

Juniar, D., Grasiawaty, N., Kinanthi, M. K., (2025). Perception and signs of stress among Indonesian university students: Insights from Rileks module responses. *Indigenous: Jurnal Ilmiah Psikologi*, 10(3).275-293. <https://doi.org/10.23917/indigenous.v10i1.10024>

Perception and Signs of Stress among Indonesian University Students: Insights from Rileks Module Responses

Dilfa Juniar¹, Novika Grasiawaty², Melok Roro Kinanthi³

Faculty of Psychology, Universitas YARSI Indonesia¹²³

Submitted: 21 April 2025

Accepted: 13 November 2025

Published: 22 November 2025

Abstract. *Although studies have documented the prevalence of stress among university students, limited attention has been paid to how students define and experience it. This study, part of a larger investigation into Rileks, a culturally adapted web-based stress management program for Indonesian university students, examined how students conceptualize stress and identify its signs. A total of 68 participants, predominantly female and aged between 19 to 42, participated in the study. They were enrolled in undergraduate to doctoral programs and were recruited through convenience sampling via the Rileks study platform. Thematic content analysis was conducted on responses to open-ended questions in the Rileks' first module, which asked about students' definitions of stress and the signs they experience. Coding was carried out manually using Excel, and inter-rater reliability checks were applied to enhance analytical rigor. Three main themes emerged in students' definitions of stress: perceived pressure or tension, circumstances exceeding coping capacity, and stress as a state of disruption. A minor theme was stress as a motivating factor. Each main theme encompassed multiple areas of student life, extending beyond academic concerns, and some responses reflected cultural values such as family expectations and societal demands. Students also described signs of stress across four domains: physical, cognitive, emotional, and behavioral. These findings indicate that students' perceptions of stress may be shaped by personal and contextual factors, offering practical implications for enhancing early recognition and communication of students' stress through approaches that are both relevant and culturally sensitive.*

Keywords: *Stress; sociocultural context; low-and middle-income countries; mental health; university students.*

INTRODUCTION

Stress is a global concern affecting individuals across various populations, including university students. Studies indicate that between 30% and 80% of university students experience elevated stress levels, adversely impacting their mental health and academic performance (Auerbach et al., 2018; Hishan et al., 2018). During periods of global crises, such as the COVID-19 pandemic, these stress levels have been observed to escalate further. For instance, students reported heightened uncertainty, academic disruption, and social isolation during the pandemic (Li et al., 2020; Zhang et al., 2024). In low- and middle-income countries (LMICs), additional factors, including political instability and limited access to mental health resources, exacerbate these challenges, intensifying students' vulnerability (Ahmead et al., 2024).

*Corresponding author: dilfa.juniar@yarsi.ac.id

The university years represent a critical developmental stage during which students must navigate academic responsibilities, social transitions, financial challenges, and career-related pressures, often without the support systems they previously relied upon (Bergin & Pakenham, 2015; Bettis et al., 2017). While moderate stress can sometimes enhance performance and motivation (Selye, 1974), chronic excessive stress is associated with impaired academic functioning and increased risks of anxiety, depression, and other mental health issues (Deng et al., 2022; Ribeiro et al., 2018; Sun-Kyüing et al., 2015). Prolonged exposure to stress may also lead to physical health problems, including fatigue, sleep disturbances, and chronic illnesses (Ovsiannikova et al., 2024). Given these potential consequences, students must recognize the early signs of stress and understand how it manifests. Recognizing stress is a crucial first step in determining when to seek help or adopt effective coping strategies.

A growing body of research emphasizes the importance of understanding stress within specific student populations and within their respective contextual frameworks (Acharya et al., 2018; Othman et al., 2019). Studies have explored how stress levels vary across disciplines, genders, and socio-economic backgrounds (Alivernini et al., 2019; Deb et al., 2016). However, much of this research has been conducted in Western, educated, industrialized, rich, and democratic (WEIRD) societies, particularly in Europe and North America, leaving non-Western contexts, including those in Southeast Asia, underrepresented (Krys et al., 2025; Muthukrishna et al., 2020). Furthermore, existing studies on student stress have primarily relied on quantitative methods and focused on specific populations, such as medical (Zheng et al., 2022) or law students (Bergin & Pakenham, 2015). While these studies provide valuable statistical indicators, they often fall short in capturing how students conceptualize and articulate stress within different sociocultural contexts.

Over time, scholars have developed several frameworks to explain how stress arises and is experienced. Early physiological models, as proposed by Selye (1974), viewed stress as a nonspecific bodily response to external demands (Szabo et al., 2012). Later approaches recognized that stress is not merely a physical reaction but also a subjective process shaped by perception and interpretation. The transactional model of stress and coping, introduced by (Lazarus & Folkman, 1984), reframes stress as a dynamic interaction between the individual and their environment. According to this model, stress occurs when people appraise environmental demands as exceeding their perceived coping resources. This process involves two stages: primary appraisal, where individuals judge whether a situation is threatening, harmful, or challenging, and secondary appraisal, where they evaluate their ability to cope or adapt. Coping then encompasses the cognitive and behavioral efforts used to manage demands or regulate the emotions they provoke. Through this model, stress is understood as an ongoing process of meaning-making rather than a static state. Later scholars have further noted that such appraisals do not occur in isolation, but within broader social contexts that influence what people perceive as stressful and how they respond (Lee et al., 2023). Thus, while stress remains a psychological construct, it is also shaped by the values, norms, and expectations that guide individuals' interpretations of demanding situations.

Understanding stress within both its psychological and contextual dimensions is particularly relevant in Indonesia, where it has become an emerging public health concern. Although awareness of mental health among young people is growing, limited research has explored how Indonesian students themselves define and articulate what stress means to them. Previous studies have documented its prevalence among student populations (Habibah et al., 2021), yet little is known about how students understand stress in their own terms. Within Indonesian society, social and relational values, such as maintaining harmony, meeting family expectations, and striving for academic success, may influence how stress is experienced and expressed (Ma et al., 2020). These contextual nuances suggest that stress may not only be perceived as a psychological strain but also as a meaningful

experience linked to social responsibility and perseverance. Recognizing these dynamics is crucial for understanding how stress is defined and manifested among Indonesian university students.

