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SYSTEMATIC REVIEW

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A systematic review on mental health and its associated factors among educators in Malaysia

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Abstract

Background Mental health is a vital aspect of health and wellbeing that supports our capacity as individuals and as a society to make choices, form bonds with one another, and influence the world we live in. This review aims to identify and synthesize research on mental health and its associated factors among educators in Malaysia. Given the rise in mental health issues among educators, it is crucial to understand the risk factors and develop supportive environments to promote mental well-being. By investigating the causes of poor mental health among educators, this review seeks to provide recommendations based on evidence for future research priorities, policy, and practice, particularly in Malaysia.

Methods This systematic review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria. A total of 488 studies were identified from five databases namely Scopus, PubMed, Web of Science, Science Direct, and PsycINFO with 30 articles meeting the inclusion criteria. Covidence tool is used for screening and data extraction.

Results The findings highlighted six major themes as significant predictors of poor mental health among educators in Malaysia were work-family conflict and demands, pandemic impact, work environment, physical health, personality traits, and workload.

Conclusions The outcomes of this review support future policy research on academic well-being, aiming to improve work-life balance for educators. Stakeholders can work towards creating a more supportive, productive, and sustainable academic environment in Malaysia.

Keywords Mental health, Educators, Malaysia, Systematic review, Factors

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Background

The frequency of mental health issues among adults in Malaysia has risen from 8.9% in 2012 to 10.7% in 2015 to 31.1% in 2019 [1]. The findings also show that Malaysian students made up the majority of the instances that were reported [2]. An increase in suicide cases among mental health patients is also indicated by a different survey report from the National Health and Morbidity Survey (NHMS) [1]. According to the report, 10% of the 5.5 million youngsters in this country, or at least one in ten, have considered suicide. The poor mental health of professors in higher education and continuing education is a growing public health and policy concern. In a recent study done in Malaysia, it was found that clinical depression affected 27.7% of the 278 staffs from academic institution in Malaysia due to low income, working in an urban campus, low-tier job type, and inadequate workplace amenities [3]. According to estimates from the World Health Organization [4], about 300 million people worldwide suffer from depression. Depression affects people across all ages, genders, and cultures. According to the World Health Organization (WHO) in 2021, over 280 million people globally experience depression.

According to the National Health and Morbidity Survey [1], there was nearly a threefold rise in adult Malaysians' mental health problems between 1996 and 2019. Despite the fact that mental health problems are on the rise across the country, a local study conducted in 2016 [5] revealed that the percentage of academic staff members with depression at higher education institutions is approximately 35.4%, which is three times greater than the local population. It is concerning that the impacts of mental health difficulties of educators could have a negative impact on the institution's success as well as the staff and students' quality of life [6]. Furthermore, it was already widely acknowledged that teaching is a very stressful profession [7]. Educators are more stressed during pandemic and are more vulnerable to anxiety and burnout due to the increased workload and expectations brought on by the outbreak [8]. Poor mental health among educators can have a detrimental effect on both educators and their students. It has been demonstrated that educators' psychological well-being has an impact on their students' psychological well-being as well where for instance, instructors might be less adept at good behaviour management in the classroom or more prone to exhibiting negative feelings or actions [9].

A career in academia has the potential to be enduring, motivating, and fulfilling. It is also a chance for learning, teaching, developing oneself, and accumulating achievements on a personal level. But none of these successes come without difficulties [10]. There is occasionally a widespread misconception that faculty members only work as instructors [11]. In spite of popular opinion, most higher education institutions want their staff to teach, work with colleagues, conduct research, and support both the university and the community. Multiple duties and a wide range of duty expectations create an interesting dynamic state that may have an impact on mental health and well-being [12].

Regarding mental health's detrimental effects on educators, research has shown that it can hasten career attrition [13], show up behaviourally as physical violence and increased hostility [14], and be linked to burnout and work discontent. On the other hand, educators who felt in charge of their own mental health reported feeling more satisfied with their jobs and experiencing less emotional tiredness [15]. Kourmousi and Alexopoulos [16] discovered that longer commutes between the educators' home and place of employment can exacerbate stressors related to discipline and motivation. Current trends indicate that Malaysia's public universities have a greater rate of burnout than private institutions, and local statistics further confirmed the severity of academician burnout [17]. It is difficult for Malaysian academics to engage in research, teaching, consultation, supervision, and publication activities [5, 18]. Educators and students at academic institutions must maintain good health in all areas of life if academic achievement is to increase and optimal quality of life is to be shared.

Besides that, poor academician's well-being may have an adverse effect on both the academician and their students' long-term mental health [19]. There may be a connection between the welfare of educators and students due to a number of intricately interwoven elements. Self-rated presenteeism among educators, is characterised as a worker who performs poorly at work due to a health issue [20]. Presenteeism may negatively impact students' mental health since educators are unable to establish a secure and supportive learning environment and are finding it more difficult to run their classes effectively [21]. Furthermore, it could be challenging for educators who are struggling with their mental health and wellbeing to establish and model positive interactions with students [21]. Moreover, when educators encounter poor well-being, their confidence in their ability to assist students with emotional issues will diminish [22].

The experience of being an academician and the prevalence of mental health issues among educators may have changed as a result of policy changes. However, the largest shift has undoubtedly been the decision to increase access to higher education for a wider range of people. It is unclear to what degree the rise in poor mental health is also affecting educators of a comparable age, and more research is necessary to fully understand this relationship. But given the rise in mental health issues, particularly among educators, it's important to know what the risk factors are and what can be done in these settings

to make sure educators are growing, learning in settings that support mental wellbeing. Furthermore, investigating and better understanding the causes of educators' poor mental health is essential to creating services that better match their needs and creating environments that promote the development of mental wellbeing.

The aim of this study was to review the risk factors for mental health among Malaysian academics. Our objective was to enhance our comprehension of the factors contributing to the poor mental health of Malaysian educators and with the findings will be helpful for future research goals, policy, and practice.

Methods

This review has been registered under PROSPERO, [Registration ID (CRD42024505815)] and has been approved by IMU Joint Committee on Research and Ethics (BPS I-2024 [12]). We adopted the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines for this systematic review.

