Scientific Research Publishing

Psychology, 2025, 16(2), 149-169
https://www.scirp.org/journal/psych
ISSN Online: 2152-7199
ISSN Print: 2152-7180

Psychological Responses after Failing an Important Exam: An IPA Study

Josephine Ebejer Grech

IDEA College Malta, Mosta, Malta
Email: josephine.ebejer.grech@ilearn.edu.mt

How to cite this paper: Ebejer Grech, J. (2025). Psychological Responses after Failing an Important Exam: An IPA Study. *Psychology, 16,* 149-169.
https://doi.org/10.4236/psych.2025.162009

Received: December 28, 2024
Accepted: February 10, 2025
Published: February 13, 2025

Abstract

This paper explores the emotional responses and coping strategies of post-secondary students following their failure in the Advanced Level Biology MATSEC examination, using an Interpretative Phenomenological Analysis (IPA) framework. The study sought to answer three main research questions: 1) What emotional responses do students experience upon failing an important examination? 2) What coping strategies do they adopt to manage these emotions? 3) What forms of support do they consider helpful in preparing for resit exams? Ten Maltese students, aged 17 - 18, participated in this study, and their experiences were analysed through semi-structured interviews, focus group, and classroom observations. Findings revealed a wide range of emotional responses, with most students experiencing intense feelings of depression, anxiety, and low self-worth, while others exhibited more moderate reactions. The study further found that coping strategies varied significantly. While some students engaged in introspective evaluation and shifted their mindset toward self-improvement, others resorted to avoidance behaviours. Support from family, peers, and teachers emerged as critical, with personalised one-on-one feedback from teachers being highly valued by students. The research, which was guided by Weiner's Attribution Theory, concludes with recommendations for educational leaders and educators to prioritise individualised academic support and continuous professional development for teachers, especially in psychological awareness. Limitations of the study include the short timeframe and the potential for response bias, as the researcher also served as the students' teacher during the remedial course.

Keywords

Introspective Evaluation, Support Networks, Mindset Shift, Avoidance

Behaviour, Psychology

1. Introduction

Examination failure in post-secondary education, particularly in high-stakes contexts such as Advanced-level exams, can profoundly affect a student's mental health and academic trajectory (Bueno, 2021; Kruger et al., 2016; Maymon & Hall, 2021; Patel et al., 2015; Salimzadeh et al., 2021). Failing a single A-level exam can jeopardise a student's chances of enrolling in their desired university programme, thereby influencing their future opportunities (MEDE, 2017). This research aims to examine the experiences of students who fail a MATSEC Matriculation exam, focusing on their emotional responses and the coping strategies they develop during the six weeks period between their initial failure and the resit examination. The MATSEC Matriculation system in Malta encompasses both Advanced-level (A-level) and Intermediate-level (I-level) exams, categorised at Malta Qualification Framework Level 4 (MQF 4), which is also equivalent to European Qualification Framework Level 4 (EQF 4). By employing Interpretative Phenomenological Analysis (IPA), this study delves into the subjective experiences of these students, seeking to reveal insights into how they manage this critical juncture in their academic lives. The researcher, who provides remedial classes for students who have failed A-level Biology, invited her students to participate in this study to explore their emotional responses to failure, the coping mechanisms they employ, and the types of support they perceive as beneficial. Recognising a potential bias, the researcher explicitly states that data will be collected exclusively from A-level Biology students seeking remedial lessons.

1.1. Background to the Study

Resit examinations provide students with a second opportunity to achieve a passing grade after initially failing an exam. During the period between release of results of the first attempt and the resit, many educators offer remedial classes to help students revise the curriculum. Patel et al. (2015) highlight that such remedial classes play a critical role in supporting students.

Remedial classes typically focus on reinforcing key curriculum concepts and addressing gaps in students' knowledge. The goal is to better prepare students for their resit examination. However, Patel et al. (2015) argue that simply preparing for the resit is insufficient if the deeper reasons for failure are not addressed. They advocate for a comprehensive analysis of the factors contributing to failure, which may include challenges related to learning skills, organisation, and personal issues. Identifying these underlying causes allows educators to provide tailored support, which may include improving study techniques, enhancing time management skills, and addressing personal or health-related obstacles that influence academic performance. Hays (2012) supports this approach, arguing that personalised inter-

ventions based on a detailed understanding of students' unique challenges are more effective than one-size-fits-all strategies. Patel et al. (2015) caution against categorising failing students without considering the complexity of their individual circumstances, advocating for a more nuanced approach to intervention.

In small remedial classes, like those typically offered by Maltese teachers during summer holidays, this personalised approach is feasible. The Ministry for Education, Youth, and Research (MEYR, 2023b) emphasises the importance of teacher training in providing targeted support beyond simply covering the curriculum content. By combining this targeted support with a deep understanding of students' needs, educators can empower failing students to overcome obstacles and achieve academic success (MEYR, 2023b).

Examination failure can also have serious emotional consequences, often contributing to increased anxiety and emotional distress (Salimzadeh et al., 2021). International bodies like UNESCO and the OECD have recognised the importance of addressing student wellbeing, particularly in the context of academic setbacks (Mason, 2017). There is growing support for developing targeted interventions to help students manage the emotional challenges associated with failure (Cefai et al., 2022).

Furthermore, students who fail important examinations may drop out of the education system. At a European level, the European Union has launched initiatives to investigate the causes and effects of early school leaving among students aged 18 - 24 (Eurostat, 2024). These initiatives encourage member states to reduce dropout rates by providing better guidance and support to students. Malta, for example, receives EU funding for programmes like Youth Guarantee, which funds summer remedial classes for students preparing for resit examinations (Escudero & López, 2017). Malta's policy on early school leaving includes providing personalised support, mentoring, and alternative study options, such as vocational training, to help struggling students (MEYR, 2023a). By 2022, Malta's early leaving from education and training (ELET) rate had dropped to 10.1%, a significant improvement from 33% in 2005. The goal is to reduce this rate further, to below 9% by 2030 (MEYR, 2023a).

Despite these efforts, local research on student wellbeing at the post-secondary level remains limited, particularly concerning the experiences of post-secondary students who fail critical exams. Failing a high-stakes examination, such as the MATSEC A-level, can have a profound psychological impact, triggering emotions such as anxiety, depression, and anger (Bueno, 2021; Maymon & Hall, 2021). Researchers have documented a wide range of emotional responses to failure, including sadness, disappointment, and frustration (Catterall, 1989; Cleary et al., 2008; Cornell et al., 2016; Greasley & Ashworth, 2007; Holme et al., 2010; Jürges et al., 2012; Kruger et al., 2016; Papay et al., 2010; Patel et al., 2015; Reardon et al., 2010). Kruger et al. (2016) emphasise the importance of understanding the impact of failure on students who rely on education to improve their future prospects.

