Australian teachers' causal attributions along a motivational continuum in supporting their resilience

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Teachers' motivation and the conditions that support their resilience to sustain motivation in the profession impact on their decision-making and outcomes for students. Yet a less commonly explored issue in educational research is the interdependence of the contextual influences on being a teacher and those teachers' thoughts and behaviours. This research deployed a qualitative inquiry approach to investigate how teachers' causal attributions about their perceived experiences indicate varying levels of external and internal motivation. The data extracts from semi-structured interviews with six Australian teachers provided insight into how they appraised the complexities, challenges and contradictions that were inherent in the work that they performed in their profession. Thematic analysis was used to deconstruct and interpret the teachers' narratives that reflected their inward feelings about how they practised emotional regulation, developed an open approach to change, recognised the pressures inherent in different stages in a teaching career and facilitated a work-life balance to manage the external and personal demands. The conceptually framed and exploratory discussion proposes that how teachers attribute causes in response to multifaceted, potentially difficult and at times competing events and issues in the workplace can be interpreted along a motivational continuum to identify resilient strengths and required support.

Introduction

At a time when the teaching profession globally is under pressure to recruit, train and retain teachers (Amitai & Van Houtte, 2022; Kelly et al., 2019; Kitching et al., 2009), it is important to understand issues of teachers' motivation further. Motivation is linked to teachers' satisfaction with their jobs and, ultimately, to the decisions that they make about whether to leave or stay in the teaching profession (Brun et al., 2022). Teacher motivation refers to doing something that is initiated from intrinsic values and inherent interest to teach and from contextually influenced reasons that sustain teaching intensity (Han & Yin, 2016). Central to theories of motivation are causal beliefs that are concerned with *why* a phenomenon occurs, and that influence teachers' future decision-making, emotions and behaviour. Teachers appraise the situations in which they find themselves and are able to transform those situations (Clarà, 2017), based in part on their attributions of causality (Weiner, 1985). At its extremes, one teacher may feel a situation to be unchangeable, out of personal control and caused by factors external to oneself, while another teacher may feel the same situation to be short-lived, within personal control and partly caused by oneself. These two situations—and, more generally, the way that teachers attribute causality—impact on their sense of motivation.

Our article reports a qualitative investigation of teachers' appraisals of their often challenging situations, guided by two interrelated theories about motivation. Firstly, *teachers' motivations matter*, whereby intrinsic motivation is a basis for a sense of psychological satisfaction in one's work (Ryan & Deci, 2000). Secondly, *teachers' motivations are influenced by their causal attributions,* which can be understood as having properties of locus, stability and controllability (Weiner, 1985). Together, these two theories provide insight into teachers' causal attributions and location on the motivational continuum that we suggest is valuable when considering how to guide teachers in transforming their appraisal of a situation (Clarà, 2017; Clarà et al., 2023).

Our paper addresses one research question in order to conclude by posing a second question. Firstly, it asks: *What can teachers' causal attributions about their perceived experiences reveal about their motivational state?* This question is addressed through an exploration of thematic analysis for investigating teachers' descriptions of their perceived experiences and what those experiences can reveal about a teacher's location along the motivational continuum (in relation to the respective experience). Secondly, it poses the question: *What is the relevance of teachers' causal attributions to guiding teacher educators in how to aid them in transforming their appraisals of situations?* This second question is introduced in the discussion as it makes clear the significance of the present work. Accordingly, the discussion is presented as an exploratory and conceptually informed analysis of teachers' causal attributions that extends current theoretical and practical understanding of this complex and crucial phenomenon.

Teachers' reflexive reflections influence their career decision-making and provide insights into the internal and external influences that can trigger a stimulus and impact on whether a teacher remains in the profession. It follows then that teachers' motivation and the conditions that support their resilience are contributing influences on their work satisfaction and retention (Turner & Theilking, 2019). This research explored the narratives of teachers to investigate how they appraise their emotional experiences, when faced with the complexities, challenges and contradictions in their work context, and it offers insights into the causes that they attribute in response to multifaceted, potentially difficult and at times competing events and issues in the workplace. This is relevant when teachers' reasons for leaving the profession reflect "a discourse of disappointment about the reality of teaching, the wider context, and the accountability/performativity culture in which teachers work" (Perryman & Calvert, 2020, p. 4).

Literature review

The following literature review reports on the complexities, challenges and contradictions in the contemporary teaching profession and conceptually frames motivational levels that are mapped along a continuum. Self-awareness is recognised as a pillar to build teachers' resilience and is linked to causal attributions as a source of motivation.

The term *teacher resilience* can refer to teachers' *capacity* to be resilient as well as to their *process* of resilience and the *outcomes* from having resilience (Mansfield et al., 2016). It

involves the complex entanglement of the internal (emotions, motivation, wellbeing) and the external (relationships, context) (Gu & Day, 2013). Here we follow Clarà (2017) in focusing on the process of resilience, which "happens when a teacher adapts positively to an adverse situation". The focus here is on the observable behaviours of resilience and their relationship to motivation, rather than the interwoven factors that go into making up any teachers' resilience in the broader sense. As such, resilience is intertwined with extrinsic influences that may support or thwart motivation, yet past research has been limited (Arthur & Bradley, 2023).