To address this gap, the present study explores how Indonesian university students define stress and recognize its signs. It draws on narrative responses collected through Rileks, a culturally adapted web-based stress management program developed specifically for Indonesian students by the first author of this present study (Juniar et al., 2019). The program comprises six core modules and an optional booster session, covering psychoeducation, problem-solving, and emotion regulation. In a prior feasibility study, Rileks demonstrated promising outcomes, with 79.1% of participants reporting reductions in stress symptoms. Among these, 33.1% initially reported moderate stress and 33.9% reported severe stress levels (Juniar et al., 2022). The present study focuses on qualitative data drawn from the first module of Rileks, which introduces psychoeducation on stress and invites participants to reflect on their personal definitions and perceived signs of stress. Building on these reflections, this study aims to explore how Indonesian university students define stress and recognize its manifestations in their daily lives.

METHOD

The present study employed a qualitative approach using inductive thematic content analysis to explore how Indonesian university students define stress and identify its signs. This method was chosen for its ability to capture recurring patterns in narrative responses and provide nuanced insight into participants' subjective interpretations. The data were derived from written reflections submitted in response to two open-ended questions in the first module of the Rileks program, which asked participants: "How do you define stress?" and "What signs or symptoms do you experience when you feel stressed?"

Participants were recruited using purposive sampling through the official Rileks study website, which provided detailed information about the study and allowed interested individuals to register online. To be eligible, participants had to meet the following criteria: a minimum score of 15 on the stress subscale of the Depression, Anxiety, and Stress Scales (DASS-42), current enrollment as a university student in Indonesia (undergraduate to doctoral programs), access to a stable internet connection, and fluency in Bahasa Indonesia. Recruitment was promoted through online mental health seminars, social media platforms, and university networks. Notably, there was no personal interaction between the researchers and participants throughout the recruitment process. In cases where participants may have previously known the principal investigator (DJ), this information was not disclosed to the study team, as no direct contact occurred during the study. In brief, the Rileks study procedures consisted of the following steps: eligible participants completed an online screening, provided electronic informed consent, and completed baseline measures (DASS-42 and WHOQOL-BREF). They then participated in a six-session web-based stress management program guided by trained e-coaches. Each session consisted of psychoeducation, interactive exercises, and reflective questions on stress and coping, which served as the qualitative data source for the present study. Brief evaluations of the modules followed this. Postintervention assessments were conducted after the completion of the program. Further details of the study phases, instruments, and procedures are available in Juniar et al. (2022).

Of the 191 individuals who initially registered through the study website, 151 met the inclusion criteria and provided electronic informed consent. Among these, 121 participants completed the baseline assessment and received login credentials to access Rileks. Ultimately, 68 participants accessed the intervention platform. Participants ranged in age from 19 to 42 years,

with a mean age of 23.56 years, and were primarily female (86.8%). Participants were enrolled in academic programs ranging from undergraduate to doctoral levels. They represented diverse study disciplines, including the social and behavioural sciences, business and administration, language studies, humanities, and other academic fields. Geographically, they came from universities located across various islands in Indonesia, including Java, Sumatra, Kalimantan, Sulawesi, East Nusa Tenggara, and other regions. Attrition occurred during the program, and 40 participants completed Module 1, which included the two open-ended questions analyzed in this study.

Data collection was conducted through the Minddistrick platform (www.minddistrick.com), which allowed participants to access and complete the Rileks modules using their personal accounts. This web-based approach enabled participants to engage with the intervention flexibly, at their own pace, and from any location with internet access. There was no direct interaction between participants and the researchers. However, each participant was assigned an e-coach, a licensed psychologist trained to provide structured, ethical, and consistent feedback throughout the program. This way maintained the self-guided nature of the intervention while also offering a degree of structured support. Given the fully online format, the research team was unable to verify whether participants completed the modules independently or in the presence of others. Each module was designed to take approximately 45 minutes per week to complete. All responses to the reflective questions were automatically recorded by the Minddistrick platform and later exported for analysis. Ethical approval was granted by the Ethics Committee of YARSI University (project No. 193/KEP-UY/BIA/VIII/2017). The study was reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007), ensuring a comprehensive and transparent presentation of the research process and findings.

A thematic content analysis was conducted, following procedures outlined by (Kiger & Varpio, 2020). Responses were exported to Microsoft Excel and initially coded by SFA, a female graduate student trained in qualitative research. The analysis began with the identification of semantic patterns in the data, which were initially grouped into preliminary codes. These codes were then organized into broader themes and subthemes through an iterative process. Although the initial coding was data-driven, the refinement of themes was informed by relevant theoretical frameworks on stress (e.g., Lazarus and Folkman's transactional model of stress), ensuring both empirical grounding and conceptual coherence. In cases where a single response reflected multiple dimensions of meaning, the excerpt was coded under more than one category. Data saturation was considered to have been reached, as no new themes or insights emerged from the participants' responses. Transcripts were not returned to participants for verification, and participants did not provide feedback on the findings, as this present study was part of a larger research project that did not incorporate such procedures.

To ensure analytic rigor, two other researchers, DJ and NG, who are both female lecturers and doctoral students in psychology, independently reviewed the initial codes and emerging themes. Their feedback was used to revise and strengthen the coding framework. Inter-rater reliability (IRR) was assessed by comparing coding agreement among the three researchers using a binary scoring system, where a score of 1 indicated agreement and a score of 0 indicated disagreement. A threshold of 75% agreement was applied (Graham et al., 2012); any discrepancies were resolved through discussion until a consensus was reached.

The processes of coding, theme development, and inter-rater reliability contributed to the overall credibility of the analysis, reflecting standards of internal validity in qualitative research. All three researchers (SFA, DJ, and NG) engaged in repeated readings of the dataset to ensure a deep familiarity with the content and to refine the coding framework with accuracy and consistency.

Transferability, comparable to external validity in quantitative research, was supported through the inclusion of direct quotations of participants' responses, which illustrate the contextual meanings of their experiences and allow readers to assess the applicability of the findings to other settings. Confirmability was strengthened through analyst triangulation, in which all three researchers independently examined the verbatim data and collaboratively validated the final themes, thereby enhancing the transparency and trustworthiness of the findings.

