

Interpersonal Relationships in Education

An Overview of Contemporary Research

Theo Wubbels & Jan van Tartwijk
Utrecht University, The Netherlands

Perry den Brok
Eindhoven University of Technology, The Netherlands
and

Jack Levy (Eds.)
University of Massachusetts, USA

This book brings together recent research on interpersonal relationships in education. Clearly, positive teacher-student relationships strongly contribute to student learning. Problematic relationships on the other hand can be detrimental to student outcomes and development. Productive learning environments are characterized by supportive and warm interactions throughout the class: teacher-student and student-student. Similarly, teacher learning thrives when principals facilitate accommodating and safe school cultures.

The contributions to this book are based on presentations at the first *International Conference on Interpersonal Relationships in Education: ICIRE 2010* held in Boulder, Colorado, the United States and include among others keynote addresses by Kathryn Wentzel, Walter Doyle and Theo Wubbels. The chapters help explain how constructive learning environment relationships can be developed and sustained. Contributions come from among others educational and social psychology, teacher and school effectiveness research, and communication and language studies, among other fields. They cover relationships of teachers with individual students and among peers, and relationships between teachers and teachers and principals.

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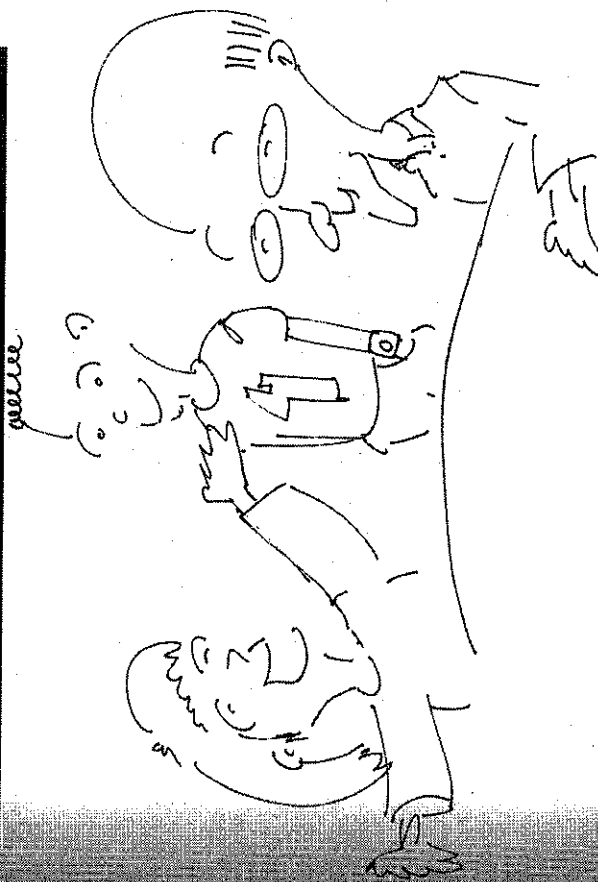
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Scope

The historical beginnings of the field of learning environments go back approximately 40 years. A milestone in the development of this field was the establishment in 1984 of the American Educational Research Association (AERA) Special Interest Group (SIG) on Learning Environments, which continues to thrive today as one of AERA's most international and successful SIGs. A second milestone in the learning environments field was the birth in 1998 of *Learning Environments Research: An International Journal (LER)*, which fills an important and unique niche.

The next logical step in the evolution of the field of learning environments is the initiation of this book series, *Advances in Learning Environments Research*, to complement the work of the AERA SIG and LER. This book series provides a forum for the publication of book-length manuscripts that enable topics to be covered at a depth and breadth not permitted within the scope of either a conference paper or a journal article.

The *Advances in Learning Environments Research* series is intended to be broad, covering either authored books or edited volumes, and either original research reports or reviews of bodies of past research. A diversity of theoretical frameworks and research methods, including use of multimethods, is encouraged. In addition to school and university learning environments, the scope of this book series encompasses lifelong learning environments, information technology learning environments, and various out-of-school 'informal' learning environments (museums, environmental centres, etc.).