1.2. Study's Contribution to Literature

This study addresses a significant research gap by examining post-secondary students' emotional responses, coping strategies, and the support mechanisms they find helpful after failing an A-level MATSEC examination in Biology. While examination failure has been explored in broader educational psychology and mental health literature, this research is unique in its specific focus on Advanced Level Biology students, a population whose experiences remain underrepresented in the local and international contexts. By employing Interpretative Phenomenological Analysis (IPA), the study delves deeply into students' personal experiences during the critical period between the initial failure in early July and the resit examination at the end of August. This detailed approach provides valuable insights into the intersection of emotional and academic challenges unique to this cohort. The findings are expected to inform the development of targeted, evidence-based support strategies, making a distinct and meaningful contribution to both educational practice and the field of educational psychology.

1.3. Theoretical Framework Underpinning this Study

This study is guided by two complementary theoretical frameworks: Attribution Theory (Weiner, 1986, 2018) and Cognitive Behavioural Theory (Beck, 1976, 2021). These frameworks align well with the research questions, offering valuable perspectives for understanding students' emotional responses and coping strategies following exam failure.

Attribution Theory examines how individuals perceive the causes of their successes and failures, and how these perceptions influence their future behaviour and motivation. It focuses on three main components: locus of control (whether the cause is internal or external), stability (whether the cause is consistent or variable), and controllability (whether individuals believe they can control the outcome). For example, a student may attribute exam failure to internal factors, such as a perceived lack of intelligence, or to external factors, like bad luck or the difficulty of the exam. These causes can be seen as stable (unchanging, such as intelligence) or unstable (temporary, like illness), and as controllable or uncontrollable, depending on the student's belief in their ability to influence the outcome (Weiner, 2018). In this study, Attribution Theory will be used to explore how students perceive the causes of their failure and how these attributions shape their coping mechanisms and the types of support they seek.

Cognitive Behavioural Theory (Beck, 1976, 2021) complements Attribution Theory by examining how students' thought patterns and emotional responses to failure influence their behaviours and coping strategies. According to this theory, negative thoughts about oneself, the world, and the future, often referred to as the cognitive triad, can lead to feelings of hopelessness and depression, which impact motivation and behaviour. For instance, a student attributing failure to stable and internal factors may engage in self-defeating behaviours, such as isolation or avoidance, reinforcing negative emotional cycles (Beck, 2021). By understanding

these patterns, Cognitive Behavioural Theory provides insights into how maladaptive thoughts and emotions contribute to coping difficulties, and it highlights opportunities for intervention, such as fostering resilience and reframing negative beliefs.

Together, these theoretical frameworks provide a robust foundation for analysing students' experiences of A-level Biology exam failure. Attribution Theory offers a lens for understanding students' interpretations of failure, while Cognitive Behavioural Theory provides a deeper exploration of the emotional and behavioural consequences of these interpretations. These frameworks will guide the study's analysis and inform its recommendations for improving support systems for students.

2. Literature Review

Studies indicate that examination failure is often associated with negative emotional responses such as despair and anger, which can impact students' motivation and self-concept (Wuthrich et al., 2020, 2021; Jürges et al., 2012). Research conducted in the United States (Cornell et al., 2006; Catterall, 1989) and Germany (Kruger et al., 2016) has revealed that failure can lead to decreased self-efficacy and psychological distress, adversely affecting students' future academic success and emotional wellbeing. Despite these insights, there is a notable lack of local studies exploring the emotional impacts of examination failure on Maltese students. Coping strategies adopted by students post-failure vary significantly, with studies showing that those who attribute failure to internal factors, such as effort and study skills, are more likely to adopt positive coping mechanisms (Cleary et al., 2008; Greasley & Ashworth, 2007). In contrast, students with a fixed mindset may resort to avoidance behaviours or self-handicapping, exacerbating their academic struggles (Holland, 2016; Duru et al., 2024). Encouraging a growth mindset and strategic attributions can empower students to navigate academic setbacks more effectively. Additionally, research highlights the importance of various forms of support in aiding students' recovery from failure, including instructional support through tutoring and study strategies, emotional support from peers and family, and encouragement (Luthar & Cicchetti, 2000; Kruger et al., 2016). Tailored support that addresses hidden challenges, such as anxiety or a lack of study skills, has been shown to be particularly effective (Holland, 2016; Putwain et al., 2023). Interventions such as cognitive behavioural therapy (CBT) and stress-reduction programmes have also proven beneficial in reducing distress and improving performance among failing students (Yusufov et al., 2019).

3. Methodology

This study adopts a qualitative research design, incorporating semi-structured interviews, focus groups, and unstructured observations to collect rich, descriptive data that reflect how students interpret their experiences of examination failure (Gorard & Taylor, 2004). The study is grounded in an interpretivist paradigm,

which views reality as subjective and knowledge as socially constructed (Saunders et al., 2007). This ontological and epistemological stance aligns with the study's goal of exploring students' emotional responses and coping mechanisms through their personal interpretations of failure (Gorard & Taylor, 2004). Employing an inductive approach, the research allowed themes and broader principles to emerge organically from the data (Saunders et al., 2007).

The study is underpinned by Interpretative Phenomenological Analysis (IPA), drawing on Husserl's phenomenological approach to understanding unique subjective experiences (Pietkiewicz & Smith, 2014). IPA was chosen because of its idiographic focus, which is well-suited for exploring individual emotional responses to a highly personal event like examination failure. This methodology emphasises the detailed exploration of participants' lived experiences and how they make sense of them, aligning with the research objective of uncovering students' emotional and cognitive processes (Eddles-Hirsch, 2015; Pietkiewicz & Smith, 2014). IPA's interpretivist stance allows for an immersive examination of participants' perspectives, enabling the researcher to uncover nuanced insights into their emotional and academic responses.

While IPA is a robust methodology for this study, it has limitations, including challenges in standardisation and capturing the essence of experiences, which are influenced by both the researcher's and participants' communication skills (Tuffour, 2017). Furthermore, the researcher's role as both a teacher and investigator introduces potential bias, as students may have tailored their responses to please the researcher. To address this, steps such as anonymised data collection, independent review of interpretations, and member-checking were employed to enhance validity and reliability.