Complexities, challenges and contradictions in the teaching profession

The influence of politics on educational policy has brought about global school reforms, leading to instability, rapid change and uncertainties that are challenging the teaching profession (Tatto et al., 2018). The last decade has seen a significant increase in regulatory policy and accountability measures that impact on the everyday work of teachers who are committed to meeting professional standards and compliancy regulations. Teachers are required to teach and administer standardised assessments that meet the needs of the diversity of students in their classrooms. Excessive workload, associated with excessive accountability and insufficient work-life balance, has been reported by teachers as the most cited reason for leaving the teaching profession (Perryman & Calvert, 2020). Additionally, teachers' intentions to leave the profession have been reported as being due to their wellbeing concerns and the current status of the profession (Peel et al., 2023). Furthermore, it is well established in the literature that students' learning motivation and engagement are considerably determined by teachers' behaviours (Leo et al., 2022), yet teacher motivation and the conditions that support and optimise their resilience to sustain motivation in the profession are a less commonly explored issue in educational research.

What has been recognised is that teachers' motivation to join the teaching profession includes the enjoyment gained from working with children, a love of learning, the provision of a service to help others, the position of status, a personal calling to teach and an opportunity for development (Sinclair, 2008). Their experiences as teachers provide a more realistic understanding of the complexities of working in the teaching profession. In their daily work, teachers are required to make difficult decisions and to demonstrate resilience to manage adverse situations that they face, most often taking "the form of continuous and cumulative difficulties" (Clarà, 2017, p. 83). Workplace contexts vary in the extent to which teachers have freedom to prioritise expectations and to set goals. Yet teacher autonomy, whereby choice, agency and provision of information are promoted, has been shown to safeguard the negative effect of work overload (Sandmeier et al., 2022).

Recent research by Arthur and Bradley (2023) revealed that one of the factors contributing to the issue of teacher retention is that within the complex environment of a school there is a multifaceted interplay between teachers' intrinsic and extrinsic motivations. For example, external influences such as recognition by school leadership and positive collegial relationships contribute to teachers' internal motivation and resilience, whilst accountability has a negative impact on teachers' autonomy. The

interplay between the sources of influences on extrinsic and intrinsic motivations is best demonstrated along a motivational continuum.

The continuum of motivation

This paper is grounded in the theory of motivation – specifically, the self-determination continuum of motivation (Ryan & Deci, 2002) – to explain the processes of internalisation. Based on this theory, motivational sources are represented as degrees of influences that are a product of both self-generated and external sources. This humanistic approach links teachers' external and internal sources of motivation with their resilience within the social context.

Motivation as an internal process is responsible for behaviours that are extrinsically influenced—performed to attain a reward or to avoid sanction—or are intrinsically influenced—volitional or performed because they are considered important (Deci et al., 1996). The organismic integration mini-theory of *self-determination theory* (Ryan & Deci, 2002) presented the continuum of motivation that can be implemented to plot teachers' sources of motivational influence that extend through their being extrinsically motivated towards their being intrinsically motivated. The continuum represents the four levels of regulation, from reliance on extrinsic motivation towards internalisation—external, introjection, identified, integrated—with intrinsic motivation leading to the experience of flow (Csíkszentmihályi, 2008).

When teachers' motivation to engage in their work is controlled by demands external to them, the degree of internal regulation is low. Partial internalisation of motivation, referred to as "introjected regulation" (Ryan & Deci, 2002, p. 17), is present when teachers' behaviours are reliant on extrinsic motivations that produce internal pressures to which they respond. Their motivation is controlled by the demands that are external, although these demands become internal through their sense of conscience or to avoid an undesired situation rather than through personal self-desires.

At the next level, "identified regulation" (Ryan & Deci, 2002, p. 16), teachers' internalisation of their work increases as they identify it as being important for them to perform, although they may not value the utility highly (Ryan & Deci, 2000). Compared with introjected regulation, identified regulation has a greater internal locus of causality (Weiner, 2000).

A slight shift in reliance on external sources towards internal desires initiates the process of transforming an external regulation into "integrated regulation" (Ryan & Deci, 2002, p. 18). This level of motivation has similarities to intrinsic motivation as it becomes endorsed as being part of the self. Intrinsic motivation is spontaneous, and is initiated and regulated within the teachers themselves (Deci et al., 1996).

Self-awareness and causal attributions

It is proposed that having a degree of self-awareness is a pillar to build teachers' resilience that influences their level of motivation and subsequently their performance. As a strength, self-awareness includes teachers thinking optimistically, feeling empathy for others, reframing to enhance positive thoughts and regulating responses (Peel et al., 2023). Teachers make judgements about their experiences, as causal attributions (Weiner, 1985), that influence their emotions and as such their future behaviours. Teachers' emotions are affective reactions that are shaped from their evaluations and are influenced by the significance of circumstances (Frenzel et al., 2021). Emotions can be reflected in teachers' actions and their facial, vocal and gestural expressions. The intensity of emotions represents the perceived quality of the experience; and, as there is an amount of cognitive processing, emotions are closely related to attribution processes (Weiner, 1985). Therefore, as a strength for building teacher resilience, self-awareness provides opportunities for teachers to contemplate situations in order to construct positive self-reflections (Wosnitza et al., 2018).