Identifications of literature

Five distinct internet databases namely Scopus, PubMed, Web of Science, Science Direct, and PsycINFO—were used to find literature. Targeting items published in the previous ten years, the search was carried out from the last week of April 2023 to January 2024. Keywords that should be used were determined by looking through previous research on mental health, words associated with the term "mental health", "depression", "well-being", "mental illness", "stress", "burn out", "mental disorder", "psychological health", "emotional health", "mental well-being", and "mental balance" were sourced. Additionally, the search capabilities of the chosen online literature databases were examined prior to deciding on the keyword string to be employed. Since the database search engines already included special symbols to encourage truncation of used keywords, they were left out. The last set of terms that were utilised was "(mental health OR depression OR well-being OR mental illness OR stress OR burn out OR mental disorder OR psychological health OR emotional health OR mental balance OR mental well-being)" AND "(factor OR risk factor OR associated factors OR aspect OR cause OR component OR influence)" AND "(academician OR lecturer OR teacher OR instructor OR educator OR scholar OR faculty member OR academia OR professor OR educationist)" AND "(Malaysia)". In total about 488 articles searched were imported into Covidence software.

Table 1 Criteria

Criteria	Inclusion	Exclusion
Timeline	Between 2014 to 2024	Before 2014
Language	English and Malay	Languages other than English and Malay
Type of articles	Research articles, grey literatures	Review papers
Content	Factors associated with mental health among educators in Malaysia	Does not address factors associated with mental health among educators in Malaysia
Setting	Studies from Malaysia only	Any other countries besides Malaysia
Samples	Educators only	Non-educators

Eligibility and screening

Using Covidence software, the literature was screened through a number of stages. First, relevant articles were chosen by carefully examining their titles and abstracts. Next, the articles were closely examined to see if they met the requirements to be included in the review. To help these processes and guarantee that a logical selection of articles is chosen for the review, inclusion and exclusion criteria were established as guidelines. This allowed the researcher to accurately accomplish the goal of the study. First, only articles written in English and Malay language only were vetted to streamline the review process and prevent articles' contents from being misunderstood owing to translation errors. Secondly, a timeline spanning a decade, from 2014 to the current year, was set, considering the development of the technological scene which may have differed too vastly in the previous decade given how rapidly technology has evolved, possibly affecting the findings regarding educators' mental health. In addition to that, only research articles that discuss and elaborate on mental health and its associated factors were included. Besides that, only articles that have studied the samples from Malaysia has been included in this review.

In the current review, mental health was characterized as any response to a dynamic condition of internal balance characterized by the ability to deal with life's obstacles to operate in social roles among educators in Malaysia. Additionally, articles which do not clearly identify the relationship between mental health and its associated factors and approach the topic through the lens of educators in Malaysia were excluded to avoid misinterpretation of the results. The criteria are better presented in Table 1. To help with the title, abstract, and full-text review, all retrieved publications were exported onto a reference manager (RIS), which was then successively loaded into Covidence. To create a shortlist of pertinent papers, we first reviewed the abstracts and titles. Each complete text was evaluated for appropriateness in turn. Out of 488 articles, 8 articles were detected as duplicate by the Covidence software, and the remaining 480 studies were screened with the reference list, which was performed by two reviewers (the second and third author). The title and abstract of each paper were evaluated for relevance during the first screening step, 174 titles were

removed, and 232 articles were used to screen the full text review. Several manuscripts were eliminated for various reasons after reading the entire article such as studies that did not meet the inclusion criteria as stated in Table 1. There were 30 studies that were included and found eligible for the review. The PRISMA flow diagram is shown in Fig. 1.

Quality assessment

The methodological quality of the selected studies was evaluated by using the Covidence software. The study design, methodological rigor, sample size, and risk of bias domains were among the evaluation criteria that were predetermined in accordance with the research question. The evaluation of studies was based on how well they adhered to established quality standards in their respective domains. For documenting assessments on different bias domains, such as reporting bias, attrition bias, detection bias, performance bias, and selection bias, Covidence offered an organised framework. Before the formal assessment, a calibration exercise was carried out to guarantee consistency and dependability in the quality assessment procedure. Through consensus sessions, reviewers addressed differences and improved their