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Edited by

Theo Wubbels

Utrecht University, The Netherlands

Perry den Brok

Eindhoven University of Technology, The Netherlands

Jan van Tartwijk

Utrecht University, The Netherlands

and

Jack Levy

University of Massachusetts, USA



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10. RELATIONS AMONG BEGINNING TEACHERS' SELF-REPORTED AGGRESSION, UNCONSCIOUS MOTIVES, PERSONALITY, ROLE STRESS, SELF- EFFICACY AND BURNOUTⁱⁱ

INTRODUCTION

Disturbing evidence documenting some teachers' aggressive classroom management (mis)behaviour is growing. Relative to the importance of this issue, the level of research activity into the area is small (Sava, 2002). Writing about teacher aggression is widespread in the non-English literature: in France, Romania, Russia, and Spain (Sava, 2002). Reports have also appeared in Australia (Lewis & Riley, 2009), China and Israel (Lewis, Romi, Katz, & Qui, 2008), Poland (Piekarska, 2000), Scotland (Munn, Johnstone, & Sharp, 2004), and Japan (Tremblay, 2001). In Europe, the term *didactogeny* has been coined for the experience of "a faulty education that harms children" medically, psychologically, or educationally (Sava, 2002, p. 1008). While children may appear to cope with the experience of teacher aggression in classrooms and schools, negative consequences accrue over time for some children more than others (Brendgen, Wanner, Vitaro, Bukowski, & Tremblay, 2007).

Background

Schools are complex environments where a range of emotional experiences is generated between students and teachers through their interpersonal relationships (Frenzel, Goetz, Lüdtke, Pekrun, & Sutton, 2009; Riley, 2011; Sutton, Mudrey-Camino, & Knight, 2009). Until relatively recently (Blackmore, 1996), little attention has been directed toward researching teachers' emotions and their associated 'emotional geographies' (Hargreaves, 2001). Teachers' work is inherently interpersonal; therefore it is both subjective and inter-subjective. A teacher's interpretation of his or her relationships with students and the resulting effects on teaching and learning are dynamically influenced, as are the students' interpretations of the teacher-student relationship (Riley, 2011). These relationships are grounded in their daily interactions and influenced by the interpretations or attributions each makes of the other's behaviour. These interactions produce a wide range of positive and negative teacher emotions in response to student behaviour.

When students misbehave, teachers have a responsibility to manage the situations as they arise, and employ strategies to reduce the incidence of misbehaviour over time. In doing so, they must manage their own emotional reactions to students and this in turn affects their own classroom behaviour. Keeping emotions under control is not always easy to achieve, particularly when student emotional volatility is high (Firm et al., 2009). Teachers' strategies for managing student misbehaviour and their own emotional reaction to it will depend on a range of factors. Sometimes, student misbehaviour will provoke an aggressive teacher response (Sava, 2002) which can take many forms; from overt acts of commission such as yelling angrily at students, through to more subtle, even covert acts, such as not rewarding or acknowledging the prosocial behaviours of students considered to be 'bad'. This is labelled 'teacher misbehaviour' in the literature (for a full review of the taxonomy of teacher misbehaviour see Lewis & Riley, 2009). Aggressive teacher misbehaviour has a powerful negative influence on the interpersonal relationships formed between teachers and students. It tends to increase the types of student misbehaviour it seeks to diminish as students react to feelings of rejection by the teacher (Lewis, et al., 2008). Aggression by teachers also leads to diminution of student self-esteem (Poenaru & Sava, 1998); student negativity toward teachers (Romi, Lewis, Roache, & Riley, 2011); and, negatively affects the quality of relationships between teachers and students over time (O'Connor, 2010). Poor quality teacher-student relationships have been shown to contribute to student disengagement (Romi et al., 2011) and job dissatisfaction among teachers (Johnson, et al., 2005; Liu, Wei, & Jiang, 2009).

