, the findings inform educators, community leaders, and volunteer organizations about the importance of designing flexible programs that address diverse motivational aspirations of youth and address barriers for youth engagement and participation. For example, the integration of digital tools can enhance outreach. These efforts must be accompanied by efforts to bridge gaps in accessibility

Policymakers must prioritize capacity building and community partnerships programs that are sustainable and encourage meaningful participation over short-term rewards of compulsory volunteering mandates. Investments and resources in volunteer management infrastructure, awareness campaigns, and technology access can foster more inclusive and effective youth participation. Such investments must foster partnership with international development initiatives, international Not for Profit Organisations with local efforts. This intervention aligns with evidence-based practices indicating that long-term youth engagement fosters greater benefits for promoting youth inclusion, engagement and participation to promote community engagement and social cohesion.

LIMITATIONS

This review has limitations, including language restrictions to English and reliance on available databases, potentially excluding relevant studies from non-English speaking regions. Publication bias toward positive findings and variability in study quality further constrain the generalizability of results. Additionally, inconsistent use of metrics across studies limits the feasibility of meta-analysis. Furthermore, the limitations of time constrained the scope and rigor of inclusion.

FUTURE RESEARCH

Future research should address these gaps by employing longitudinal designs, comparative studies across diverse socio-economic settings, and underrepresented populations, particularly in regions like the Maldives and similar contexts. Furthermore, volunteerism focused on specific themes discussed and new and emerging issues such as digitalism and volunteerism in the digital platforms. Expanding focus on digital engagement and policy impacts will also enhance understanding of emerging trends in youth volunteerism. Comparative research focusing on Small Island Developing States would also provide greater insights for developing evidence-based policies on volunteerism to SIDs countries such as the Maldives.

CONCLUSION

In conclusion, this review advances knowledge on youth engagement in voluntary work for community development by synthesizing recent research across multiple contexts. It notes the need for culturally sensitive, theory-informed, and practice-oriented approaches to maximize the positive impact of youth volunteerism while addressing persistent barriers. These insights provide a foundation for future research, program design, and policymaking aimed at fostering meaningful and sustained youth involvement in community development. Such initiatives underscore the value of youth in community development initiatives to prevent the existing issues of societal fragmentation and ensure security, harmony, peace and stability.

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