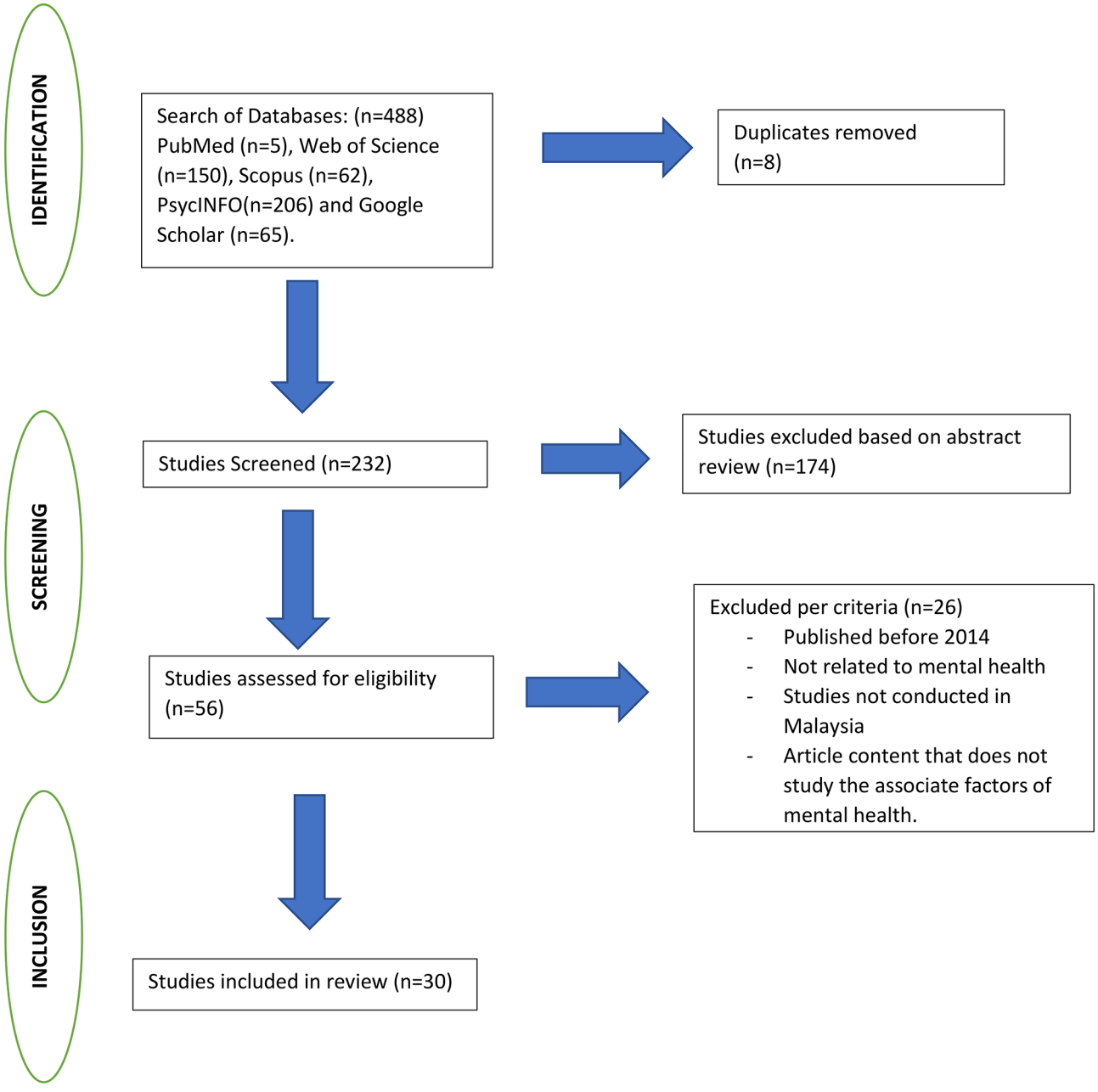

Fig. 1 PRISMA flowchart

comprehension of the assessment criteria. Using Cohen's kappa coefficient to measure inter-rater reliability, significant agreement was found (κ=0.80). Every included study was assessed in relation to the predetermined standards, and assessments of the potential for bias were noted. With few cases of notable bias, most studies showed moderate to high methodological quality overall.

Results

Characteristics of study

Eventually, we identified 30 articles that met our inclusion criteria which consist of two qualitative design research utilizing interpretative phenomenological analysis [23], and one mixed-method study [24] respectively. Amongst the quantitative research articles, there was one longitudinal study [25], while the rest consisted of quantitative cross-sectional studies [5, 26–51]. Participants in the studies ranged between 25 years to 65 years old. There are a few research studied on university faculty members [5, 26–29, 32, 36, 41, 43], school principal [24] public school teachers [23, 30, 31, 33–35, 37–40, 42]. Table 2 showed the general description of studies and Table 3 discussed the findings of the studies included.

Synthesized findings

Work–family conflict and demands

The ubiquitous impact of work-family friction and pressures on personal well-being was one of the main themes that surfaced [26]. A recurrent issue was the effect of autonomy and workload on work-life balance, with high workloads frequently resulting in higher stress levels and a reduced ability to handle family obligations [27, 29]. Furthermore, the difficulties in juggling work and family obligations were made worse by role ambiguity, overload, and conflict in the workplace [37]. Interestingly, the perception and experience of work-family conflict were shaped by gender differences and teaching experience, highlighting the complexity of this problem even further [52].

Pandemic impact

The pandemic's arrival presented numerous difficulties and profoundly changed the dynamics of work-life balance. Our analysis demonstrated the pandemic's significant effects on a range of personal aspects, most notably work-family balance [28, 30]. With the increasing prevalence of remote work and virtual learning, factors like insufficient technological proficiency and e-teaching competencies become critical. In addition, the pandemic intensified pre-existing stressors and work-family conflicts, with sociodemographic variables influencing the severity of these difficulties even more.

Work environment

Working environment is an employee's physical and mental workspace where they carry out their everyday responsibilities. It includes physical environment, working conditions and company culture. Rusdi et al. [35] suggests that the probability to experience stress decreases with increasing workplace quality. He also found that stress and the interpersonal relationships among coworkers are positively correlated. Student misbehaviour such as bullying, absenteeism and disrespectfulness were found as one of the leading contributing factors to mental health among educators [23, 38]. Besides that, Salina et al. [36], found that job satisfaction has been shown that a person's level of job satisfaction at work is influenced by a variety of factors, including leadership, social relationships, pay, advancement, and the job itself has influenced on academician's mental health.

Physical health

Educators who experience burnout may also experience physical health issues. Regarding this, poor sleep quality among educators is also one of the contributing factors to depression and stress [39]. Ng et al. [42] discovered that musculoskeletal disorders is one of the significant predictors of depression among teachers.

Personality traits

According to Aziz et al. [44] investigation into the connection between personality traits and educators' mental health in Malaysia, some personality qualities may have an impact on outcomes related to mental health in the academic setting. Desa et al. [46] study on the impact of personality on job stress among university for academician with administrative tasks highlighted the relationship between stress levels and personality features, with potential ramifications for administrative staff members' mental health.