Self-awareness is linked to causal attribution theory (Duval et al., 2012) to explain how self-focused causal attributions versus external attributions result in behaviour changes owing to enhanced feelings of ownership and responsibility (Duval et al., 2012). Based on the seminal work of Heider (1958), causal attributions are cognitions that generate emotional and behavioural responses to influence expectations about future events. Causal attributions act as varying sources of motivation that provide teachers with the reasons for their performances, whether they be successes or failures that can empower or disempower their resilient strengths. According to attribution theory (Weiner, 2000), there are three underlying causal properties: locus of the causality; stability duration and opportunities for change; and controllability for the performance success or failure.

The locus of causality refers to the location of the perceived cause (De Charms, 1968), whether that be attributions internal to the teacher like ability and effort or external attributions that implicate others and the context. Internal causes are dependent on the teacher perceiving that they are the origin of the cause. As can be reasoned, it is difficult for teachers to establish internal attributions for all the work that they do when there are complexities, challenges and contradictions that impact on expectations and outcomes. However, their perceived locus of causality for the events and issues that they experience in their everyday teaching lives, whether they are external or internal, influences their level of motivation. Furthermore, when teachers attribute causes of successes or failures constructively to changeable conditions that are under their volitional control, they are informed to make adjustments for their future motivation and resilience. Alternatively, misdirected causal attributions lead to dissatisfaction, waning motivation and work-related stress. Teachers who self-reflect on controllable aspects of their work report greater job satisfaction and less work-related stress (Wang & Hall, 2018).

By attributing causes of emotions to changeable and controllable attributes that serve to enhance resilience (Wosnitza et al., 2018), teachers can shape their decision-making and subsequent behaviours. The realistic focus for teachers is on reaching a level of

motivation that enables them to maintain resilience, such as their levels of identified regulation and integrated motivation.

Conceptual framework

The conceptual framework presented in Figure 1 brings together the theoretical notions that underpin this paper. Causal attributions can be identified based upon the three attributes of stability, controllability and locus of causality. Motivation can be described—reductively, but usefully—as a position along the motivational continuum. Together, causal attribution and motivational position give insight into teachers' appraisals of their complexities, challenges and contradictions. This forms the basis of a discussion of how teachers may come to transform their appraisals and of where such transformation may be appropriate.
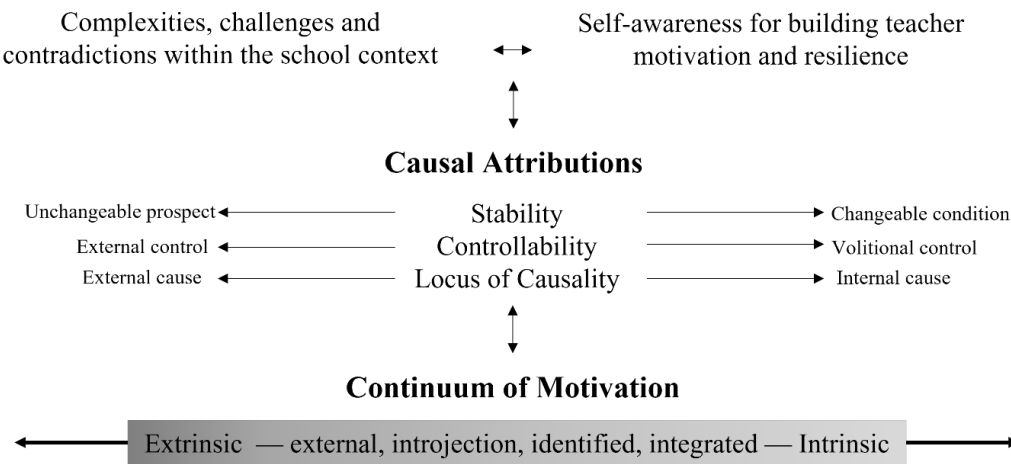
Figure 1: The conceptual framework representing the interaction of the causal attributions as influences along the continuum of motivation (adapted from Ryan & Deci, 2002).

Methods

Research context

This research forms one part of a larger, five-nation collaboration (Australia, Brazil, Chile, Ecuador and Spain) that studied the relationship between narratives and the development of resilient teachers (Clarà, 2017; Clarà et al., 2023; NARRES, 2021; Vallés & Clarà, 2023). The project title, when translated from Spanish to English, is "The relationship between narratives and the development of resilience in teachers", and is referred to as the NARRES project (based on the Spanish acronym). The present research was drawn from in-depth, semi-structured interviews with 42 Australian teacher participants.