In this chapter we focus on three aspects of aggressive teacher responding to student misbehaviour. Each behaviour type is a display by the teacher directed toward students in response to student misbehaviour. The three types of aggressive behaviour are: deliberately embarrassing students, usually in front of their peers; using sarcasm to discredit a student, also usually in front of peers; and, yelling angrily to intimidate. Each behaviour, whilst often directed at an individual or small group, can also affect other students in the class in multiple ways; these range from distraction from the work tasks to more serious health effects (Hyman & Snook, 1999). The three aggressive behaviours were chosen because they have been reported as typical negative teachers' classroom reactions to student misbehaviour in Australia and elsewhere (Lewis et al., 2008).

The emergent field of research concerning teachers' aggressive behaviour has predominantly focussed on situational correlates. From this literature, teacher aggression appears to be both common, and under-reported. More than 60% of Australian teachers have been identified as sometimes employing at least one of these aggressive techniques in their classroom interactions with students (Lewis, 2008); it has also been estimated in the US that between one and two percent of all students may be suffering from education-induced post-traumatic stress disorder (PTSD; Hyman & Snook, 1999). In this chapter we widen consideration of the range of factors that may be involved, by the inclusion of dispositional bases. We investigate three commonly reported modes of aggressive responding to student

misbehaviour and seek to relate these to a range of relatively unexplored background dimensions. The impetus for our study was to investigate the prevalence, salience, sources, and correlates of aggressive classroom responding displayed by beginning teachers. We were especially interested to examine possible relationships with a range of relatively unexplored dimensions including personality factors; unconscious motives; self-efficacy for managing difficult student behaviour; role stress from teaching situations and environments; and, teachers' burnout.

Sources of Aggression for Beginning Teachers

Potential sources of aggression displayed by beginning teachers toward students are likely to be complex aggregations of individual causes, in different school contexts. Despite changes to the nature of their work, for many teachers, the classroom remains the arena in which emotions are activated throughout the day. Hope, fear, joy, anxiety, anger, and a host of other affective dimensions propel teachers and students in classrooms for different reasons. This affects teachers' perceptions and appraisal of students (Frenzel et al., 2009), and, consequently, interpersonal work within the classroom (Riley, 2011). Increasingly, teachers' monitor and assess how teaching and learning is organised and conducted. These factors all contribute to teaching as a highly stressful occupation (Montgomery & Rupp, 2005). This places beginning teachers in a very vulnerable position where fears, concerns, and problems associated with learning how to teach are exacerbated by multiple demands, lack of time to prepare, lack of rest, and lack of professional preparation for the socio-emotional and relational demands of teaching.

How these stressors are handled initially by a beginning teacher, is likely to set in train the course of a teacher's long-term classroom behaviours. In some social contexts, displays of aggression are condoned or even promoted, and become embedded in everyday assumptions, interactions, practices, and values. Left unexamined, these can become accepted modes of classroom behaviour and management for teachers and students. If a school culture overtly or covertly condones aggressive behaviours such as yelling at students, or anger to maintain classroom control, novice teachers may be encouraged to adopt them. Hence school cultures are replicated and sustained over time, and aggression becomes acceptable and invisible to review. This is in contrast to positive school cultures which are also self-replicating, with benefits flowing to both teachers and students, and, their interpersonal relationships.

Beginning teachers' reactions to students' poor behaviour may have utilitarian goals, by seeking to alter the future behaviour; be retributive, oriented toward retaliation for a past wrong, to avenge, rather than to prevent future misbehaviour (Reyna & Weiner, 2001, p. 309); reflect a disposition or personality type; or, be a reactive response provoked by a sudden stressful situation. Aggression theories

range from genetic inheritance, cognitive neo-association, script, excitation transfer, through to social learning and social interaction (Anderson & Bushman, 2002). The latter perspective informs our study; as well, we include dispositional bases discussed below.