RESULTS AND DISCUSSION

This study aimed to explore how Indonesian university students define stress and identify its signs. Our analysis revealed three major themes and one less prevalent theme describing university students' definition of stress: (1) pressure or tension, (2) a situation that exceeds one's capacity, (3) a state of disturbance, and a less prevalent theme describing stress as a motivating factor. Overall, these findings suggest that stress was predominantly defined in negative and debilitating terms, with only a rare acknowledgment of its potentially adaptive function. Signs of stress were grouped into four themes: (1) physical, (2) cognitive, (3) emotional, and (4) behavioural symptoms. The IRR for these themes ranged from 83.33% to 100%, indicating high coding consistency (see Tables 1 and 2).

Definition of Stress

Theme 1. Perceived pressure or tension

A central way in which students defined stress was as a state of pressure or tension, a continuous sense of being burdened by multiple and overlapping demands. Stress was described as an enduring psychological weight, emerging not from a single source but from the intersection of several life domains, including academic, social, familial, economic, and personal spheres. In some cases, these pressures reflected internalized expectations and values, revealing how social and individual aspects intertwined in shaping students' experiences of stress.

Academic responsibilities emerged as the primary source of tension, as university life became the space where educational, social, and economic demands converged. The pressure to complete studies and graduate was often intertwined with other obligations, creating a persistent sense of burden. Students described challenges such as completing final assignments or theses, preparing for exams, dealing with unclear supervisory relationships, and reading English-language materials. Rigid timelines, inconsistent guidance, and limited autonomy over academic progress compounded these difficulties. Overall, these accounts suggest that stress was shaped not only by workload but also by structural, economic, and linguistic constraints that restricted students' sense of control and support within the academic system.

"At this time, what I consider to be stress is the pressure that the thesis I am working on during semester seven. The lecturer asks me to find a new title, which is increasingly becoming a pressure since coursework is still ongoing. This issue makes it difficult to progress on the thesis, even though my mind is always focused on it." (P099)

This perceived pressure may be further amplified by comparisons with peers who have progressed more quickly, such as those who have already begun their thesis seminars. For some, these comparisons evoked feelings of inadequacy and urgency, reinforcing the sense that academic success was not only a personal goal but also a social benchmark against which one's worth was

measured. This response aligns with a previous study that identified academic demands and peer comparison as prominent sources of stress among university students (Maqsood et al., 2022).

"I think stress is pressure. Currently, what I consider pressure is the thesis I'm working on during the 7th semester... Additionally, friends from other departments who have started their proposal seminars also create pressure for me." (P099)

For some, the expectation to complete their studies was inseparable from the need to sustain household income. Those who worked full-time while studying described the exhaustion of managing both roles, where long hours left little energy to focus on academic progress.

"...stress is my burden caused by numerous demands from parents and others close to me, insisting that my thesis must be completed. They don't realize that I want the same thing. However, working while studying is incredibly difficult. My body and mind are already exhausted from busy office work from 9 am to 7 pm, Monday to Friday." (P098)

In other cases, participants did not work but faced acute financial insecurity within their families. The expectation to graduate was intensified by economic hardship and the moral weight of family dependence. One student described the strain of studying amid poverty and illness.

"Stress is a tension when I have to think about money every day. I don't work, and I need money for college, as does my sister. My mother does not work and is sick. My father is dead. I am required to complete my studies quickly, and I still strive to finish my assignments as soon as possible. Many household needs must be met, but there is a lack of money... My mother often borrows money, which makes me more stressed because I end up having to pay the debt every month." (P041)

These accounts reveal that academic pressure was often inseparable from economic precarity and interdependent family expectations. For many students, the pursuit of higher education was not only driven by personal ambition but also by familial and financial responsibilities, making academic achievement a moral obligation to their families. This sense of duty often intensified stress, particularly when academic deadlines coincided with caregiving or household responsibilities. Balancing study, family, and economic demands left students with limited time and energy, reinforcing the experience of strain as both an academic and relational burden.

"Stress is when the deadline is getting closer, but there hasn't been significant progress in my studies. The children are growing up and need more attention." (P0151)

Consistent with prior studies, our findings highlight how the intersection of institutional, economic, and familial demands shapes academic pressure among Indonesian students. In collectivist contexts such as Indonesia, education is often viewed as a shared family endeavor rather than an individual pursuit (Liem et al., 2008; Rizwan et al., 2020). As a result, academic achievement becomes a moral and relational duty, reflecting not only personal success but also family honor and obligation (Dessauvague et al., 2021). This sense of responsibility can intensify pressure, particularly when students are expected to progress quickly despite limited emotional or financial support from their families. For married female students, the difficulty of managing

academic responsibilities alongside domestic obligations further compounded this strain. In the Indonesian sociocultural context, where caregiving and household roles are traditionally assigned to women (Aziz, 2023; Cameron, 2023), such role conflict created an additional layer of pressure, often leading to emotional exhaustion when support from spouses or extended family was lacking.

In addition to academic demands, students also describe stress as a form of tension arising from interpersonal conflicts. Many experienced ongoing strains in their relationships with parents, romantic partners, and peers. These conflicts were emotionally charged, often involving competing loyalties, unmet expectations, or the desire to maintain relational harmony. Within Indonesia's collectivist context, where family approval and social cohesion are highly valued (Liem et al., 2008; Ma et al., 2020), such relational discord produced a deep sense of psychological pressure. Several participants expressed feeling caught between personal needs and filial obligations, reflecting how efforts to assert autonomy could themselves generate tension. Disagreements with parents about academic progress or life choices were not merely situational frustrations but moral conflicts that challenged cultural norms around respect and obedience. These findings align with prior research, which emphasizes that stress in collectivist societies is often experienced as relational strain, linked to the struggle to balance connectedness and independence (Dessauvagie et al., 2021; Rizwan et al., 2020).

"My definition of stress is a tension when I was fighting with my mother, because she didn't approve of my relationship with my boyfriend, and I love both." (P052)

Participants also described stress as a state of tension arising from more personal and situational experiences that extended beyond academic and relational domains. A few participants portrayed stress as a struggle for self-control over biological urges, highlighting the internal strain involved in managing impulses that conflicted with moral and cultural expectations

"Stress is the pressure I have when I have to try almost every day to resist the urges of hormones (internal sexual drives) that appear so frequently when stimulated... Even though they don't arise when I'm busy with other things, once they do, they put me under pressure." (P0123)

Some students spoke of living conditions that heightened this sense of tension, such as noisy dormitories, limited privacy, or the lack of emotional connection with family or roommates, which made rest and focus difficult. A few others mentioned being compared by parents to more accomplished siblings or peers, which intensified feelings of inadequacy and reinforced the pressure to meet family expectations. A small number described experiences of harassment or physical aggression that created persistent fear and insecurity.