Data collection

The questions in the semi-structured interviews were intended to find out about the emotional experiences of these teachers to understand about the influences of resilience in terms of contextual and individual factors (Peel et al., 2023). The interview questions are detailed in Appendix A and covered topics that included the teachers' career in teaching; situations experienced as a teacher; relationships with colleagues, students, parents and school administrators; specific work tasks that they were required to perform; issues that caused them concern in their work; challenges that they faced at work that changed how they thought about a situation; and what it meant to them to be a teacher. These interviews were video-recorded and transcribed, and later the data were coded, categorised and thematically analysed (Peel, 2020).

Participants and recruitment

This paper reports on findings from six Australian teachers. These were drawn from the broader group of 42 teachers who participated in the Australian part of the NARRES project. Invitations were posted to multiple groups of teachers across the nation through email lists and social media, representing teachers at all levels of schooling (Prep to Year 12) and many different subject areas. A recognised limitation of the research was that only a self-selecting group of teachers responded to these invitations with a willingness to volunteer. Further, in this paper, the authors selected a small group of participants whose responses were most relevant to the research question: *what can teachers' causal attributions about their perceived experiences reveal about their motivational state?* This was appropriate given that the research question invited methodological investigation that aimed to open avenues of research; the work did not involve testing specific claims. All the ethical considerations from the university were observed (H18REA161). The six teacher participants traversed diverse teaching areas and different career stages in the teaching profession. In Table 1, the teaching backgrounds of the participants are provided with their names listed as pseudonyms.

Table 1: The teaching backgrounds of the six participants

Pseudonym	Teaching context
Chantelle	Science and biology secondary school teacher with over 15 years of teaching experience both in Australia and in the UK.
Doug	Secondary school history teacher with over five years of experience, teaching in his third school.
Heidi	Primary school teacher focused on the upper years with six years of experience.
Katie	Secondary school teacher teaching science, mathematics and ICT (information and communication technology) with eight years of experience.
Paul	Mathematics and science secondary school teacher with over 20 years of teaching experience.
Sally	Mathematics specialist teacher across the middle years of learning (from Years Five to Nine) with over 10 years of teaching experience.

Data analysis

In addressing the research question, the analysis had two levels of depth. Firstly, a coding matrix was used for categorising teachers' responses to questions within the hour long interviews. Secondly, one dimension within this matrix (the psychosocial) was selected for inclusion in the present paper, and thematic analysis of that dimension was conducted.

Initially, the research team coded interview responses from all 42 participants in the Australian NARRES research project using a coding matrix with three nodes (complexities, challenges and contradictions) and five dimensions (psychosocial, profession and professionalism, changes and continuities, naming, framing and shaming, and teaching by design). These nodes and dimensions were identified by the team prior to starting the analysis in this study and following the completion of the interviews. The present paper reports only on the dimension of *psychosocial*, and all three nodes are included here. Psychosocial utterances were defined as those relating to *the interdependence of contextual influences on being a teacher and teachers' personal thoughts and behaviour.*

The codes were generated for all teacher utterances relating to the psychosocial dimension, and these codes (N=248) were organised into code categories (N=34) that served to condense the data into meaningful aggregations as a form of thematic analysis (Braun & Clarke, 2012; Peel, 2020). The themes (N=7) were constructed as they emerged from substantive connections among the code categories. Four of these code categories established a theme as they related to teachers' *reflexive reflection*s: (1) practising emotional regulation; (2) developing an open approach to change; (3) recognising the pressures inherent in different stages in a teaching career; and (4) facilitating a work-life balance to manage the external and personal demands. Other themes were: (5) relationships of care; (6) power in relationships, and (7) external factors affecting relationships. Qualities of social relationships are highly relevant to teachers' resilience and motivation but were outside the scope of this paper, which focuses on causal attribution in reflexive reflections. Figure 2 represents the qualitative coding using the matrix to identify codes, followed by grouping into code categories within the theme to represent the teachers' *reflexive reflections.*

This primary stage of coding and analysis was rigorous, systematic, transparent and trustworthy. The data extracts provided short narratives, referred to as "utterances", to represent the voices of the participants that would inform the questions being studied. Once the coded extracts from the interviews were organised in the matrix, the codes were explored for patterns. The matrix provided an organising framework that aided the coding and that led to the authors identifying common threads and contradictions within each dimension and across the three nodes. This supported the authors in the process of reducing the codes to code categories. The *Miro* software platform provided an online collaborative workspace for the authors to represent the codes and to identify code categories and then themes collectively in a process lasting six months. Identifying the patterns across the dataset required the authors to be deliberative, reflective and thorough.
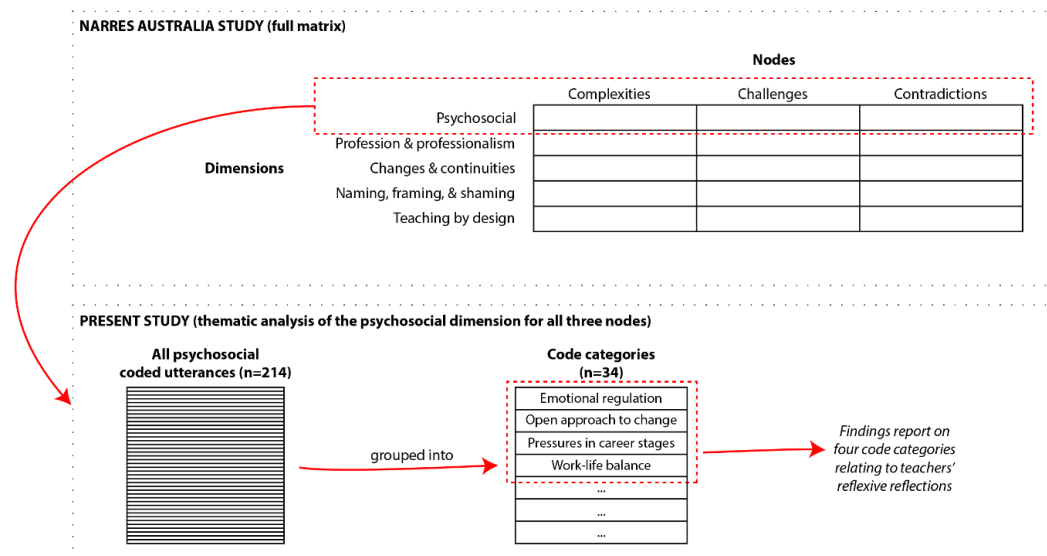
NARRES AUSTRALIA STUDY (full matrix)