Workload

In an empirical study on burnout among educators in Malaysian private universities, Chen et al. [45] found that high workloads, a dearth of institutional support, and pressure to publish were the main causes of considerable levels of burnout. When Kavita and Hassan [50] analysed the occupational stress levels of elementary and secondary school teachers, they discovered that the stress levels varied depending on the type of classroom management and administrative responsibilities. This suggests that stress experiences change depending on the educational level. Occupational stressors are also a cause for teacher burnout [23]. In addition, Mukosolu et al. [51] investigated the correlation between job stress and academic and non-academic staff at Universiti Putra Malaysia. They also identified important stressors like workload,

Table 2 General description of study

References	Nature of study	Sample size	Factors	Mental health
Achour et al. [26]	Cross-sectional	five Muslim female lecturers, aged 43–45 years	Work–family conflict	Coping strategies
Ghasemy et al. [27]	Structural Equation Modelling	325 academics	Impact of workload and autonomy	Interpersonal conflict and affective states
Achour et al. [28]	Cross-sectional	480 Muslim academics ages 25–60 years	Pandemic	Subjective well-being
Achour et al. [29]	Cross-sectional	300 female academic staff employed in research universities in Kuala Lumpur	Work–family demands	Subjective well-being
Tahir et al. [24]	Mix-Method	216 Muslim primary principals	Stress experiences	Coping strategies
Maung et al. [30]	Cross-sectional	primary and secondary school teachers	Pandemic and its associated sociodemographic factors	Prevalence of depression, anxiety, and stress
Zamri et al. [31]	Cross-sectional	888 female secondary school teachers in Selangor	Physical component	Health-Related Quality of Life
Kori et al. [32]	Cross-sectional	435 lecturers	Individual, Organizational, and Environmental Factors	Work-life balance
Ahmad et al. [32]	Cross-sectional	239 teachers from 17 primary schools	Low Technological Competence	Anxiety
Wong et al. [34]	Cross-sectional	595 secondary school teachers	Competencies in e-teaching	Psychological status
Amzat et al. [23]	Interpretative phenomenological analysis	Five teachers were chosen from each public school	Burnout	Coping strategy
Gosnell et al. [25]	Longitudinal study	97 primarily Burmese refugee teachers and 26 nonrefugee teachers living in Malaysia	Stress	Depression & anxiety
Rusdi et al. [35]	Cross-sectional	Petaling Utama district which totals up to 2259 teachers	Work related psychosocial factors	Stress
Salina et al. [36]	Cross-sectional	216 academicians	Burnout	Depression
Faizal et al. [37]	Cross-sectional	150 teachers	Role ambiguity, overload, and conflict	Stress
Samad et al. [38]	Cross-sectional	272 teachers in Klang Valley	Work related psychosocial factors	Mental health
Musa et al. [39]	Cross-sectional	1,871 secondary school teachers	Sleep quality	Depression
Zamri et al. [40]	Cross-sectional	70% of teachers from of public schools From each district in Penang	Work-related psychosocial factors	Psychological distress
Abdullah & Hamid [41]	Cross-sectional	252 academicians	Organizational commitment (workload, role conflict and unclear task)	Work stress
Arma & Hassim (2015)	Cross-sectional	380 academic staff from a research university in Malaysia	Career development, research, teaching, and interpersonal relationship	Stress
Ng et al. [42]	Cross-sectional	a cluster size of 60 teachers from 15 primary schools; 367 primary school teachers participated in the study.	Psychosocial factors Musculoskeletal disorder	Depression
Henny et al. [43]	Cross-sectional	194 randomly sampled academicians from a faculty of a public university.	Gender, teaching experience, job satisfaction	Burnout
Jumahat et al. [48]	Cross-Sectional	14 out of 22 Missionary Primary Schools located in Kuala Lumpur has a teacher population of 382 people	Demographic Factor	Stress
Kavitha & Hassan [50]	Cross-Sectional	268respondents, the samples are teachers from selected primary and secondary schools in a districtin Selangor	Demographic Factor	Stress
Desa et al. [46]	Cross-Sectional	120(55 males and 65 females) academic administrators of the National University of Malaysia	Personality	Stress
Ghani et al. [47]	Cross-Sectional	A total of 92 special education teachers	Demographic factors	stress
Mukosolu et al. [51]	Cross-Sectional	511 academics in University Putra Malaysia	work stressor: job demand, lack of social support	stress
Aziz et al. [44]	Cross-Sectional	317 lecturers have been selected from one research university in Malaysia	Personality	Happiness

Table 2 (continued)

References	Nature of study	Sample size	Factors	Mental health
Chen et al. [45]	Cross-Sectional	229 academicians from private universities in Malaysia	characteristics of academics in private universities in Malaysia	Burnout
Kassim et al. [49]	Cross-Sectional	327 research university academicians	academia work stressors	burnout

interpersonal relationships, and organisational climate. Rusdi et al. [35] showed that there is a significant positive high correlation between workloads and stress as they are often burdened with administration work. Besides that, Samad et al., [38] showed that workload plays a contributing factor of mental health in educators.

Discussion

The results of this systematic review provide insight into the intricate state of mental health among educators in Malaysia. Our review identifies 30 studies that addresses a number of significant variables that are linked to educators in Malaysia's mental health outcomes, highlighting the possible areas of concern with identifying six possible themes that were associated with mental health issues among academician's Malaysia. The high prevalence of mental health concerns among Malaysian academics is one of the review's main conclusions. Academic staff members routinely reported higher levels of stress, depression, anxiety, and burnout, according to the studies in this review. This research emphasises how critical it is to respond quickly to address mental health issues in the academic community. The review also emphasises how multifaceted academic mental health consequences are. A number of variables, such as pandemic impact, personality traits, high workloads, personality factor, physical health and work-family conflict and demand were found to be the cause of poor mental health among educators in Malaysia. These results are consistent with earlier research done in different contexts and highlight the significance of addressing organisational and individual issues to support academics' mental health.

Specific professional and demographic traits that might influence academics' varying susceptibility to mental health problems. Early-career academics and those in junior positions, for example, have been reported to be especially vulnerable to stress and burnout. In a similar vein, female academics expressed greater psychological anguish than their male colleagues. These results highlight the necessity of focused interventions made to meet the unique requirements of various academic community subgroups. This review also emphasises how the academic setting affects mental health results. A few other factors, including perceived work-life imbalance, job insecurity, and little prospects for career progression, have been repeatedly linked to poor mental health in academics [53]. It is imperative that academic institutions tackle these structural problems in order to create a work climate that is both conducive and supportive to faculty members' well-being.