The data collection tools, semi-structured interviews, focus groups, and unstructured observations, were carefully chosen to align with the study's objectives. Semi-structured interviews were conducted immediately after participants received their examination results and again at the end of the remedial course. These interviews allowed for flexibility in probing students' emotional reactions while providing a framework to explore their experiences systematically (Cohen et al., 2017). Focus group discussions conducted mid-course facilitated dynamic interactions between participants, enriching the data by capturing shared and diverse perspectives (Robson & McCartan, 2016). The use of unstructured observations throughout the six-week remedial course enabled the researcher to document students' behaviours, interactions, and emotional responses in a naturalistic classroom setting. This multi-faceted approach ensured a comprehensive understanding of the students' experiences.

The rationale for these tools lies in their complementarity. Semi-structured interviews provided in-depth insights into individual experiences, while focus groups offered a collective perspective, capturing the social dynamics of coping with failure. Observations added a contextual layer, allowing the researcher to assess behavioural patterns and emotional changes in real-time. This triangulation of

methods enhanced the richness and credibility of the findings (Robson & McCartan, 2016).

The study employed purposive sampling, selecting a small, homogenous group of students who had failed an important MATSEC examination in Biology and sought remedial lessons (Pietkiewicz & Smith, 2014). This approach ensured that the participants shared similar contexts, enabling an in-depth exploration of their lived experiences.

The data analysis process followed a systematic IPA framework, involving an iterative, step-by-step approach. Transcripts were read multiple times to identify emergent themes, which were then clustered into related concepts. These clusters were refined to create a final list of themes that reflected the essence of the participants' experiences (Pietkiewicz & Smith, 2014). Reliability and validity were ensured through inter-coder reliability checks, member-checking, and time triangulation, enhancing the study's credibility (Creswell, 2014; Saunders et al., 2007).

Acknowledging the limitations of the short research timeframe of three months, the study focuses on immediate emotional and academic responses. A longitudinal design in future studies could provide insights into the longer-term impact of failure on students' wellbeing and academic trajectories. Additionally, the sample's homogeneity, while suitable for idiographic analysis, limits generalisability. Including students from diverse disciplines and backgrounds in future research could enhance the applicability of findings.

Finally, ethical considerations were a priority throughout the study. Participants were assured of voluntary engagement, informed consent, and confidentiality. Ethical protocols adhered to GDPR regulations and Maltese legislation, with safeguards in place to protect participants from emotional distress (Pietkiewicz & Smith, 2014; Legislation Malta, 2018).

4. Findings and Discussion

The study included ten participants, consisting of seven females and three males, from various regions of Malta and from diverse socio-economic backgrounds. The majority were 18 years old, with two aged 17. All participants were Maltese and had failed the MATSEC Advanced Level Biology examination, receiving an "F" grade. They attended different state and church-affiliated post-secondary schools in Malta, with none coming from private schools.

4.1. Emotional Reactions Post-Failure

The study revealed various psychological reactions to examination failure, consistent with cognitive processes described by Putwain et al. (2022) and Weiner (2018). Students responded differently, with some experiencing intense emotions, while others exhibited more moderate reactions.

4.1.1. Intense Emotional Reactions

Seven out of ten students reported experiencing intense emotional responses after their examination failure. They described their experiences as profoundly distressing

and deeply personal. Many expressed feelings of self-punishment, isolation, and depression, with one student describing the experience as "falling into a deep dark well." They conveyed overwhelming emotions of self-hatred, self-blame, and shame, compounded by a sense of "crushing defeat" and "high disappointment." Some likened the experience to a "punch in the stomach," while others felt that "part of me died." Coping mechanisms included "crying," "screaming into a pillow," and "stress eating," while others reported a "loss of interest in activities" and an overwhelming sense of "hopelessness." The participants' vivid descriptions underscore the emotional toll of such failure, with one calling it "an overwhelming experience." These findings are consistent with studies by Jürges et al. (2012), which reported high levels of despair and anxiety among students in Germany who failed central exit exams, and Cornell et al. (2006), who found that 80% of high school students in North Carolina who failed exams experienced depression.

These descriptions resonate with the biological explanation of depression, where prolonged sadness and loss of interest can impair memory and concentration (Thapar et al., 2022). This is further explained by the overactivation of the amygdala and hypothalamus-pituitary-adrenal axis, which releases stress hormones like cortisol, shrinking brain regions responsible for learning and memory (Leistner & Menke, 2020). The impact of anxiety on students' ability to study effectively was highlighted, with students reporting physical symptoms such as headaches, stomach aches, and insomnia, linked to heightened anxiety (Thapar et al., 2022).

The emotional toll of failure stemmed from multiple sources: fear of disappointing parents and teachers, losing university entry opportunities, and missing out on summer enjoyment while peers celebrated. One notable aspect unique to Maltese culture was students' fear of disappointing their grandparents, with one participant describing how her grandparents prayed and lit candles for her success.

Weiner's (1985, 2018) Attribution Theory provides a framework to understand these reactions. Students who attributed their failure to internal factors, such as lack of effort, experienced negative emotions such as self-blame, shame, and hopelessness. For example, one participant remarked, "I kept blaming myself for not studying harder; it felt like I deserved this failure." Such internal attributions intensified their feelings of self-punishment and shame, further suppressing their motivation and potential. These findings align with Beck's (2021) Cognitive Behavioural Theory, which suggests that negative self-attributions trigger depressive emotions, often leading to self-destructive behaviours like isolation, stress-eating, and emotional outbursts.

Conversely, students who attributed their failure to external, uncontrollable factors, such as the difficulty of the exam or circumstances beyond their control, appeared less affected emotionally. This is supported by Weiner's Attribution Theory, which highlights how external attributions can help preserve self-esteem

and reduce emotional distress (Wuthrich et al., 2021).

Some students also described feelings of confusion or "turmoil," which may reflect difficulty with emotional regulation (Thapar et al., 2022). Student 1 described their experience with these words: "Receiving the results felt like a crushing defeat. In that moment, it seemed as though the world had come to an end. My emotions were in turmoil—I felt shocked and deeply disappointed in myself." One student experienced a delayed emotional reaction, reflecting slower cognitive appraisal, where individuals evaluate their situation and assess their ability to cope before reacting emotionally (Agah et al., 2021; Weiner, 1985).