		Nodes		
		Complexities	Challenges	Contradictions
Dimensions	Psychosocial			
	Profession & professionalism			
	Changes & continuities			
	Naming, framing, & shaming			
	Teaching by design			

PRESENT STUDY (thematic analysis of the psychosocial dimension for all three nodes)

All psychosocial coded utterances (n=214) → grouped into → Code categories (n=34): Emotional regulation / Open approach to change / Pressures in career stages / Work-life balance / ... / ... / ... → Findings report on four code categories relating to teachers' reflexive reflections

Figure 2: Qualitative coding using a matrix to identify codes, grouping into code categories and establishing the theme of *reflexive reflections* (use web or PDF reader 'zoom' in function to facilitate reading)

The findings reported in this paper involved the second level of data analysis, with attention being directed to the utterances by the six selected teachers as they self-reflected on their feelings, reasons for their reactions and how their experiences influenced their decision-making. These *reflexive reflections*, as the theme characterised by the four code categories listed above, became the organising framework for the qualitative data analysis (Miles & Huberman, 1994) to appraise the teachers' self-assessment of their inward feelings. This analytical method was selected to interpret the meanings in the data extracts subjectively and systematically, and so aligns well with the method of collecting the data through the semi-structured interviews (Mackenzie & Knipe, 2006). Furthermore, the data analysis complemented the research question by allowing the concept of teachers' causal attributions and the states of motivational internalisation to be integral to the process. This phase of the analysis drew the authors' attention back to the meanings in the coded extracts (Miles & Huberman, 1994). Integral to the process was the operationalisation of the conceptual framework as the tool for data analysis that involved the authors' collective interpretation of the data extracts in relation to the pertinent code category.

Findings

The findings detail the *reflexive reflections* of teachers: the utterances that showed a self-awareness of their emotions within the complexities, challenges and contradictions of the teaching profession. The findings are structured based upon the four code categories of practising emotional regulation, developing an open approach to change, recognising the pressures inherent in different career stages and facilitating a work-life balance. The code categories are foregrounded with statements about how they were contextualised for this

paper. For each teacher utterance, we discuss the motivational positioning and causal attribution that can be inferred from that utterance.

Practising emotional regulation

The practice of emotional regulation is represented as teachers being self-aware of their feelings as they reflect on their capacity to manage their emotions and thoughts in the workplace. Chantelle has 16 years of secondary school teaching experience, and is currently in a leadership position as the Head of Science. During the interview, she expressed her inability to manage the "stress and anxiety" that she was feeling.

> I've finally realised that I do suffer quite severely from stress and anxiety, and I didn't realise that until working here. It probably has always been there, but it's been exacerbated working here. I feel frustrated a bit in my job, which again snowballs into a [combination of a] stressed anxious mix. Sometimes you feel a bit worthless …. It all combines into one and eventually trying to manage it all. Workload for me is a big thing. I find I don't have enough time to work with my colleagues to produce something that I'm proud of every day. I find it quite frustrating and quite stressful. I'm a bit of a perfectionist in terms of I want to do something well and be proud of my job and know that it's going to help someone else. Everybody wants to know they're doing a good job if they're putting in the hard work, and that's very rarely given in my experience here.

Chantelle recognised the cumulative emotional toll (Clarà, 2017) that contributed to her feelings. Her response indicated that she felt "frustrated" owing to the external pressure of time demands. She had not developed strategies to regulate her emotional responses and control the pressures that she felt in her workplace. As such, she demonstrated an *introjected* level of motivation where she recognised the cause of her anxiety but did not accept that this was in her control. This teacher perceived the workplace to be the reason for her emotional state. Accordingly, the reasons for her feelings were attributed to an *external locus of causality* where she was left to "try to manage", with little indication that she thought that things would change in the near future. When teachers report external influences as being primarily responsible for their occupational stress, their motivation is not driven by volition and self-desires (Wang & Hall, 2018) and this impacts on their resilience (Thom, 2020), and can lead to work dissatisfaction.