One of the most important variables in regulating a person's daily life is work-life balance, which is defined as the state of being in balance between a person's wishes and expectations regarding his or her employment and his or her personal life expectations. Raising academic performance nowadays depends on a number of aspects, one of which is the capacity to combine work and personal obligations [54]. Activities related to family and other personal pursuits can interfere with work and sap the enthusiasm and energy required for it. Achieving work-life balance is crucial for every individual. According to the work-life spillover theory, an individual's attitudes, feelings, abilities, and behaviours from one domain to their personal or professional life flow into the other. Both positive and negative outcomes are possible from spillover, which can happen in two ways which is from work to personal life and from personal life to work [55]. Additionally connected to job happiness, organisational commitment, and organisational citizenship are good work-life balance and reduced work-life conflict. Academics should pay special attention to work-life balance and job stress concerns since they might lead to conflict while balancing several duties from the same or distinct roles example work and personal life [56].

Studies reveal that a variety of jobs may negatively impact an employee's health [57] Comparably, research suggests that educators are vulnerable to a variety of negative health effects, which may apply to the teaching profession as well. This involves not only noticeable and detrimental impacts on their physical health but also the emergence of mental health issues such as depression [58]. Research in this field, for instance, has revealed a higher prevalence of cardiovascular illnesses as well as somatic complaints including headaches [59]. It is crucial to comprehend and preserve academician's health for a variety of reasons. In its broadest sense, absenteeism among educators such as teachers on sick leave probably costs schools, the educational system, and society a lot of money [60]. This includes having a direct impact on school systems through higher absenteeism from class, and contributions to teacher dropout rates which are higher than those of most other professions [61].

The Job Demands-Resources theory states that, a job's characteristics are composed of two elements which are

Table 3 Findings of study

References	Tools	Findings	Limitations
Achour et al. [26]	Semi-structured interview: Open-ended questions covered issues related to work demands and family responsibilities	Most of them experienced conflict between work demand and family life. They believe that these conflicts were reasons for decline in productivity, higher rates of absenteeism, higher turnover, lower morale, lower job satisfaction, and lower family satisfaction. To manage WFC, social support, professional coping strategies and religious coping strategies were used.	Study scopes were not extended to other Muslim countries, because different cultures bring different findings and shed light on the efficacy of spirituality and religiosity in coping across a broader spectrum.
Ghasemy et al. [27]	Interpersonal conflict at work scale (ICAWS); Positive and negative affect schedule (PANAS); Job satisfaction scale	Affective states were related to job satisfaction, they were truly distinct constructs. He comparison of job satisfaction's predictors revealed that the fluctuating affective states were better predictors of job satisfaction compared with the more stable work environment features.	In this cross-sectional study, we focused on testing a few tenets of AET in the context of private institutions of higher learning. Due to the complexity of AET, we did not consider a few variables such as judgment-driven behaviours and personality predispositions in study.
Achour et al. [28]	Anxiety scale; Ryf Scales of Psychological Well-Being; Coping strategies	The findings show a negative yet significant correlation between anxiety and well-being while also showing a positive and significant correlation between coping strategies and subjective well-being. The research also points to the role of coping strategies in reducing anxiety and stress, the resulting improvements in well-being for Muslim academics, and the mediating effect of coping strategies between anxiety, stress, and well-being for Muslim academics.	It would be more valuable if this study could have further extended its scope to involve and compare other world universities, especially of different religious groups.
Achour et al. [29]	Work–family conflict; Job satisfaction; Life satisfaction; Family demand; Work demands	The findings show that there is a negative and significant relationship of work–family demands with well-being. There is also a positive and significant relationship between religiosity and female wellbeing, where religiosity increases employee well-being. Thus, religiosity has a moderating effect on work–family demands and Muslim women's well-being.	The contribution of future research is not limited to providing empirical evidence and may enhance understandings of how to implement religiosity in the lives of Muslims.
Tahir et al. [24]	Causes of stress; Islamic coping strategies	Results discovered that primary principals experienced fairly stress level and they perceived managing students' academic achievement was the most stressor followed by managing teachers' capabilities. Although findings revealed that no significant differences in terms primary principals' demographics; male primary principals and experienced between 6 and 10 years and positioned in schools with least students (SLS) category have slightly higher level of stress.	More stress patterns and configuration on how primary principals manage and cope with stress would be disclosed to determine the most suitable strategy on how to manage or cope with principals' stress within the local context.
Maung et al. [30]	Sociodemographic details; Depression, Anxiety, and Stress Scale (DASS) 21	Perceived overworking was significantly greater during the pandemic compared to before the pandemic. Significant experience in teaching, and less perceived overworking before and during the pandemic were associated with better mental health.	Cross-sectional nature and convenient sampling, as the sample is small and not countrywide, with limited generalizability and a lack of representativeness.
Zamri et al. [31]	Job Content Questionnaire (JCQ); Depression Anxiety Stress Scale (DASS-21); Nordic Musculoskeletal Questionnaire (NMQ); Short Form Health Survey (SF-12v2); Resilience Scale-14 (RS-14)	Age, body mass index (BMI), symptoms of depression and anxiety, and reporting low back pain were significantly associated with PCS. Meanwhile, age, symptoms of depression, and resilience level were significantly associated with MCS.	This study's lower PCS and MCS scores cannot be generalized to other teacher populations in Malaysia as the sample population was limited to a single state.
Kori et al. [32]	Work-Life Balance; Emotional intelligence; Spiritual intelligence; Work overload; Organizational support; Technological advancement.	Individual factors, organizational factors, and environmental factors were partially supported because only one sub-factor was significant in each factor. Work overload is the most influencing factor affecting the lecturer's work-life balance in Malaysia, while emotional intelligence is the least influencing factor. In addition, the result depicts that only emotional intelligence, work overload, and technological advancement made a significant impact on work-life balance. Whereas spiritual intelligence, organizational support, and telecommuting do not explain the variance in work-life balance significantly.	The barrier to research, generalizability, and the methodology used by the researcher to conduct the research and create validity.