All in all, these accounts show that students understood stress not merely as a psychological reaction but as a continuous state of tension embedded in moral, social, and everyday living conditions. Stress was experienced as an enduring sense of strain shaped by the convergence of academic, familial, economic, ethical, and social expectations. For many students, these intersecting demands created a persistent feeling of being stretched beyond comfort or stability. In this sense, stress was not defined by a single event or emotional state but by the continuous effort to maintain balance and control amid overlapping pressures that shaped students' everyday lives. This finding is consistent with previous studies that portray student stress as more than a discrete psychological reaction, but rather as an enduring state of strain embedded in daily experiences (Tonon, 2021).

Theme 2. Circumstances exceeding one's coping capacity

Another central theme was captured in students' definitions of stress as circumstances where the demands of daily life were perceived to exceed their ability to cope. Stress was portrayed as a cumulative burden of overlapping academic, personal, and emotional obligations that gradually undermined students' sense of balance and control. This interpretation is consistent with the transactional model of stress (Lazarus & Folkman, 1984), which conceptualizes stress as arising when perceived demands exceed available coping resources.

Students often described circumstances exceeding their coping capacity as a state of being overwhelmed. Multiple responsibilities accumulated faster than they could be managed, creating confusion about priorities and leading to emotional exhaustion. This sense of overload reflects cognitive strain and emotional depletion, consistent with Lazarus & Folkman (1984) model of stress as a continuous appraisal process. Through primary appraisal, students perceived academic, interpersonal, and emotional demands as taxing; through secondary appraisal, they evaluated coping resources such as time, resilience, and social support. When these resources were deemed insufficient, stress emerged.

"When you feel like there are so many things to do, but you don't know which one to do first..."
(P0139).

Participants further illustrated this experience through descriptions of time scarcity. They often felt that available time was insufficient to meet multiple expectations, especially when academic deadlines and personal duties coincided. This perception of limited time was integral to how students defined stress, representing the moment when obligations felt unmanageable and self-control began to waver

"...when I'm about to face the seminar, I feel that time is running out, but I still have many things to accomplish." (P0139)

Another prominent manifestation of circumstances that exceeded students' coping capacity involved the gap between expectations and reality. Stress was often defined by the experience of setting high personal or social standards that proved challenging to meet, resulting in a sense of inadequacy and self-blame.

"...stress is a combination of unrealistic expectations of myself and my impatience with my current incompetence." (P0130).

Moreover, the feeling of helplessness also marked circumstances in which students felt unable to cope with ongoing demands. Several participants described moments when sustained effort no longer yielded improvement, resulting in a sense of stagnation and frustration. This experience reflected the point at which persistence gave way to exhaustion, and the sense of control began to fade. For these students, helplessness was not merely about failure but about reaching the limits of endurance in the face of unrelenting demands.

"Stress is when I am frustrated because I cannot change the condition despite my best efforts."
(P023).

Taken together, students conceptualized stress as more than a transient emotional reaction. It was an embodied experience of being stretched beyond perceived limits, encompassing emotional, cognitive, and temporal dimensions. Repeated accounts of being unable to “keep up,” “stay in control,” or “meet expectations” illustrated stress as a gradual erosion of one’s capacity to function effectively. Prior studies have shown that difficulty managing or adapting to such pressures can lead to feelings of being overwhelmed and declines in well-being and academic performance (Pascoe et al., 2019; Slimmen et al., 2022). This perspective positions stress as a dynamic process shaped by personal appraisals, social expectations, and culturally embedded notions of competence and endurance.

Theme 3. Stress as a state of disruption

Distinct from the previous themes, the third theme highlights how students define stress through its disruptive effects on various aspects of life. Stress was described not as a single event or situational demand but as a condition that unsettles one’s emotional, psychological, social, and physical balance. Students depicted stress as an ongoing disturbance that erodes stability and interferes with their ability to live, study, and relate to others effectively.

One manifestation of this disruption was emotional disturbance. Students frequently described stress as an emotional strain that made it challenging to maintain calmness or regulate feelings. These accounts portray stress as an ongoing emotional imbalance that amplifies frustration, sadness, and irritability, making even ordinary situations feel heavier and more complex to manage.

“...Something that puts me in a bad mood...” (P0106)

Beyond emotional strain, students also defined stress in terms of its disturbing effects on psychological stability, highlighting experiences of panic, confusion, and diminished control. Their accounts align with prior studies suggesting that prolonged stress gradually erodes one’s capacity for emotional regulation and psychological well-being (Pascoe et al., 2019).

“Stress is something that can lead to panic attacks or a breakdown if I’m alone at home. I can’t get rid of these things easily. It stresses me out.” (P0132)

The disruptive nature of stress was also evident in students’ social lives, where it often interfered with their motivation to engage with others and maintain relationships. Students described withdrawing from peers, avoiding communication, and losing interest in social activities when feeling overwhelmed. These accounts show that stress was not only experienced internally but also manifested as a relational disturbance that weakened their ability to connect with others and seek emotional support. For many, this withdrawal deepened feelings of isolation, limiting access to the very relationships that might otherwise help them cope.

“Stress is that which affects social relationships and so on...” (P0133)

Participants also defined stress through its disruptive influence on the body and daily life. Stress was understood as a condition that unsettled both physical well-being and the rhythm of everyday living. It was described as a tangible, embodied experience, often felt through headaches, digestive discomfort, trembling, or fatigue that signaled the body’s strain under persistent pressure

"I think of stress as something that gives me a headache or indigestion..." (P0132)

These descriptions highlight the embodied nature of stress, where emotional and psychological tension were experienced through somatic symptoms such as pain, fatigue, or digestive discomfort. The close connection between mind and body, as reflected in these accounts, aligns with findings by Glise et al. (2014), who observed that somatic symptoms are commonly present among individuals experiencing stress-related exhaustion. Such accounts indicate that, for many students, stress was perceived as an embodied condition of imbalance in which emotional and physical strain were deeply intertwined.