Paul demonstrated his resilience as he shared how he reframed his thoughts (Peel et al., 2023) to function through the highs and lows of the school day, term and year, and even throughout his career. During the interview he explained how he managed the emotional demands of teaching with a reset strategy.

> In general, I don't have highs and lows in terms of the course of the day. I know exhaustion creeped in more towards the end of the term, and I was looking forward to a new term. The fact that you've got the break which helps you reset your emotional state … I think is really important. The intensity of working with young people, it doesn't go away …. It's more peaks and troughs as events happen, if I think back even longer over my teaching career. I had a meeting earlier explicitly about the work that I was doing in the area of sustainability. The principal recognised that I've gone above and beyond and really made a point of celebrating that and being grateful, which allowed me to be

> grateful to her because she's supported me for what I've done. In general, I feel like most parents are supportive of what I'm doing and strike up a professional relationship quite quickly. I find it mostly interesting as opposed to challenging.

The reset strategy's significance was explained by Paul as "the break which helps you reset your emotional state". This strategy confirmed Paul's desire to initiate emotional regulation in response to the *external demands of events*, and indicated his transformation towards an *integrated* level of motivation. *Integrated* motivation is more internal than the *identified* level and inspires Paul to manage the "peak and troughs as events happen". He signified the changeable nature of his work, "if I think back even longer over my teaching career", and this acceptance provided *a sense of internal control*. The recognition from the principal was interpreted by Paul as being "supportive of what I'm doing". Endorsement by significant others offers an extrinsic source of motivation (Ryan & Deci, 2002), yet this inspired Paul intrinsically, and, as he explained, allowed him "to be grateful". Through a sense of volitional control, Paul felt empowered to offer the same supportive feedback to the principal.

Developing an open approach to change

The teachers' experiences in this paper highlighted the importance of an open approach to change that is integral to teaching. Heidi, a primary school teacher in her seventh year, revealed in the interview that her actions were shaped by her willingness to change.

> I think you have to be, in this profession, very critical of yourself and what you do, and your performance and how things work, so that you can continually change and get better, and I think, because your kids [students] are constantly changing from year to year, then you just can't afford to keep things the same all the time because it's just not going to work. You have to be willing to learn from situations or reflect on things and change.

By reflecting on and learning from situations, Heidi was accepting and demonstrated resilience through her optimism (Peel et al., 2023) and her open approach to personal change, as she shared, "You can continually change and get better". This allowed Heidi to remain in *control of her decision-making*, be critically aware of her performance and be open to available options. Previous research suggested that the age and the career stage of teachers affect their emotional responses to educational change (Hargreaves, 2005), with teachers into their mid-career like Heidi being more resilient in the face of change, "able to remain open to yet also selective about the change initiatives they adopt" (Hargreaves, 2005, p. 981). Heidi recognised that change is part of the context of teaching, "constantly changing from year to year", and *attributed the cause of change externally* to the difference in the cohorts of students that annually revolve through her classroom door. Although the cause was external, Heidi's acceptance of and positive experiences of adapting to change actually provided her with stability and control within her teaching context that indicated an *integrated* level of motivation.

Recognising the pressures inherent in different stages in a teaching career

The teaching profession presents pressures that are inherent in the different stages of a teaching career. Early career teachers, with five years of experience or less, face dual challenges of establishing themselves as an effective teacher in their own minds and as proving their status to others. Hargreaves (2005) referred to this as "typically finding their feet as professionals and as people" (p. 970). Doug has taught for over two decades but during the interview clearly recalled his experience as an early career teacher and how the external contextual influences of the workplace impacted on his thoughts and emotional state.

> Teaching when you're in early career is almost like you have two jobs. You have a job to teach, but you also have a job to impress everyone because you're trying to get that contract or you're trying to get that permanency [permanent work position]. Yes, I think that itself adds on a little bit of stress, which probably amplifies when bad things happen. In reflection, they are probably 100 times more serious to you than they are to anybody else in the school, but it's just because I used to internalise those things that it stressed me out a little bit more than it probably should have.

Doug was acutely aware of the opinions of others in striving "to impress everyone" whilst trying to establish his basic confidence and competence as a professional. This clearly illustrates an *introjected* level of motivation along the continuum as he responded to the perceived external pressure to maintain his employment. Reflecting later in his career with a certainty of employment, Doug was able to recognise the external influence that controlled his internal thoughts and, as he stated, "that … stressed me out a little bit more than it probably should have".

However, tensions that influence the emotional states of teachers do not necessarily align just with career stages as lives vary among different kinds of teachers and personalities, and across different cultures and eras (Hargreaves, 2005). It follows then that teachers' experiences vary not only throughout their time in the profession but also from life's events and circumstances that impact on their emotional stability. Katie transitioned from teaching in a secondary school to primary school teaching, before returning in her fifth year of teaching to the secondary school. During the interview, she identified how she needed to recognise and celebrate her successes to regain her self-confidence.