4.1.2. Moderate Psychological Reactions

Three students reported moderate reactions to failure, exhibiting a carefree attitude and not experiencing depression or anxiety. These students attributed their failure to not studying enough and showed a realistic self-assessment, which mitigated negative emotions (Weiner, 1985). Student 7 admitted:

"In the past, I tended to concentrate on topics I grasped easily, while ignoring sections that posed challenges. Nowadays, I recognize that I could have been more attentive during lessons. Despite being easily distracted by even the simplest noises due to my condition, I acknowledge that I could have put in more effort to focus and pay attention, and study more the topics I found challenging".

This realistic self-assessment mitigated negative emotions, consistent with Weiner's Attribution Theory, which emphasises that attributing failure to controllable factors like effort can reduce the psychological burden and foster adaptive behaviours. For instance, these students demonstrated an acceptance of their failure and a resolve to improve, thereby avoiding the cycle of self-blame and emotional distress observed in others.

One student exhibited cognitive dissonance, acknowledging his failure to submit coursework while still desiring to pass the exam. This dissonance may have moderated his emotional response (Weiner, 2001).

These students benefited from social and teacher support, which encouraged adaptive coping strategies. For example, one student with autism reported that peer support significantly reduced their stress and enhanced engagement, aligning with findings by Agah et al. (2021). This demonstrates the protective role of positive social interactions in regulating the autonomic nervous system, enabling these students to remain calm in the face of stress (Bueno, 2021).

4.2. Second Theme: Introspective Evaluation

This study revealed that students introspectively evaluated their examination failures to identify contributing factors, with most adopting a mindset shift, while others exhibited avoidance behaviours.

4.2.1. Mindset Shifts

Many students experienced a significant mindset shift following their examination failure, engaging in introspective evaluation to identify areas for improvement.

These reflections often centred on controllable factors, such as time management, study techniques, and effort, aligning with Weiner's (1985) Attribution Theory. According to this theory, attributing failure to controllable internal factors example lack of preparation, fosters adaptive behaviours and resilience. For instance, several students reported adopting evidence-based study strategies such as active recall, spaced repetition, and working through past papers. This aligns with findings by Cleary et al. (2008) and Reardon et al. (2010), which demonstrated that strategic attributions and targeted interventions lead to enhanced performance in future assessments.

Student 6 illustrated this mindset shift: "By feeling bad, I am not going to change the result. So, I tried to do like our teacher told us: leave the past in the past and steer the future." This statement reflects the process of reframing failure as an opportunity for growth and development, emphasising the connection between internal attributions and adaptive responses.

Most students also recognised the need to let go of negative emotions and focus on future success, consistent with research by Cornell et al. (2006), which found that fostering positive self-perceptions and setting clear goals enhances motivation. For example, Student 3 highlighted the role of positive psychology in their approach:

> "Positive psychology plays a significant role in maintaining a positive outlook. Rather than focusing on the glass as half empty, it encourages us to see how we can fill the empty half. Moreover, recognising that many successful individuals have faced exam failures but still achieved high-ranking positions provides encouragement. In essence, these setbacks serve as valuable lessons, motivating us to work hard and pursue our dreams."

This demonstrates how the attribution of failure to internal, modifiable factors, coupled with a shift in perspective, can mitigate the psychological burden of failure and enhance goal-directed behaviour. The emphasis on learning from failure aligns with Kruger et al. (2016), who observed that students who attribute setbacks to insufficient effort are more likely to engage in self-regulatory strategies to improve performance.

Additionally, students' ability to reframe their experiences as opportunities for growth reflects a shift from fixed to growth mindsets, as described by Dweck (2006). By viewing failure as a stepping stone rather than a defining moment, students actively engaged in developing resilience and resourcefulness. For example, one participant noted, "I realised I wasted so much time procrastinating. Instead of blaming myself endlessly, I decided to focus on managing my time better and sticking to a schedule."

These findings underscore the transformative potential of mindset shifts and strategic attributions in fostering not only academic recovery but also personal growth. Weiner's Attribution Theory thus provides a valuable framework for understanding how students' interpretations of failure shape their emotional responses and subsequent actions.

4.2.2. Avoidance Behaviour

A few students exhibited avoidance behaviours, a common response to failure, as highlighted by Putwain et al. (2023). This behaviour can be understood as an attempt to escape distress or cognitive interference caused by heightened anxiety (Belcher et al., 2022; Thapar et al., 2022). For instance, Student 1 initially displayed high levels of effort, submitting numerous worked past papers for correction. However, when these efforts were met with grades such as a D or a C, she became visibly angry and frustrated. By the third week, her behaviour shifted, she stopped attending lessons physically, opting instead for online participation. She also refused oral feedback from her teacher, apologising and stating, "I cannot take this stress any longer." The researcher observed that her stress levels were exceptionally high, making her resistant to encouragement or moral support.

Such avoidance behaviours align with Weiner's (1985, 2018) Attribution Theory, which suggests that attributing failure to uncontrollable factors, such as perceived personal inadequacy, can lead to feelings of helplessness and disengagement. Student 1's refusal to engage with feedback reflects an attributional style where failure was seen as a reflection of her fixed abilities rather than as an opportunity for growth. This maladaptive attribution exacerbated her stress and perpetuated her avoidance behaviours.

Other students who exhibited avoidance behaviours adopted self-handicapping strategies, such as skipping in-person lessons, missing homework deadlines, or using mobile phones during class. These behaviours can be interpreted as efforts to protect self-esteem by creating external excuses for potential failure (Duru et al., 2024). For example, one student admitted to procrastination as a way of avoiding the anxiety of confronting their workload. Such actions reflect an attributional shift where failure is attributed to external factors, like distractions or time constraints, rather than internal factors, allowing students to shield their self-concept from the full impact of failure.

Escapism was another common coping mechanism among these students. For instance, Student 6 explained, "When I saw all the material, panic set in, and I didn't know where to begin. So I watched some videos."

This behaviour reflects an attempt to suppress the overwhelming emotional burden of failure by focusing on unrelated activities. Escapism, while temporarily alleviating stress, ultimately hinders productive engagement and reinforces avoidance patterns. Such behaviours are consistent with findings by Belcher et al. (2022), which highlight that students experiencing heightened anxiety often seek distractions to manage their emotional state.

Moreover, these avoidance behaviours can be understood through the lens of Weiner's Attribution Theory. Students who attribute failure to stable, uncontrollable factors, such as their perceived inability to handle stress or complete the workload, are more likely to adopt maladaptive coping strategies like avoidance. By externalising or minimising the reasons for failure, they attempt to preserve their self-esteem while disengaging from activities that may challenge their emotional resilience.