Table 3 (continued)

References	Tools	Findings	Limitations
Ahmad et al. [32]	Barriers experienced during online teaching; Depression Anxiety and Stress Scale (DASS 21)	Approximately 14%, 20% and 8% of teachers reported depressive, anxiety and stress symptoms. The reporting of anxiety was contributed by low technological competence other factors include not living with in-laws that were linked with depression and diagnosed with chronic diseases that were linked with stress.	The risk factors concerning working from home were self-reported by the teachers and the data were collected during a short time when the MCO was lifted and some physical education sessions had commenced, and the responses given may have been influenced by a recall bias.
Wong et al. [34]	Respondents' background, and the second part is to collect data from the respondents pertaining to their psychological status (stress, anxiety and depression), e-teaching competencies (teaching, monitoring and evaluation) and teaching motivation.	Teachers' psychological factors in stress, anxiety and depressed are moderate, competencies in e-teaching and working motivations is also the moderate level. However, the highest mean value was found among the variables, this is revealed that despite the challenges during the Covid-19 outbreak, teachers showed positive and strong motivation in conducting e-teaching. Additionally, the result showed a negative relationship between psychological status and e-teaching competencies as well as reported a negative relationship between dimension of psychological status and competencies in e-teaching.	This study is included only Selangor teachers and given that the information obtained from the study was gather from secondary schools, the generalizability might be limited. The current study applied convenience sampling as a non-probability sampling technique conducted in this study. Future studies can consider random sampling or probable sampling techniques to undermine the generalizations from the sample to the population.
Amzat et al. [23]	Teacher Burnout Scale; semi-structured interviews	The findings revealed challenges that cause teachers to experience burnout, which are student misbehaviour, insufficient parental collaboration, occupational stress in the teaching environment, and negative emotions. The themes related to the coping strategies used to remain in the teaching profession are understanding teaching and learning, positive approach, individual factors, and support system.	This study was restricted to teachers in some schools in urban and suburban areas in Kuala Lumpur, Malaysia. It was also restricted to Chinese public schools in Kuala Lumpur as most of the participants were Chinese Malaysians.
Gosnell et al. [25]	The Depression Anxiety Stress Scales-21; Self-care strategy questionnaire	Results suggested that refugee teachers reported significantly higher rates of mental health and stress, but lower rates of self-care, compared with nonrefugee teachers. In addition, higher rates of self-care were associated with lower rates of stress and mental health symptoms, and the association was moderated by age.	Study 1 and Study 2 was led by white American researchers who could only spend a limited amount of time in Malaysia, thus leading to a biased lens. Although we did our best to establish rapport and had established a solid reputation after8 years of refugee research in Malaysia, having interviews led by white American researchers may have influenced how the refugee teachers presented their stories and what information they chose to share.
Rusdi et al. [35]	Variable that is being measured is depersonalization, workload, interpersonal relationship among colleagues and working environment	Independent variables are highly significant and positively associated with the dependent variable.	It is recommended that longitudinal study be used along with observations of the same subject over a period.

Table 3 (continued)

References	Tools	Findings	Limitations
Salina et al. [36]	Copenhagen Burnout Inventory (CBI), Depression, Anxiety and Stress Scale (DASS-21) and Job Satisfaction Scale (JSS).	Academicians demonstrated greater burnout levels and psychological distress when compared to non-academicians. Correlational analyses indicated a moderate to high correlation between psychological distress and burnout due to work, personal and client where higher burnout was associated with higher psychological distress. Non-academicians demonstrated greater job satisfaction levels when compared to academicians. Correlational analyses indicated a high correlation between job satisfaction and burnout due to work, with higher burnout levels associated with lower job satisfaction among staff. This study showed that academicians suffer from high levels of burnout in aspects of personal, work and client-related matters, and this has contributed to higher psychological distress among them and significantly affect their job satisfaction.	No limitation
Faizal et al. [37]	Role stress constraints; role conflicts construct; role ambiguity constructs; role overload constructs	level of stress was at moderate level, there is a significant relationship between role conflicts, role ambiguity and role overload to role stress. As a conclusion, this study demonstrates that role conflicts, role ambiguity and role overload have a major impact to the role stress of teachers in Malaysia.	Samples that were randomly selected is also one of the limitations to this study. Therefore, the findings can only explain the pattern of relationship between the variables in general and cannot be generalized to different organizational backgrounds.
Samad et al. [38]	The General Health Questionnaire (GHQ); Teacher Stress Inventory	Most of the teachers experience moderate stress level (71.7%) and only 12.1% had low mental health status. Student misbehaviour was the main stressor in the school environment and workload showed a significant contributing factor towards mental health status.	No limitation
Musa et al. [39]	Pittsburgh Sleep Quality Index (PSQI); Depression, Anxiety and Stress Scale (DASS 21)	Total teaching hours/day, depression and stress were significantly associated with poor sleep quality in the univariate analysis, while only stress remained significant in the multivariate analyses.	Polysomnography may not be feasible to be carried out in epidemiological studies with large sample size. In addition, some potential confounders such as domestic burden of caring for children and household duties, family make-up, age of children and care responsibilities were not taken into consideration in this study.
Zamri et al. [40]	Measurement of Musculoskeletal Pain (MSP); Measurement of psychological factors (psychological distress and mental health).	Psychological distress and work-related psychosocial factors were both associated with self-reported LBP and NSP.	Selection bias might occur where teachers who volunteered may have different characteristics compared to the non-respondents. However, we did not collect detailed information on the non-respondents. There is a possibility of recall bias, since the instruments used were self-reported and subjective.
Abdullah & Hamid [41]	Organizational Commitment Questionnaire	A significant positive relationship between work stress level and organizational commitment level. Findings also revealed that work stress explained the changes in organizational commitment.	Study's sample was from one private university in Malaysia, and this may restrict issues of generalizability of the findings where they might not represent the public and other private universities in Malaysia.
Arma & Hassim (2015)	Depression, Anxiety and Stress Scale-21 (DASS-21) ; Stress Sources Questionnaires (SSQ)	Career development, that include university condition and required publications for promotion were the greatest source of stress among the academicians. Occupational stress showed positive linear relationship to career development, research, and teaching. There was a fair positive relationship between occupational stress and career development, research, and teaching.	No limitation.