> I wanted to build myself up again after being [teaching] in high [secondary] school. I was about to drop out and say, "Oh, I can find a different career". I was really intimidated because I am a shorter person and looked like one of them [students] …. Instead of dropping out, I thought the best thing I can do is go back to [teach in] a primary school, re-establish myself, re-establish my philosophy and my techniques. I contacted one of our family friends who was a deputy principal at a primary school, and he said, "Before you quit, come over. We'll rebuild you. Challenge yourself." That's what I did, and I got all my confidence back. Last year I thought, "Why not give it a go [return to teach in a secondary school]?" The principal of the high school had a lot of influence. He kept asking me year after year, "When are you coming over? We want you over here." I just thought, "You know what? I'll do it." [chuckles] I did it because I wanted to really give high school a go again, just to say, "Yes, I can actually do it".

The school context as well as individual teacher characteristics impact on teachers' work satisfaction. Specifically for early career teachers, the literature suggests that orientation programs and reduced face-to-face teaching workloads support teachers in remaining committed to and motivated by their profession (Kelly et al., 2019). In Katie's case, her first negative experience as a secondary school teacher left her emotionally drained of confidence which impacted on her motivation to remain in the profession. She recognised that there was an opportunity to change the conditions by transitioning to teaching in the primary school. Katie identified that this move was important for her, although the utility may not have been highly valued by her at the time (Ryan & Deci, 2000). The reliance on external sources shifted towards more internal desires as an outcome of her new work context and consequently her perceptions of herself as a teacher. As such, the external locus of causality was counterbalanced by her volition, as she stated, to "re-establish myself, re-establish my philosophy and my techniques". Katie's level of motivation to be a teacher moved along the motivational continuum as she demonstrated her resilience by regulating her initial response to find other work. Her move back to the secondary school, although supported by the principal's significant encouragement, was internally inspired, at an *integrated* level of motivation as she wanted to meet her personal goal to show that she "can actually do it".

Facilitating a work-life balance to manage the external and personal demands

Overwhelming workloads have been cited in the literature as the most common reason for teachers intending to leave the profession (Perryman & Calvert, 2020). Sally has been a teacher for 13 years and at the time of the interview was a mathematics specialist with teaching and leadership roles. Sally explained how she struggled to find the time to meet the external demands of her work, and that her experiences have taught her not to bring work home with her any more, as she pursued a healthier work-life balance.

> The security of my job is incredibly high, but my desire for it is dropping significantly. This job has stresses that are quite unique to the teaching profession, because you always want to be better and do the right thing. I've become much, much better over the years than I used to be. What I do now is I very much leave my work at work. There's just going to be some jobs that when you shut the door at the end of the day it's done, and, obviously, there are some jobs that aren't, and my job happens to be one of those that isn't [ever finished]. Whether that really does take more of a toll on our body than we give it credit for, I don't know …. There comes a point when you have to just leave it because the burnout is just huge.

Sally strongly advocated for teachers taking control over their workload and being self-aware to maintain a work-life balance. She recognised that she had not always taken this stance, and blamed the nature of the work that is "unique to the teaching profession". Because of the unlikely prospect that the demands of the profession were changeable, and that she was not the origin of the cause, Sally has taken an internal stance. She explained, "There comes a point when you have to just leave it." However, being self-aware to manage time and know what can be completed in the set time frame may not always be in her volitional control, and consequently she reflected that her "desire for it [the job] is dropping significantly". Studies have indicated the benefit of enhancing teachers'

autonomy and of establishing policies and programs that enable teachers to balance their work and life needs (Johari et al., 2018). Along the motivational continuum, Sally would appear to be taking action to maintain a level of *identified* motivation for her work as a teacher by accepting the challenge of workload, although the locus of causality appears to be external, and accountability demands may have a negative impact on her perceived autonomy. As the literature confirms, changeable conditions within school contexts differ significantly in the extent to which they enable or hinder teachers' satisfaction of autonomy (Sandmeier et al., 2022).

Discussion and implications

It is important firstly to acknowledge the limitations of the research reported in this paper. It is accepted that the teachers interviewed were all volunteer participants who responded to a request to take part in the interviews, and that self-selection bias would have influenced the results. Moreover, the researchers selected a convenience sample from the larger scale study to make analysis manageable; the comprehensive nature of interpretive data analysis is time consuming and intensive, so pertinent extracts were presented aligned to the inquiry design and as addressing the research question. As such, the findings of this analysis are not intended to provide generalisable conclusions, but instead to expand theoretical and practical understanding of what is already known about how teachers' causal attributions indicate varying levels of external and internal motivation.

Causal attributions and motivational states

The first research question asked: *what can teachers' causal attributions about their perceived experiences reveal about their motivational state?* The findings have given an example of how the conceptual framework, Figure 1, can be investigated. Teachers were prompted to speak about their emotional experiences in a range of situations, especially their relationships with students, parents, teachers and school administrators. Teachers' utterances reveal their inward feelings, their reflexive reflections, which can be analysed for motivational position and causal attribution.