Students also described how this sense of disturbance extended into their daily lives. Stress was depicted as a persistent state that drained energy, reduced concentration, and made even simple activities feel heavy and difficult to complete. Rather than being viewed as a temporary emotional reaction, stress was defined as a continuous condition that shaped how students lived their daily lives, influencing not only how students thought and felt, but also how they navigated the flow of their days.

"Stress is a feeling that makes it uncomfortable to go through the day..." (P0128)

Taken together, these accounts suggest that students defined stress through its pervasive and multifaceted disruptions to everyday life. Stress was experienced as a continuous state of imbalance that affected emotional stability, mental clarity, social connectedness, and physical well-being. Across these domains, students portrayed stress as something that unsettled their capacity to think clearly, relate to others, and maintain bodily and psychological balance. This understanding moves beyond viewing stress as a temporary response to external demands, emphasizing instead its enduring presence in daily living. For these students, stress represented a lived state of disruption, an embodied and relational condition that permeated their feelings, functioning, and sense of making sense of their lives.

Stress as a Motivating Force (Eustress). Although nearly all participants viewed stress as harmful or exhausting, one student described it as a constructive pressure that enhanced focus and productivity.

"Stress is something that pushes me to complete my tasks; without it, I might become too relaxed." (P0198)

This account reflects a perspective of eustress, in which stress serves as a motivating force that energizes rather than depletes (Kupriyanov & Zhdanov, 2014). However, this view remains marginal within the Indonesian academic context, where stress is predominantly framed as detrimental. Its limited presence underscores how, within Indonesian higher education, stress may be culturally and institutionally framed as a threat to balance rather than an opportunity for growth.

The rarity may suggest a limited capacity to appraise stress positively. This matter may reflect cultural and institutional contexts that emphasize endurance and avoidance over active coping. When individuals perceive sufficient coping resources, stress can stimulate engagement and performance rather than emotional strain (Van Slyke et al., 2023). Moreover, public discourse may also reinforce this view, framing stress as something to be feared instead of managed. The absence of psychoeducation and formal training on stress management within university curricula further limits students' coping efficacy, making them less likely to interpret stress as adaptive or

empowering (Lazarus & Folkman, 1984; Rudland et al., 2020). Strengthening coping resources and reframing stress as a manageable process could help transform distress into opportunities for learning and resilience.

Table 1.
 Summary of Thematic Analysis on Stress Definitions with IRR

Main Theme	Definitions	Example of Response	IRR (%)
Stress as Pressure or Tension	A perceived state of psychological strain or tension arises when students face multiple academic, social, or personal demands, producing a sustained feeling of being burdened or under pressure but not necessarily beyond control.	"Stress is when all the burdens of the mind are piled up" (P0149)	93.33
Stress as Circumstances Exceeding Coping Capacity	A perceived loss of control that occurs when demands or responsibilities are appraised as surpassing one's ability to cope, leading to feelings of being overwhelmed, helpless, or unable to fulfill expectations.	"Stress is when I am frustrated because I cannot change the condition despite my best efforts." (P023)	92.59
Stress as a State of Disruption	A disruptive state that interferes with emotional, cognitive, physical, and social functioning, reflecting the perceived negative consequences of sustained or intense stress.	"Stress is a certain stimulus that triggers emotional tension..." (P090)	92.89

Signs of Stress.

Participants described a wide array of signs and symptoms associated with stress, which were categorized into four domains: physical, cognitive, emotional, and behavioral. These findings provide insight into how students recognize and articulate their stress experiences through observable and subjective indicators.

Table 2.
 Summary of Thematic Analysis on Sign of Stress with IRR

Main Theme	Definitions	Example of Response	IRR (%)
Physical	Observable bodily reactions that reflect the physiological manifestation of stress.	"Hands and body trembling, breath panting..." (P0113)	83.33
Cognitive	Signs of stress that impair cognitive functioning and thought processes.	"...difficulty concentrating, becoming careless, nightmares, forgetting..." (P0113)	100
Emotional	Signs of stress that manifest as intense, negative emotions.	"The emergence of unpleasant feelings such as panic, anger, tension, and fear." (P0144)	100
Behavioural	Signs of stress are observable through behavior or actions.	"...if you do not want to meet other people..." (P0151)	100

Theme 1. Physical Signs

Students commonly associate stress with somatic symptoms, including headaches, dizziness, chest pain, cold sweats, and general fatigue. These bodily sensations were perceived as direct consequences of prolonged tension and emotional burden. One participant shared,

“...dizziness or headache, chest pain.” (P0113)

These responses are consistent with previous evidence indicating that stress can trigger physical reactions linked to autonomic nervous system activation (Oubaid, 2023) and can also increase blood pressure, as shown in previous studies (Uyun et al., 2016)

Theme 2. Cognitive Signs

Participants also reported cognitive symptoms, including difficulty concentrating, forgetfulness, and recurring negative thoughts. These impairments were perceived to interfere with academic tasks and daily functioning, as noted by one student:

“...difficulty concentrating, being careless, often forgetting, repeating things.” (P0113)

These findings align with existing research that highlights the impact of stress on executive functioning and attention regulation (Beiter et al., 2015).

Theme 3. Emotional Signs

Stress was frequently described in affective terms, with students reporting intense and distressing emotions such as panic, anger, fear, and irritability. One participant reflected,

“I have unpleasant feelings such as panic, anger, tension, and fear.” (P0144)

These emotional responses often co-occurred with cognitive disruptions and were understood to both reflect and exacerbate stress. These findings echo literature suggesting that heightened emotional reactivity is a core feature of stress experiences, particularly when coping resources are limited (Shapero et al., 2016)

Theme 4. Behavioral Signs

Students also described behavioral changes in response to stress, most commonly in the form of social withdrawal and avoidance of interpersonal interactions. These behaviors were interpreted as attempts to reduce exposure to stress-inducing environments or situations. One participant noted

“...don't want to meet other people...” (P0151)

These behavioral signs reflect a coping mechanism frequently observed among individuals facing chronic stress, where withdrawal serves to protect emotional energy (Farnish, 2021).