These findings underscore the importance of addressing maladaptive attributional styles and providing targeted interventions that encourage students to reinterpret failure as a temporary and controllable outcome. Teachers and mentors can play a critical role by fostering supportive environments where students feel safe to confront their challenges and reframe their attributions to emphasise effort and improvement.

4.3. Third Theme: Support Networks

4.3.1. The Role of Family

Family support emerged as a cornerstone in helping students cope with the emotional aftermath of examination failure. Students consistently emphasised the importance of unconditional familial care in restoring their confidence and emotional wellbeing. For example, Student 4 shared, "Knowing that your family cares about you no matter what, that is the best help." Parents, siblings, and grandparents provided emotional comfort, practical advice, and encouragement, helping students shift their focus from failure to preparing for resit exams. This finding aligns with Ryan and Deci's (2020) Self-Determination Theory, which highlights the critical role of relatedness in fostering emotional wellbeing. Emotional validation from family members who listened without judgment was particularly instrumental in mitigating feelings of shame and hopelessness, supporting Wuthrich et al.'s (2021) emphasis on maintaining positivity through strong family ties.

A unique dimension of family support within the Maltese cultural context was the influence of religious traditions. Grandparents often played a pivotal role, offering prayers and lighting candles as expressions of their hope and support. Student 10 described this cultural dynamic very clearly:

> "My grandparents have been praying for me and lighting candles in front of the statue of Our Holy Lady for months. They always ask how I'm doing in my studies and are so eager to hear that I've passed, so they can thank Our Holy Lady for her grace. I can't stop picturing their happy faces turning to sadness. It's a feeling that hits me like a hole in my stomach."

This combination of spiritual and emotional support is deeply rooted in Maltese family dynamics, underscoring the interconnection between cultural practices and psychological resilience. Such support not only helped students feel cared for but also motivated them to succeed, knowing their achievements would bring pride and joy to their families.

4.3.2. Support from Peers

Peer support was equally significant in alleviating the emotional toll of examination failure. Friends who shared similar experiences offered empathy, encouragement, and practical advice, creating a sense of solidarity and reducing feelings of isolation. This aligns with Sein et al.'s (2020) findings that peer networks can mitigate negative emotions and enhance academic performance.

The study found that collaborative efforts during remedial classes fostered a

sense of community and shared goals among students. Peer-led study sessions and informal discussions provided a platform for exchanging strategies, such as breaking down complex topics or practising past papers. These interactions not only strengthened academic skills but also created a supportive environment that motivated students to persevere. For example, one participant noted, "During the remedial classes, we helped each other stay on track. Knowing you're not alone makes a huge difference."

This sense of shared struggle and mutual encouragement exemplifies the importance of peer networks in promoting resilience and academic engagement.

4.3.3. Support from Teachers

The teacher's role was critical in providing both academic and emotional support, blending pedagogical expertise with a focus on students' emotional wellbeing. The remedial teacher employed a holistic approach, addressing students' emotional needs while equipping them with study skills and subject knowledge. One-to-one sessions were particularly effective, enabling students to express their concerns in a safe environment and receive personalised feedback. This approach aligns with Holland's (2016) research, which highlights the importance of addressing both emotional and academic dimensions of student development.

Student 7 reflected on the benefits of tailored support:

> "Some time ago I went abroad on an Erasmus, and we had sessions about time management, how to deal with workloads and deadlines, study skills, and so forth. I think that a student should not go for an Erasmus to have these sessions. I believe that all students should be taught these things."

Students valued the emphasis on practical strategies, such as time management, effective revision techniques, and the development of a growth mindset. The teacher's encouragement to view failure as a learning opportunity resonated deeply with students, reflecting Yeager and Dweck's (2020) findings on the role of growth mindsets in fostering resilience and adaptability.

The teacher's use of positive psychology principles further motivated students to stay engaged and work towards their goals. For example, students reported feeling inspired by messages that reframed failure as a stepping stone to success. However, the study also highlighted potential drawbacks. One student reported heightened anxiety when the importance of passing was overly emphasised, illustrating how excessive performance pressure can exacerbate stress. This observation supports Putwain et al.'s (2022) findings that undue emphasis on high-stakes outcomes can hinder performance by increasing anxiety.

5. Conclusion

5.1. Limitations of the Study

While this study provides valuable insights into the emotional and academic impacts of examination failure, several limitations must be acknowledged.

As described in the methodology section, one key limitation is the dual role of

the researcher as both a teacher and investigator, which may have introduced response bias. Students might have provided feedback they believed would please the researcher, potentially skewing the findings. To mitigate this, future studies could incorporate anonymised data collection methods, such as surveys or interviews conducted by an independent third party, a practice that was not possible for this research. Additionally, validation of findings through external sources or triangulation with other data sets could enhance the reliability of the results.

The short research timeframe of three months also restricted the depth of analysis. While the study sheds light on students' immediate emotional and academic responses, future similar studies could capture long-term outcomes or changes over time. A longitudinal approach in future research could provide a more comprehensive understanding of how students' coping mechanisms, emotional states, and academic trajectories evolve after examination failure.

Another limitation is the homogeneity of the sample, which focused exclusively on A-level Biology students. While this specificity offers valuable insights for this cohort, it limits the generalisability of the findings to students in other disciplines or with diverse academic and cultural backgrounds. Future studies could include students from different subjects, educational levels, and socio-economic contexts to enhance the applicability of the study and provide a broader perspective on how examination failure affects different groups.

Addressing these limitations in future research would strengthen the understanding of the complex dynamics surrounding examination failure and support the development of more robust and inclusive interventions.

5.2. Recommendations

5.2.1. Personalised One-on-One Support

The study emphasises the importance of personalised, one-on-one support from educators, particularly for students who experience intense psychological reactions to failure. Participants highlighted the value of receiving individualised attention and feedback, such as targeted sessions to address misunderstood concepts, guided practice on challenging topics, and tailored advice on study techniques. One participant mentioned how their teacher helped them break down complex topics into manageable sections, which significantly reduced their anxiety and improved their understanding. Another participant shared how personalised weekly progress reviews helped them stay on track and motivated. These interventions enabled students to regain confidence, address specific weaknesses, and develop effective coping strategies.

However, providing such support requires time and effort beyond the standard teaching workload. To make this feasible, educational leaders could consider integrating one-on-one support into curriculum planning, such as by scheduling dedicated time for individualised feedback sessions or implementing small-group tutorials. Ensuring teachers have the resources, training, and allocated time to provide such personalised interventions would enhance their capacity to support students effectively within their regular duties.