Table 3 (continued)

References	Tools	Findings	Limitations
Moy et al. (2014)	Work Organization Assessment Questionnaire (WOAQ); Beck Depression Inventory for Malays (BDI-M)	There were significant relationships between psychosocial factors, depression, and MSD. Low control on the job and lack of social support by colleagues are positively associated with musculoskeletal disease.	Depression was assessed with self-report measures without any further clinical interviews or assessments to diagnose specific mental disorders. Lastly, the cross-sectional nature of the analyses limits the causal inferences regarding the relationship between psychosocial factors, depression and musculoskeletal disorder.
Henny et al. [43]	Minnesota Satisfaction Questionnaire; Maslach Burnout Inventory–Educators Survey (MBI–ES)	The odd of experiencing burnout among those who were dissatisfy ed with their job was seven times more than among academicians who were satisfy ed with their jobs. Burnout was found to be prevalent among academicians. Being a female academician, with fewer years of teaching experience and low job satisfaction were among the factors that have significant associations with burnout.	Another important factor noted was that there was lacking in term of consensus and consistency to define a burnout case.
Jumahat et al. [48]	Demographical questionnaire	The finding indicated that the stress level among respondents was at a moderate level. There were no significant differences on the level of stress among respondents in terms of gender, age and work experience. In addition, it was found that parental relationship, and appreciation and support significantly predicted teacher's stress level.	No limitation.
Kavitha & Hassan [50]	Teacher Stress Inventory (TSI)	The study also showed that secondaryschool teachers perceived more stress in all stress factors which are rapport with parents, rapportwith co-worker, work load, time constrain, student attitude, recognition and support and lack ofresources than primary school teachers. The result also revealed that there was a significantdifference in the mean stress level scores for single and married teachers with mean difference(0.42, $p < 0.05$). The finding also indicates that teachers who have teaching experience between11-15 years experienced more stress and teachers in age between 31–50 years experienced morestress compared to the younger age group (20–30 years) and older age group (51–60 years).	Further studies should examine other types of extrinsic and intrinsic factors forteachers' motivation in different culture and ethnic
Desa et al. [46]	Eysenck Personality QuestionnaireRevised Short-Version (EPQR-S) (1985); The University Administrative Concern.	there was a significant relationship between personalities with work –related stress. Next, the results revealed that there is a meaningful positive correlation betweenjob stress and psychoticism ($r = 0.17$) and neuroticism ($r = 0.38$), and a meaningful negative correlation was found between jobstress and extraversion ($r = -0.26$) and lie ($r = -0.25$). However, only two of the personality dimensions which were neuroticismand lie scale showed as good predictors of job stress	No limitation.
Ghani et al. [47]	Teacher Stress Inventory	Among the five stressors, pupil misbehaviour is the strongest determinant of teacher stress with a mean of 3.70. Other factors are teacher workload (mean = 3.22),time and resources difficulties (mean = 3.11), recognition (mean = 3.05), and interpersonal relationships (mean = 3.00) respectively. The workload and other factors had caused a moderate stress on the respondents. The result also indicates that thereis no significant difference of work stress among the respondent based on gender, marriage status, and highest academicqualification. Furthermore, the result of this study failed to indicate a significant correlation between teacher stress anddemographic factors such as age, length of teaching experience, and the respondents' monthly salary	No limitation.
Mukosolu et al. [51]	Job Content Questionnaire Copenhagen Psychosocial Questionnaire	The overall prevalenceof job stress was 21.7%. The predictors job stress was job demand, lack of support from co-worker andsupervisor, depression, anxiety and use of avoidance focused coping.	No limitation
Aziz et al. [44]	Big Five Inventory; Subjective Happiness Scale	The results also revealed that happiness has been influenced by various type ofpersonality traits such as extraversion ($r = 0.79$), agreeableness ($r = 0.65$) and conscientiousness ($r = 0.72$), openness ($r = 0.34$) effects positively onhappiness, while neuroticism ($r = -0.61$) effects negatively on happiness	The finding on this research significantly inquire more attention in the direction of academician onemotional part of their individual perception in daily job on the way to making Malaysian universities as a happy workplace could berealize

Table 3 (continued)

References	Tools	Findings	Limitations
Chen et al. [45]	Maslach Burnout Inventory – Educators Survey (MBI-ES); Work-Related Quality of Life (WRQoL) Scale	no difference of burnout level wasfound according to marital status, lower total quality ofworking life scores were found for those academics who exhibited burnout characteristics. Academic rank wasfound to be a significant factor in predictingacademic burnout	The findings in this study was solely based on self-report measures, therefore, it would provide more comprehensiveperspectives in applying in-depth interviewtechniques as well as focus group discussionmethods to further complement and support theobservations of this study
Kassim et al. [49]	Stress Source Questionnaire (SSQ); Maslach Burnout Inventory Educator Survey.	Academicians were resilient against the burden of teaching.However, they did adopt coping mechanisms to overcome research challenges and interpersonalconflicts. The effects of research and interpersonal conflicts on tri-dimensional burnout mediated bymaladaptive coping (f2 effect size ¼ 0.37) had a larger effect than interpersonal conflicts toward burnoutmediated by adaptive coping (f2 effect size ¼ 0.02).	strengthening the current identified variables and hypothesis such aswork stressors can also be established via qualitative methods.

job demands and job resources (62–63). job demands, which are directly linked to financial or psychological consequences, are the aspects of a job that require effort from employees, such as work overload and role conflict [63]. The JD-R theory states that two processes are initiated by job demands and job resources which are a health impairment process and a motivational process [64]. Chronic job demands drain workers' physical and mental resources, which can result in health issues and energy depletion, or a state of tiredness, in the process of health deterioration. It is assumed in the motivational process that job resources have the capacity to motivate and result in high levels of work engagement, low levels of cynicism, and superior performance. This model is appropriate for explaining how educators' experiences are related to outcomes related to their well-being both individually and collectively. One of the well-being outcomes that is being explored in this review is mental health, is directly taken into account by the JD-R hypothesis as an indication of the well-being of the employees [62]. The literature indicates a high correlation between mental health and work overload [65]. It was shown that the proportion of persons with mental health disorders in the teaching profession is higher than the broader public (65–66). Previous research indicates that the primary cause of educators' elevated stress levels is their extensive workloads [67]. According to study by Pace et al. [68], educators are assigned hefty workloads and ever-increasing administrative responsibilities, with or without additional income.