Taken together, these findings suggest that university students in Indonesia recognize stress through a combination of physical sensations, cognitive impairments, emotional turbulence, and behavioral changes. The manifestations reported in this study closely mirror those documented in research from Western contexts (Amirkhan et al., 2018). These convergence points highlight the universality of stress indicators among university students worldwide.

Overall, the findings suggest that Indonesian university students define stress as a cumulative and multifaceted condition that arises when perceived pressures exceed their ability to cope, creating a sense of imbalance that disrupts emotional, cognitive, physical, and social functioning. Stress was not viewed as a single or temporary reaction but as an ongoing process of managing overlapping

demands that challenge one's control and equilibrium. Across accounts, students described striving to maintain balance amid, e.g., academic, relational, and financial pressures, reflecting both personal endurance and the influence of broader social expectations and institutional constraints (Jiang et al., 2021; Maulana & Khawaja, 2022; Rudland et al., 2020; Vogel et al., 2014).

In the Indonesian context, where social harmony, familial responsibility, and interdependence are highly valued (Maulana & Khawaja, 2022), stress was often interpreted through relationships with others and the need to fulfill shared obligations. This pattern aligns with perspectives suggesting that individuals' sense of self and well-being is closely tied to their social roles and responsibilities (Harry C, 2018). While the physical and emotional symptoms of stress, such as headaches, impaired concentration, and withdrawal, are common across student populations globally, their meanings are shaped by local norms, economic conditions, and social expectations (Dressler, 2022).

Strengths and Limitations

The strength of this study lies in its cultural sensitivity, which underscores the importance of integrating cultural nuances into global understandings of stress among university students. Collecting in-the-moment reflections during students' engagement with the Rileks module enhanced ecological validity and captured authentic, personally relevant perspectives. The findings further contribute to theory by showing that stress is shaped by cultural nuances in perception and expression, reflecting its social and contextual embeddedness rather than a purely individual psychological state.

Participants represented a wide range of academic disciplines and geographic regions across Indonesia, contributing to the contextual richness of the findings. The analysis also benefited from the involvement of multiple coders and the assessment of IRR. Reported IRR values ranged from 83.33% to 100%, indicating a high level of coding consistency. The inclusion of IRR not only demonstrates agreement among coders on the emerging themes but also supports the transparency and methodological rigor of the qualitative analysis (Cheung & Tai, 2021).

However, the study has limitations. The use of qualitative self-report data from a specific demographic of university students may not fully capture the wide range of stress experiences across varied populations in Indonesia. Another limitation concerns the reliance on participants' written responses to two open-ended prompts. While this approach generated valuable thematic insights and effectively captured diverse perspectives (Braun & Clarke, 2022; Sundler et al., 2019), it lacked the opportunity for follow-up clarification or elaboration, which may have constrained the depth and contextual richness of specific themes. This limitation is partly inherent to the study's web-based format, as responses were collected online without direct researcher-participant interaction, making it challenging to verify contextual factors such as whether participants completed the modules independently or in shared settings, as noted in COREQ recommendations.

Future Directions

Future studies should broaden the sample to include students from vocational, religious, and informal education settings, as well as underrepresented regions, to enhance the applicability and transferability of findings. Longitudinal designs could also capture how definitions and symptoms of stress evolve across key life transitions, such as graduation, employment, and family changes. Methodologically, incorporating approaches such as in-depth interviews, focus groups, or participatory methods would enrich the contextual understanding. At the same time, mixed-methods designs could triangulate qualitative insights with quantitative measures of distress, performance, and help-seeking.

On a practical level, the findings can inform strategies for early detection and prevention of stress among university students. Incorporating culturally sensitive approaches to communication and screening can facilitate the early identification of distress and promote more relevant forms of support.

CONCLUSION

This study shows that stress, as defined and experienced by Indonesian university students, is a multifaceted construct characterized by perceived pressure and imbalance that arise when academic, familial, and social demands exceed one's ability to cope. While stress was generally associated with negative impacts on well-being, in rare cases, it was also seen as a potential source of motivation. The signs of stress were described in ways largely consistent with global understandings, suggesting that the manifestations of stress are universal even as their meanings are culturally shaped.

By highlighting how students define and recognize stress in their own terms, this study underscores that stress is both universal and contextual: universal in its symptoms yet culturally nuanced in its interpretation. These insights can guide universities in fostering supportive academic environments that acknowledge not only individual coping capacities but also the relational and other contextual dimensions of students' stress. Such culturally attuned understanding may enhance early identification, empathetic communication, and responsive mental health support within higher education settings in Indonesia.

ACKNOWLEDGMENTS

We would like to extend our gratitude to Sunia Fauziah Azmi for her invaluable contribution to the data analysis process, undertaken on a remunerated basis.

REFERENCES

- Acharya, L., Jin, L., & Collins, W. (2018). College Life is Stressful Today -- Emerging Stressors and Depressive Symptoms in College Students. *Journal of American College Health, 66*(7), 655–664. <https://doi.org/10.1080/07448481.2018.1451869>
- Ahmead, M., El Sharif, N., Abuiram, I., Alshawish, E., & Dweib, M. (2024). Depression, anxiety and coping strategies among Palestinian university students during political violence: a cross sectional study. *Frontiers in Public Health, 12*. <https://doi.org/10.3389/fpubh.2024.1436672>
- Alivernini, F., Cavicchiolo, E., Manganelli, S., Chirico, A., & Lucidi, F. (2019). Students' psychological well-being and its multilevel relationship with immigrant background, gender, socioeconomic status, achievement, and class size. *School Effectiveness and School Improvement, 31*(2), 172–191. <https://doi.org/10.1080/09243453.2019.1642214>
- Amirkhan, J. H., Landa, I., & Huff, S. (2018). Seeking signs of stress overload: Symptoms and behaviors. *International Journal of Stress Management, 25*(3), 301–311. <https://doi.org/10.1037/str0000066>

- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C. (2018). WHO World mental health surveys international college student project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology, 127*(7), 623–638. <https://doi.org/10.1037/abn0000362>
- Aziz, M. (2023). Women's Double burden in the family between culture and discrimination. *Potret Pemikiran, 27*(2), 227–244. <https://doi.org/10.30984/pp.v27i2.2782>
- Bergin, A., & Pakenham, K. (2015). Law student stress: Relationships between academic demands, social isolation, career pressure, study/life imbalance and adjustment outcomes in law students. *Psychiatry, Psychology and Law, 22*(3), 388–406. <https://doi.org/10.1080/13218719.2014.960026>
- Bettis, A. H., Coiro, M. J., England, J., Murphy, L. K., Zerkowicz, R. L., DeJardins, L., Eskridge, R., Adery, L. H., Yarboi, J., Pardo, D., & Compas, B. E. (2017). Comparison of two approaches to prevention of mental health problems in college students: Enhancing coping and executive function skills. *Journal of American College Health, 65*(5), 313–322. <https://doi.org/10.1080/07448481.2017.1312411>
- Cameron, L. (2023). Gender equality and development: Indonesia in a global context. *Bulletin of Indonesian Economic Studies, 59*(2), 179–207. <https://doi.org/10.1080/00074918.2023.2229476>
- Cheung, K. K. C., & Tai, K. W. H. (2021). The use of intercoder reliability in qualitative interview data analysis in science education. *Research in Science & Technological Education, 41*(3), 1155–1175. <https://doi.org/10.1080/02635143.2021.1993179>
- Deb, S., Banu, P. R., Thomas, S., Vardhan, R. V., Rao, P. T., & Khawaja, N. (2016). Depression among Indian university students and its association with perceived university academic environment, living arrangements and personal issues. *Asian Journal of Psychiatry, 23*(3), 108–117. <https://doi.org/10.1016/j.ajp.2016.07.010>
- Deng, Y., Cherian, J., Khan, N. U. N., Kumari, K., Sial, M. S., Comite, U., Gavurova, B., & Popp, J. (2022). Family and Academic Stress and Their Impact on Students' Depression Level and Academic Performance. *Frontiers in Psychiatry, 13*, 869337. <https://doi.org/10.3389/fpsy.2022.869337>
- Dessauvague, A. S., Dang, H.-M., Nguyen, T. A. T., & Groen, G. (2021). Mental Health of University Students in Southeastern Asia: A Systematic Review. *Asia Pacific Journal of Public Health, 34*(2–3), 172–181. <https://doi.org/10.1177/10105395211055545>
- Dressler, W. W. (2022). Culture and the stress process. In M. Singer, P. I. Erickson, & C. E. Abadia-Barrero (Eds.), *A companion to medical anthropology* (pp. 93–108). John Wiley & Sons. <https://doi.org/10.1002/9781119718963.ch5>
- Farnish, K. A. (2021). *“Not now, I had a long day”: Social withdrawal as a coping strategy for managing stress*. The University of Texas at Austin.

- Glise, K., Ahlborg, G., & Jonsdottir, I. H. (2014). Prevalence and course of somatic symptoms in patients with stress-related exhaustion: does sex or age matter. *BMC Psychiatry*, *14*(1), 118. <https://doi.org/10.1186/1471-244X-14-118>
- Graham, M., Milanowski, A., Miller, J., & Henderson, A. (2012). *Measuring and Promoting Inter-Rater Agreement of Teacher and Principal Performance Ratings*. Retrieved From <https://files.eric.ed.gov/fulltext/ED532068.pdf/>
- Habibah, U., Syakurah, R. A., Ikhsan, D. S., Zulissetiana, E. F., & Aini, S. (2021). Depression, anxiety, and stress among students of Sriwijaya University. *Indigenous: Jurnal Ilmiah Psikologi*, *6*(3), 23–35. <https://doi.org/10.23917/indigenous.v6i3.12629>
- Harry C, T. (2018). Individualism and Collectivism. In *Social Interaction and the Development of Knowledge*. Routledge. <https://doi.org/https://doi.org/10.4324/9780429499845>
- Hishan, S. S., Jaiprakash, H., Ramakrishnan, S., Mohanraj, J., Shanker, J., & Keong, L. B. (2018). Prevalence and socio-demographic association of depression, anxiety and stress among university students. *International Journal of Engineering & Technology*, *7*(2), 29. <https://doi.org/10.14419/ijet.v7i2.29.13998>
- Jiang, R., Liu, R., Star, J., Zhen, R., Wang, J., Hong, W., Jiang, S., Sun, Y., & Fu, X. (2021). How mathematics anxiety affects students' inflexible perseverance in mathematics problem-solving: Examining the mediating role of cognitive reflection. *British Journal of Educational Psychology*, *91*(1), 237–260. <https://doi.org/10.1111/bjep.12364>
- Juniar, D., van Ballegooijen, W., Karyotaki, E., van Schaik, A., Passchier, J., Heber, E., Lehr, D., Sadarjoen, S. S., & Riper, H. (2019). Web-based stress management program for university students in Indonesia: systematic cultural adaptation and protocol for a feasibility study. *JMIR Research Protocols*, *8*(1), e11493. <https://doi.org/10.2196/11493>
- Juniar, D., van Ballegooijen, W., Schulte, M., van Schaik, A., Passchier, J., Heber, E., Lehr, D., Sadarjoen, S. S., & Riper, H. (2022). A web-based stress management intervention for university students in Indonesia (rileks): feasibility study using a pretest-posttest design. *JMIR Formative Research*, *6*(7), e37278. <https://doi.org/10.2196/37278>
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE guide no. 131. *Medical Teacher*, *42*(8), 846–854. <https://doi.org/10.1080/0142159X.2020.1755030>
- Krys, K., de Almeida, I., Wasiel, A., & Vignoles, V. L. (2025). WEIRD–Confucian comparisons: Ongoing cultural biases in psychology's evidence base and some recommendations for improving global representation. *American Psychologist*, *80*(2), 247–263. <https://doi.org/10.1037/amp0001298>
- Kupriyanov, R., & Zhdanov, R. (2014). The eustress concept: problems and outlooks. *World Journal of Medical Sciences*, *11*(2), 179–185. <https://doi.org/10.5829/idosi.wjms.2014.11.2.8433>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*, Springer Publishing Company
- Lee, H., Masuda, T., Ishii, K., Yasuda, Y., & Ohtsubo, Y. (2023). Cultural differences in the perception of daily stress between European Canadian and Japanese undergraduate students. *Personality and Social Psychology Bulletin*, *49*(4), 571–584. <https://doi.org/10.1177/01461652231171111>