Implications

The second research question asks: *what is the relevance of teachers' causal attributions to guiding teacher educators in how to aid them in transforming their appraisals of situations?* The findings have demonstrated that it is possible to identify a range of teachers' causal attributions from interviews about their emotional experiences. Previous research by Brossmann and Islar (2020) proposed, "Self-reflection is not only needed to uncover and understand one's own practices, but [also] feeds into broader, collective reflection processes" (p. 920). Against that backdrop, what is the significance of this paper for teachers and teacher educators?

We suggest that one possibility is to develop teachers' self-awareness by integrating theoretical understandings of causal attributions and motivation. The organismic integration of self-determination theory (Ryan & Deci, 2002) was applied to plot teachers' sources of motivational influence along a continuum. Teachers' internal cognitions that

are externally influenced generate emotional and behavioural responses to influence their decision-making and expectations about future events. The concept of teachers' causal attributions (Weiner, 1985) is integral to the process of determining the varying sources of motivation that provide teachers with the reasons for their performances and that influence their resilient strengths.

Additionally, leadership teams in schools, who are responsible for setting up support mechanisms for teachers, could consider the findings in relation to the structures within their complex school environments. Issues for school leaders to consider include how they could enable teachers to practise emotional regulation that empowers them to manage the emotional demands of teaching and to build resilience. Resilience is a source of motivation that can be influenced externally within the school contexts where teachers work (Peel et al., 2023). Moreover, acceptance of change comes when teachers perceive that their adaptability to change actually provides them with stability and control over their decision-making (Wosnitza et al., 2018). Furthermore, teachers respond emotionally to life's events and circumstances that impact on their emotional stability. More specifically, at different stages of a teacher's career, there are inherent pressures that are recognised as external influences that affect their internal thoughts, such as confidence, and that impact on their motivation to remain in the teaching profession.

It needs to be emphasised that a realistic aim is for teachers to reach a level of extrinsic motivation that enables them to maintain their resilience and wellbeing, such as the levels of identified regulation and integrated motivation. Foremost in the minds of school leaders undertaking planning should be acceptance of the challenge of creating workloads for teachers where accountability demands do not have a potential negative impact on teachers' autonomy. Teachers' satisfaction of autonomy is the cornerstone of managing a work-life balance whereby their motivations are fulfilled by the realities of their work.

Moreover, this research is significant in informing policymakers of the importance of considering the multifaceted, potentially difficult, and at times competing events and issues that teachers face in their workplace. Considerations that support teachers include reasonable and manageable workloads, availability of continuity of employment, clear rationales for necessary reforms and enhanced teachers' autonomy that supports internalised motivation. The ways in which teachers makes sense of and appraise adverse situations play a crucial role in their emotional states, motivation to stay in the teaching profession and resilience to face the complexities, challenges and contradictions of the future.

Finally, we see value in further research being conducted at the intersection between causal attributions of motivation and the distinctive characteristics and contexts of teaching from two distinct but interrelated perspectives. Firstly, at the level of personal psychology, how can and do individual teachers navigate their professional and private lives against the backdrop of the significant issues raised by the participants cited in this paper? Secondly, at the level of organisational sociology, how can and should education systems support teachers maximally while also engaging full square with the macro pressures with which they are confronted every day?

Conclusion

This paper posed two inter-related research questions: *What can teachers' causal attributions about their perceived experiences reveal about their motivational state?*; and *What is the relevance of teachers' causal attributions to guiding teacher educators in how to aid them in transforming their appraisals of situations?* The preceding analysis has highlighted specific ways in which teachers' causal attributions about their perceived experiences can indeed reveal aspects of their motivational states, understood as a continuum from external to introjection to identified to integrated. Additionally, and following Clarà (2017), understanding teachers' causal attributions and motivational states is significant for guiding teacher educators in how to aid those teachers in transforming appraisals of adverse situations, taken to be a core competency of resilience. We see this motivational continuum as practically helpful for teacher educators and other stakeholders in maximising support for teachers, and also as conceptually significant in explaining why and how such support contributes to enhancing teachers' resilient strengths.

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Appendix A

This Appendix provides the full script that was used by interviewers in all semi-structured interviews with teachers. Interviewers asked follow-up questions where necessary to understand more about the participants' emotional experiences and in service of the overarching objective of the interviews, which was clarified in the script as *determining emotional experience and situational representations (narratives) associated with specific situations of practice as a teacher.*

Questions

1. Explain briefly your academic background and your **career as a teacher**.
2. Describe briefly the different **types of emotion that you normally experience** as a teacher.
3. Tell me about **any situation that you have experienced** throughout your career (or that you are currently experiencing) that has had (or has) an important emotional charge:
   3a. Do you remember any **situation with students** with significant emotional content?
   3b. Do you remember any **situation with parents** with significant emotional content?
   3c. Do you remember any **situation related to specific tasks** that you are asked to complete as a teacher (e.g., administrative tasks, planning or coordination tasks, evaluation tasks, etc.) with significant emotional content?
   3d. Do you remember any **situation related to how the educational system works** with significant emotional content?

3e. Do you remember any **situation related to the management of your school** with significant emotional content?

3f. Are there **currently** issues, challenges, or things related to work **that worry or bother you**?

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