5.2.2. Continuous Professional Development (CPD)

Continuous Professional Development (CPD) for teachers is crucial for addressing students' psychological and academic needs effectively. CPD programmes should prioritise stress management and emotional resilience, ensuring that educators are equipped to support students facing significant emotional challenges. For instance, training in stress management techniques would enable teachers to help students identify triggers and develop coping mechanisms. Additionally, fostering emotional resilience among educators themselves is essential, as teachers who can model resilience are better positioned to guide their students through setbacks.

CPD programmes could include workshops on recognising signs of stress and anxiety in students, paired with practical strategies for early intervention, such as creating supportive classroom environments or encouraging constructive conversations about failure. For example, teachers could be trained to implement personalised feedback sessions or guide students in setting realistic goals, which are particularly effective in helping students rebuild confidence after examination failure.

To ensure accessibility and effectiveness, CPD should be seamlessly integrated into the academic year, with designated in-service days or after-school sessions to prevent overloading teachers' workloads. This investment in professional development is particularly important for preventing school dropouts, as students who receive insufficient emotional support are more likely to disengage from education (Eurostat, 2024). By equipping teachers with these critical skills, CPD programmes can foster a more resilient, inclusive, and supportive educational system.

5.2.3. Psychological Resilience and Student Retention

Schools should adopt a holistic approach to education, integrating emotional support with academic instruction to help students cope with the challenges of failing an important A-level Biology examination. This approach is crucial for fostering psychological resilience and preventing disengagement or dropout following academic setbacks (Ryan & Deci, 2020). To achieve this, schools can introduce well-being sessions specifically tailored to the needs of students dealing with examination failure. These sessions could focus on stress management, mindfulness, and emotional regulation, equipping students with practical skills such as breathing techniques, time management, and positive self-talk. Such tools are essential in managing the emotional distress that often accompanies examination failure (Thapar et al., 2022).

In addition to standalone sessions, schools could incorporate discussions on resilience, coping strategies, and growth mindsets into existing lessons, particularly in science classes. For instance, a Biology class might include content on the physiological responses to stress, helping students understand their emotional reactions to examination failure from a scientific perspective (Leistner & Menke, 2020). Teachers play a critical role in this process, and equipping them to recognise signs of emotional distress in students who have failed can significantly

enhance the support provided. Professional development sessions for teachers could focus on active listening, creating supportive classroom environments, and using positive reinforcement to rebuild students' confidence after academic setbacks (Holland, 2016).

Peer support systems can also provide invaluable assistance to students facing the disappointment of failing a critical A-level Biology exam. Schools could establish mentoring programmes where students who have successfully navigated similar challenges offer guidance and encouragement. These peer-led interactions can foster a sense of shared experience and reduce feelings of isolation, as highlighted by Sein et al. (2020). Furthermore, ensuring the availability of professional counselling services is vital. Whether through on-site counsellors or partnerships with external mental health organisations, students should have access to more intensive emotional support when needed (Cornell et al., 2006).

By implementing these strategies, schools can provide targeted support for students grappling with the aftermath of failing an important A-level Biology examination. This approach not only enhances students' emotional wellbeing but also increases their likelihood of academic recovery and long-term resilience. By addressing both the academic and emotional dimensions of examination failure, schools can help students remain engaged and prepared to face future challenges with confidence (Yeager & Dweck, 2020).

5.3. Recommendations for Future Studies

Future studies should broaden the scope to include students from various academic disciplines and socio-economic backgrounds. While this study focused on A-level Biology students, expanding to other subjects could reveal unique challenges and coping strategies specific to different fields. For instance, students in humanities or vocational training may face different academic pressures compared to those in science disciplines. Including participants from diverse socio-economic contexts would also enhance the generalisability of the findings and provide a richer understanding of how resources and opportunities shape students' responses to failure and coping mechanisms.

Additionally, future research could benefit from adopting a mixed-methods approach, combining both qualitative and quantitative methods. While qualitative research provides in-depth insights into personal experiences, quantitative measures such as surveys or psychometric tools could offer a broader perspective on the prevalence and intensity of emotional responses across a larger population. Supplementing the qualitative Interpretative Phenomenological Analysis (IPA) with additional data sources, such as student diaries, academic records, or feedback from parents and teachers, would further enhance the validity and credibility of the findings. Student diaries, for example, could provide a longitudinal view of emotional and behavioural changes, while academic records might reveal patterns in performance that correlate with coping strategies. Parental or teacher feedback could offer an external perspective, adding context to students' self-reported

experiences. This multi-faceted approach would create a fuller and more nuanced picture of the emotional and behavioural dimensions of coping with academic failure, providing actionable insights for educators and policymakers.

Exploring the role of digital tools and online resources in supporting students could also be a valuable area of inquiry. With the growing reliance on technology in education, future studies might investigate how online platforms, mental health apps, or digital peer support groups help students navigate academic challenges. Understanding the efficacy of these tools could inform the development of accessible, scalable support systems tailored to students' needs.

Finally, to address potential biases in data collection, future research should consider involving a neutral third party for data collection and analysis. This would mitigate the influence of teacher-student dynamics, ensuring more objective findings. By employing independent researchers or anonymised data collection methods, future studies could further enhance the reliability and validity of their results.

5.4. Contribution to the Field

While the emotional and academic challenges of examination failure are well-documented in educational research, this study offers a unique contribution through its use of Interpretative Phenomenological Analysis (IPA) and its specific focus on Advanced Level Biology students in Malta. IPA's emphasis on individual lived experiences provides in-depth insights into how students interpret and cope with failure, a perspective that is often underrepresented in broader quantitative studies. By focusing on a homogenous group, A-level Biology students, the study captures ways in which subject-specific demands intersect with emotional and psychological stressors, offering insights into how high-stakes examinations uniquely impact students in science disciplines.

Moreover, the findings have broader implications beyond the Maltese context. While the cultural and educational setting of Malta adds specificity, many of the identified themes, such as the role of family support, teacher intervention, and peer networks, are universal and can inform support strategies in other educational systems. For instance, the integration of personalised feedback, the development of resilience-focused curricula, and the emphasis on peer mentoring are practices that could be adapted to various cultural and institutional settings. Highlighting these transferable elements broadens the relevance of the study and establishes a foundation for comparative research across different educational contexts.

Additionally, the study provides practical recommendations for educational leaders and policymakers, emphasizing the need to align emotional support with academic instruction. These findings are particularly valuable for institutions seeking to mitigate the long-term effects of examination failure, such as disengagement and dropout. By framing failure as a growth opportunity, the study contributes to the ongoing discourse on fostering resilience and adaptability in

students, aligning with contemporary educational paradigms that prioritise holistic development and wellbeing.