org/10.1177/01461672211070360

- Li, X., Wu, H., Meng, F., Li, L., Wang, Y., & Zhou, M. (2020). Relations of COVID-19-related stressors and social support with Chinese college students' psychological response during the COVID-19 pandemic. *Frontiers in Psychiatry, 11*, 551315. <https://doi.org/10.3389/fpsyt.2020.551315>
- Liem, A. D., Lau, S., & Nie, Y. (2008). The role of self-efficacy, task value, and achievement goals in predicting learning strategies, task disengagement, peer relationship, and achievement outcome. *Contemporary Educational Psychology, 33*(4), 486–512. <https://doi.org/10.1016/j.cedpsych.2007.08.001>
- Ma, K., Pitner, R., Sakamoto, I., & Park, H. Y. (2020). Challenges in acculturation among international students from Asian collectivist cultures. *Higher Education Studies, 10*(3), 34–43. <https://doi.org/10.5539/hes.v10n3p34>
- Maqsood, S., Bano, S., Goraya, J. T., & Sher, I. (2022). Peer pressure, academic stress and goal adjustment in day scholars and hostelite college students. *Journal of Research in Psychology, 4*(2), 81–93. <https://doi.org/10.31580/jrp.v4i2.2702>
- Maulana, H., & Khawaja, N. G. (2022). A Cultural perspective of well-being. In *Handbook of Health and Well-Being* (pp. 35–49). Springer Nature Singapore. https://doi.org/10.1007/978-981-16-8263-6_2
- Muthukrishna, M., Bell, A. V., Henrich, J., Curtin, C. M., Gedranovich, A., McInerney, J., & Thue, B. (2020). Beyond Western, Educated, Industrial, Rich, and Democratic (WEIRD) Psychology: Measuring and mapping scales of cultural and psychological distance. *Psychological Science, 31*(6), 678–701. <https://doi.org/10.1177/0956797620916782>
- Othman, N., Ahmad, F., El Morr, C., & Ritvo, P. (2019). Perceived impact of contextual determinants on depression, anxiety and stress: a survey with university students. *International Journal of Mental Health Systems, 13*(1), 1–9. <https://doi.org/10.1186/s13033-019-0275-x>
- Oubaid, V. (2023). Psychological stress and the autonomic nervous system. In *Primer on the Autonomic Nervous System* (pp. 301–304). Elsevier. <https://doi.org/10.1016/b978-0-323-85492-4.00131-9>
- Ovsiannikova, Y., Pokhilko, D., Kerdyvar, V., Krasnokutsky, M., & Kosolapov, O. (2024). Peculiarities of the impact of stress on physical and psychological health. *Multidisciplinary Science Journal, 6*, <https://doi.org/10.31893/multiscience.2024ss0711>
- Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2019). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth, 25*(1), 104–112. <https://doi.org/10.1080/02673843.2019.1596823>
- Ribeiro, Í. J. S., Pereira, R., Freire, I. V, de Oliveira, B. G., Casotti, C. A., & Boery, E. N. (2018). Stress and Quality of Life Among University Students: A Systematic Literature Review. *Health Professions Education, 4*(2), 70–77. <https://doi.org/10.1016/j.hpe.2017.03.002>
- Rizwan, M., Talha, M. A., & Qi, X. (2020). Cultural impact of perceived parental expectations

- on students' academic stress. *Annals of Social Sciences and Perspective*, 1(2), 53–65. <https://doi.org/10.52700/assap.v1i2.25>
- Rudland, J. R., Golding, C., & Wilkinson, T. J. (2020). The stress paradox: how stress can be good for learning. *Medical Education*, 54(1), 40–45. <https://doi.org/10.1111/medu.13830>
- Selye, H. (1974). Stress without distress. In *Psychopathology of human adaptation* (pp. 137–146). Springer.
- Shapero, B. G., Abramson, L. Y., & Alloy, L. B. (2016). Emotional reactivity and internalizing symptoms: moderating role of emotion regulation. *Cognitive Therapy and Research*, 40(3), 328–340. <https://doi.org/10.1007/s10608-015-9722-4>
- Slimmen, S., Timmermans, O., Mikolajczak-Degrauwe, K., & Oenema, A. (2022). How stress-related factors affect mental wellbeing of university students A cross-sectional study to explore the associations between stressors, perceived stress, and mental wellbeing. *PLOS ONE*, 17(11), e0275925. <https://doi.org/10.1371/journal.pone.0275925>
- Sun-Kyüng, L., Wi-Young, S., & Dong Jun, S. (2015). Association between chronic mental stress and academic performance among korean adolescents. *Universitas Psychologica*, 14(3), 967–974. <https://doi.org/10.11144/Javeriana.upsy14-3.abcm>
- Szabo, S., Tache, Y., & Somogyi, A. (2012). The legacy of Hans Selye and the origins of stress research: A retrospective 75 years after his landmark brief “Letter” to the Editor#ofNature. *Stress*, 15(5), 472–478. <https://doi.org/10.3109/10253890.2012.710919>
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>
- Tonon, G. H. (2021). Student's quality of life at the university: a qualitative study. *Applied Research in Quality of Life*, 16(4), 1517–1535. <https://doi.org/10.1007/s11482-020-09827-0>
- Uyun, Z., Mahmud, R., & Mahmud, R. (2016). Studi deskriptif mengenai pola stress pada mahasiswa praktikum. *Indigenous: Jurnal Ilmiah Psikologi*, 1(2). <https://doi.org/10.23917/indigenous.v1i1.4970>
- Van Slyke, C., Clary, G., & Tazkarji, M. (2023). Distress, eustress, and continuance intentions for distance learners. *Journal of Computer Information Systems*, 63(1), 149–161. <https://doi.org/10.1080/08874417.2022.2037477>
- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3(4), 206–222. <https://doi.org/10.1037/ppm0000047>
- Zhang, X., Wong, G. T. F., Liu, C. H., Hahm, H. “Chris,” & Chen, J. A. (2024). International student stressors and mental health during the COVID-19 pandemic: a qualitative study. *Journal of American College Health*, 72(4), 1027–1033. <https://doi.org/10.1080/07448481.2022.2068015>

Zheng, Y., Jiao, J.-R., & Hao, W.-N. (2022). Stress levels of nursing students: a systematic review and meta-analysis. *Medicine*, *101*(36), e30547. <https://doi.org/10.1097/MD.00000000000030547>