A personality attribute lessens stress and aids in the development of a happy outlook on life. Desirable characteristics and appearance are both components of personality. As a psychological variation, personality can actually influence all human behaviours, both in the social and personal spheres [69]. Five main personality traits were used by Costa and McCrae to explain individual differences which are neuroticism, extraversion, openness, agreeableness, and conscientiousness [70]. Numerous research has indicated that personality traits and mental health are negatively correlated [71], but a large body of research has also demonstrated a positive link between personality traits and general health subscales (72–73). In this context, extraversion is thought to be one of the key determinants of health, as demonstrated by Bernard et al. [74]. Extroverts seem to take measures to lessen their anxiety and mental stress and ultimately improve their own mental, social, and physical health [75]. This is because extroverts naturally enjoy social support in their intimate relationships, communications, and socialisation [76]. Based on the two studies which discussed about personality traits in this review showed that extraversion was linked to greater mental wellbeing which is happiness [44] and extraversion showed negative correlation was with job stress [46].

Besides that, one of the significant predictors for mental health during pandemic period were anxiety, fear, frustration, loneliness, anger, boredom, depression, stress, avoidance behaviour [77]. Cullan et al. [78] predicted a significant rise in depression and anxiety symptoms among those without a history of mental illness, with some eventually developing post-traumatic stress disorder. During pandemic social distancing, which have caused the closure of all educational facilities and a rapid shift to online learning, severely disrupting the education industry. There were many challenges faced by the educators due to the lockdowns and other limitations on movement which has impacted their mental health. Academic staff members will need to gain confidence teaching remotely and navigating the technological difficulties associated with virtual classrooms. Besides that, even before pandemic, contract employees like sessional lecturers and part-time researchers naturally faced job instability. Many contract or part-time employees do not receive employment benefits such employment provident funds or social security, in contrast to permanent

employees. Additionally, they rely on whether the courses they instruct are offered during that specific semester. At other times, their contract's continuation depends on their immediate superiors' approval. Overall, the disruptions have increased mental stress and the likelihood of burnout among educators [79].

The researchers stressed that a major risk factor for occupational stress in contemporary higher education institutions is the mental health of academics. Although academics are becoming more aware of mental health concerns, there is still a significant lack of information in the literature about interventions and support systems designed with this group in mind in Malaysia. Subsequent investigations ought to concentrate on assessing the efficacy of several interventions, including workshops on mental health, counselling services, and organisational modifications targeted at mitigating stress and fostering academic well-being. To sum up, this systematic review offers insightful information about the mental health of Malaysian academics. Our findings add to the expanding body of work addressing mental health issues within the academic community by identifying critical characteristics linked to poor mental health outcomes.

Conclusion

This review uncovered a wide range of variables and possible pathways via which they impact mental health and increase the risk of mental illness among academics. Understanding the factors influencing educators' mental health and well-being may help them create coping strategies that increase their ability to manage the pressures of working in an educational environment. This review highlighted six major themes as significant predictors of poor mental health among educators in Malaysia were work-family conflict and demands, pandemic impact, work environment, physical health, personality traits, and workload. This paper asserts immediate attention for future mental health intervention to be provided among the educators in Malaysia by addressing the mental health factors contributing to the well-being of educators across various institutions can enhance the quality of the education system in Malaysia and facilitate their career development.

Limitation

The primary limitation of this review is that it does not provide a comprehensive analysis of the main factors of mental health decline, nor does it deal with how the problem can be dealt with effectively within the context of Malaysia. The scope of the study was limited in terms of potential challenges and barriers to implementing mental health interventions in the Malaysian academic setting. Besides that, this review explored on various mental health and its associated factors and didn't focus on one single factor, thus, there could be more comprehensive application of intervention could be designed if only focused on specific factor influencing mental health. Although the search criteria were intended to include every phrase often used in studies concerning mental health and financial hardship, it is possible that some studies were overlooked due to the vast range of labels and descriptions given to these events. There was limited generalizability of the results to different settings because most of the studies utilised cross-sectional designs of single education system at one moment in time, and others had small sample sizes unrepresentative of their target populations with poor response rates. While the inclusion of a substantial number of studies undertaken globally to provide a global picture is a strength of this analysis, education vary throughout nations. This restricts the applicability of some of the review's conclusions to mental health educators employed by the in Malaysia. The fact that the factors this research found come from research that only lasted ten years is another drawback. Even yet, a few elements from the past research will still apply to this review.

Recommendation

It should be the goal of future studies in this field to overcome some of the shortcomings noted in the body of current knowledge. Further longitudinal research is required to investigate the causal relationships and interactions between mental health and its associated factors among educators in Malaysia. Therefore, it is necessary to investigate the methods by which these elements interact in greater depth. Further studies are necessary to comprehend the relationship between pertinent mental health and its associated factors within demographics, since some groups are probably more exposed to and prone to poor mental health than others. The finding of this review enables future policy research on wellbeing for educators to better facilitate work-life balance and enables to conduct of qualitative research on specific sub-groups according to their study program offered to tailor interventions effectively considerably more work should be conducted which increase support system such as restructuring issues about students' misbehaviour.

Abbreviations

PRISMA Preferred Reporting Items for Systematic Reviews and Meta-Analyses

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Author contributions

This study was developed by SM, SR, and NI. Literature search, data extraction, and analysis in addition to the writing of the first draft was carried out by SM, SR, and NI. Lastly, the collective effort and agreement of all authors were involved in the process of proofreading, editing, as well as the approval of the final submitted manuscript.

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Data availability
The datasets used and/or analysed during the review are available from the corresponding author on reasonable request.

Declarations

Ethical approval
This study was approved by the IMU Joint Committee on Research and Ethics (BPS I-2024(12)). This review has been registered under PROSPERO, [Registration ID (CRD42024505815)]. All methods were performed in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines for this systematic review.

Consent for publication
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Competing interests
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