5.5. Conclusion

This study explored emotional and academic challenges faced by Maltese students after failing an important MATSEC Advanced level Biology examination. By employing IPA, it provides detailed insights into students' experiences, coping strategies, and the critical role of support systems in fostering resilience. The findings highlight the need for schools to integrate emotional wellbeing into curricula, equip teachers with effective support strategies, and explore innovative approaches to addressing examination failure. By implementing these recommendations, educators can better support students in navigating setbacks, ensuring they remain engaged with a growth mindset.

Acknowledgements

This paper is the result of a mini study conducted as part of the requirements for a doctoral course the author is pursuing.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Agah, J. J., Ede, M. O., Asor, L. J., Ekesionye, E. N., & Ejionueme, L. (2021). Managing Examination Induced Stress among Students Using FEAR-Model of Cognitive Behavioural Intervention: Policy Implications for Educational Evaluators. *Current Psychology, 42,* 3011-3023.

Beck, A. T. (1976). *Cognitive Therapy and the Emotional Disorders*. International Universities Press. https://archive.org/details/cognitivetherapy0000beck_q8c8?utm_source=chatgpt.com

Beck, A. T. (2021). The Future of Cognitive Therapy. *Cognitive Therapy and Research, 45,* 620-622.

Belcher, J., Wuthrich, V. M., & Lowe, C. (2022). Teachers Use of Fear Appeals: Association with Student and Teacher Mental Health. *British Journal of Educational Psychology, 92,* 610-626. https://doi.org/10.1111/bjep.12467

Bueno, D. (2021). *Exams as a Source of Stress: How Assessments May Affect Learning, through Stress*. IBE-UNESCO Science of Learning Briefings. https://solportal.ibe-unesco.org/articles/exams-as-a-source-of-stress-how-assessments-may-affect-learning-through-stress/

Catterall, J. S. (1989). *School Dropouts: Here Today, Here Tomorrow. CSE Technical Report, 296*. UCLA Center for Research on Evaluation, Standards and Student Testing.

Cefai, C., Camilleri, L., Bartolo, P., Grazzani, I., Cavioni, V., Conte, E. et al. (2022). The Effectiveness of a School-Based, Universal Mental Health Programme in Six European Countries. *Frontiers in Psychology, 13,* Article ID: 925614. https://doi.org/10.3389/fpsyg.2022.925614

Cleary, T. J., Platten, P., & Nelson, A. (2008). Effectiveness of the Self-Regulation

Empowerment Program with Urban High School Students. *Journal of Advanced Academics, 20,* 70-107. https://doi.org/10.4219/jaa-2008-866

Cohen, L., Manion, L., & Morrison, K. (2017). Mixed Methods Research. In L. Cohen, L. Manion, & K. Morrison (Eds.), *Research Methods in Education* (8th ed., pp. 31-50). Routledge. https://doi.org/10.4324/9781315456539-2

Cornell, D. G., Krosnick, J. A., & Chang, L. (2006). The Case of the Student Reactions to Being Wrongly Informed of Failing a High-Stakes Test: Minnesota Basic Standards Test. *Educational Policy, 20,* 718-751. https://doi.org/10.1177/0895904805284123

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Sage.

Duru, E., Balkis, M., & Duru, S. (2024). Fear of Failure and Academic Satisfaction: The Mediating Role of Emotion Regulation Difficulties and Procrastination. *European Journal of Psychology of Education, 39,* 2901-2914. https://doi.org/10.1007/s10212-024-00868-9

Dweck, C. S. (2006). *Mindset: The New Psychology of Success*. Random House.

Eddles-Hirch, K. (2015). Phenomenology and Educational Research. *International Journal of Advanced Research, 3,* 251-260. https://researchonline.nd.edu.au/cgi/viewcontent.cgi?article=1172&context=edu_article

Escudero, V., & López M. E. (2017). The European Youth Guarantee: A Systematic Review of Its Implementation across Countries. *ILO Working Papers, 21,* 189-204. https://www.ilo.org/publications/european-youth-guarantee-systematic-review-its-implementation-across

Eurostat (2024). *Early School Leavers down to 9.5% in 2023*. Eurostat. https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20240523-1

Gorard, S., & Taylor, C. (2004). *Combining Methods in Educational and Social Research*. McGraw-Hill.

Greasley, K., & Ashworth, P. (2007). The Phenomenology of "Approach to Studying": The University Student's Studies within the Lifeworld. *British Educational Research Journal, 33,* 819-843. https://doi.org/10.1080/01411920701656977

Hays, R. B. (2012). Remediation and Re-Assessment in Undergraduate Medical School Examinations. *Medical Teacher, 34,* 91-92. https://doi.org/10.3109/0142159x.2012.643268

Holland, C. (2016). Critical Review: Medical Students' Motivation after Failure. *Advances in Health Sciences Education, 21,* 695-710. https://doi.org/10.1007/s10459-015-9643-8

Holme, J. J., Richards, M. P., Jimerson, J. B., & Cohen, R. W. (2010). Assessing the Effects of High School Exit Examinations. *Review of Educational Research, 80,* 476-526. https://doi.org/10.3102/0034654310383147

Jürges, H., Schneider, K., Senkbeil, M., & Carstensen, C. (2012). Assessment Drives Learning: The Effect of Central Exit Exams on Curricular Knowledge and Mathematical Literacy. *Economics of Education Review, 31,* 56-65. https://doi.org/10.2139/ssrn.1423743

Kruger, L. J., Li, C., Kimble, E., Ruah, R., Stoianov, D., & Krishnan, K. (2016). Impact of Repeatedly Failing a High School Exit Exam: Voices of English Language Learners. *The Urban Review, 48,* 463-483. https://doi.org/10.1007/s11256-016-0363-z

Legislation Malta (2018). *Data Protection Act*. https://legislation.mt/eli/cap/586/eng/pdf

Leistner, C., & Menke, A. (2020). Hypothalamic-Pituitary-Adrenal Axis and Stress. In *Handbook of Clinical Neurology* (pp. 55-64). Elsevier. https://doi.org/10.1016/b978-0-444-64123-6.00004-7

Luthar, S. S., & Cicchetti, D. (2000). The Construct of Resilience: Implications for Interventions and Social Policies. *Development and Psychopathology, 12,* 857-885.

https://doi.org/10.1017/s0954579400004156

Mason, H. D. (2017). Stress-Management Strategies among First-Year Students at a South African University: A Qualitative Study. *Journal of Student Affairs in Africa, 5,* 131-149. https://doi.org/10.24085/jsaa.v5i2.2744

Maymon, R., & Hall, N. C. (2021). A Review of First-Year Student Stress and Social Support. *Social Sciences, 10,* Article No. 472. https://doi.org/10.3390/socsci10120472

MEDE (Minister for Education and Employment) (2017). *The Working Group on the Future of Post-Secondary Education*. MEDE. https://www.um.edu.mt/library/oar/bitstream/123456789/108002/1/The_working_group_on_the_future_of_post-secondary_education%282017%29.pdf

MEYR—Ministry for Education, Sports, Youth, Research and Innovation (2023a). *In Early Leaving from Education and Training Strategy—The Way forward 2023-2030*. Government of Malta—Ministry for Education, Sport, Youth, Research and Innovation (MEYR). https://education.gov.mt/wp-content/uploads/2023/07/ELET-Strategy-English-18th-July-1530.pdf

MEYR—Ministry for Education, Sports, Youth, Research and Innovation (2023b). *Visioning the Future by Transforming Education. National Education Strategy 2024-2030*. Government of Malta—Ministry for Education, Sport, Youth, Research and Innovation. https://education.gov.mt/wp-content/uploads/2023/12/NATIONAL-EDUCATION-BOOKLET-DEC-2023-2030.pdf

Papay, J. P., Murnane, R. J., & Willett, J. B. (2010). The Consequences of High School Exit Examinations for Low-Performing Urban Students: Evidence from Massachusetts. *Educational Evaluation and Policy Analysis, 32,* 5-23. https://doi.org/10.3102/0162373709352530

Patel, R. S., Tarrant, C., Bonas, S., & Shaw, R. L. (2015). Medical Students' Personal Experience of High-Stakes Failure: Case Studies Using Interpretative Phenomenological Analysis. *BMC Medical Education, 15,* Article No. 86. https://doi.org/10.1186/s12909-015-0371-9

Pietkiewicz, I., & Smith, J. (2014). *A Practical Guide to Using Interpretative Phenomenological Analysis in Qualitative Research Psychology*. https://www.doi.org/10.14691/CPPJ.20.1.7

Putwain, D. W., Jansen in de Wal, J., & van Alphen, T. (2023). Academic Buoyancy: Overcoming Test Anxiety and Setbacks. *Journal of Intelligence, 11,* Article No. 42. https://doi.org/10.3390/jintelligence11030042

Putwain, D. W., Pekrun, R., Rainbird, E., & Roberts, C. (2022). Cognitive-Behavioural Intervention for Test Anxiety: Could Teachers Deliver the STEPS Program and What Training Would They Require? In L. R. V. Gonzaga, L. L. Dellazzana-Zanon, & A. M. Becker da Silva (Eds.), *Handbook of Stress and Academic Anxiety* (pp. 381-399). Springer International Publishing. https://doi.org/10.1007/978-3-031-12737-3_25

Reardon, S. F., Arshan, N., Atteberry, A., & Kurlaender, M. (2010). Effects of Failing a High School Exit Exam on Course Taking, Achievement, Persistence, and Graduation. *Educational Evaluation and Policy Analysis, 32,* 498-520. https://doi.org/10.3102/0162373710382655

Robson, C., & Mccartan, K. F. (2016). *Real World Research* (4th ed.). Wiley.

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and Extrinsic Motivation from a Self-Determination Theory Perspective: Definitions, Theory, Practices, and Future Directions. *Contemporary Educational Psychology, 61,* Article ID: 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

Salimzadeh, R., Hall, N. C., & Saroyan, A. (2021). Examining Academics' Strategies for

Coping with Stress and Emotions: A Review of Research. *Frontiers in Education, 6,* Article ID: 660676. https://doi.org/10.3389/feduc.2021.660676

Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students* (5th ed.). Pearson Education Limited.

Swan Sein, A., Dathatri, S., & Bates, T. A. (2020). Twelve Tips on Guiding Preparation for Both High-Stakes Exams and Long-Term Learning. *Medical Teacher, 43,* 518-523. https://doi.org/10.1080/0142159x.2020.1828570

Thapar, A., Eyre, O., Patel, V., & Brent, D. (2022). Depression in Young People. *The Lancet, 400,* 617-631. https://doi.org/10.1016/s0140-6736(22)01012-1

Tuffour, I. (2017). A Critical Overview of Interpretative Phenomenological Analysis: A Contemporary Qualitative Research Approach. *Journal of Healthcare Communications, 2,* 52. https://doi.org/10.4172/2472-1654.100093

Weiner, B. (1985). An Attributional Theory of Achievement Motivation and Emotion. *Psychological Review, 92,* 548-573. https://doi.org/10.1037//0033-295x.92.4.548

Weiner, B. (1986). *An Attributional Theory of Motivation and Emotion*. Springer-Verlag.

Weiner, B. (2001). Intrapersonal and Interpersonal Theories of Motivation from an Attribution Perspective. In F. Salili, C. Chiu, & Y. Hong (Eds.), *Student Motivation* (pp. 17-30). Springer US. https://doi.org/10.1007/978-1-4615-1273-8_2

Weiner, B. (2018). The Legacy of an Attribution Approach to Motivation and Emotion: A No-Crisis Zone. *Motivation Science, 4,* 4-14. https://doi.org/10.1037/mot0000082

Wuthrich, V. M., Belcher, J., Kilby, C., Jagiello, T., & Lowe, C. (2021). Tracking Stress, Depression, and Anxiety across the Final Year of Secondary School: A Longitudinal Study. *Journal of School Psychology, 88,* 18-30. https://doi.org/10.1016/j.jsp.2021.07.004

Wuthrich, V. M., Jagiello, T., & Azzi, V. (2020). Academic Stress in the Final Years of School: A Systematic Literature Review. *Child Psychiatry & Human Development, 51,* 986-1015. https://doi.org/10.1007/s10578-020-00981-y

Yeager, D. S., & Dweck, C. S. (2020). What Can Be Learned from Growth Mindset Controversies? *American Psychologist, 75,* 1269-1284. https://doi.org/10.1037/amp0000794

Yusufov, M., Nicoloro-SantaBarbara, J., Grey, N. E., Moyer, A., & Lobel, M. (2019). Meta-analytic Evaluation of Stress Reduction Interventions for Undergraduate and Graduate Students. *International Journal of Stress Management, 26,* 132-145. https://doi.org/10.1037/str0000099