Personality. The Five-Factor model of personality (Judge & Ilies, 2002) proposes that five basic dimensions underlie human personality: Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. Personality dimensions may appear an intuitively obvious source for teacher aggression, but have not previously been systematically examined as such, or in combination with the other sources investigated in our study. We anticipated that Neurotic teachers may be more likely to perceive personal threat in student misbehaviour and respond aggressively. Conversely, we expected that Open, Conscientious, and Agreeable teachers would be less aggressive. We had no clear expectations regarding Extraversion: more enthusiastic teachers may either be less likely to behave negatively to students, or, on the other hand, may be more likely to 'let off steam' when provoked and aggravated.

Self-efficacy. Teachers' self-efficacy for the management of difficult students is likely to impact teacher aggression (Sava, 2002). Beginning teachers who report poor disciplinary and management skills may be more likely to employ aggressive responding during episodes of elevated stress when dealing with a difficult classroom situation. Teacher behaviours that 'work' to keep the teacher feeling in control during such a stressful experience are likely to be repeated. These behaviours may be learned through trial and error, observation of, and listening to other teacher colleagues, outside the classroom.

Role stress. Stress and lack of effective support have been identified as causal factors for aggressive behaviour in many life circumstances (Bowiby, 1975). Documenting the difficulties that many teachers deal with on a daily basis indicates the high level of background stress involved in school teaching (Friedman, 2006). Beginning teachers who appraise their setting as stressful may engage in aggressive behaviours, especially when they lack the confidence to appropriately respond to challenging students.

Unconscious motives. Unconscious motives refer to those motives or drives of which the individual is not fully aware; these could be more relevant than conscious motivations as a source of teacher aggression, as teachers may be powerfully influenced by their need for attachment to their students (Riley, 2009). Attachment theory (Bowiby, 1969/82) provides plausible explanations for at least some types of teacher aggression, as it closely describes the underlying feelings that can develop as part of emotional transfer or reciprocity between teachers and

students and the subsequent vulnerabilities that can result for both (see Cassidy & Shaver, 2008; Mikulincer & Shaver, 2007).

Teaching is an intensely interpersonal arena; therefore teachers' and students' perceptions of the relationship are central to teaching effectiveness (Riley, 2011). According to attachment theory the teacher's *internal working model* of self and other, or mental representation of the relationship with the student(s), is likely to be a determining factor affecting the teacher's level of aggressive behaviour, provoked in the teacher by a combination of student behaviour and the symbolic meaning it unconsciously primes in the teacher. A perceived threat to the current relationship with students is likely to cause emotional dissonance for the teacher (Lewis & Riley, 2009). This could result from the students becoming too close or too distant for the beginning teacher to feel comfortable in the relationship. This is further complicated by the interplay with the students' attachment needs, but has not yet been widely researched (Riley, 2009).

Attachment avoidance. This refers to the desire to remain emotionally distant and independent from others. For the avoidant teacher, aggressive responding should increase the emotional distance between him/herself and students, reducing tension and providing emotional stability. Students in turn may learn that increased emotional distance reduces aggressive interactions with the teacher. It is possible that as Attachment avoidance increases, so too does aggressive behaviour.

Attachment anxiety. Attachment anxiety is founded on a fear of being unloved or abandoned. When confronted with student misbehaviour, this perceived lack of care and concern for the teacher by the students is likely to confirm the teacher's internal working model of how the world works – of being let down or abandoned – prompting what in attachment theory is termed 'separation protest' behaviours, which are invariably aggressive (Bowiby, 1975). This state of tension and distress is likely to arouse aggressive responding in the teacher who has high levels of Attachment anxiety.

Burnout. Burnout is widely researched along dimensions of reduced Personal accomplishment, Depersonalisation, and Emotional exhaustion (Maslach, Jackson, & Leiter, 1996). Perhaps teachers who are more 'burned out' may care less about students, and therefore treat them with less concern and respect; alternatively, the same symptoms may manifest as more apathetic and less aggressive responses to challenging student behaviour. Aggressive responding by teachers may serve to 'let off steam', thereby reducing the pathway to burnout. On the other hand, if beginning teachers behave in aggressive ways, thereby lowering self-efficacy and reducing work satisfaction, aggressive responding may increase burnout.

Some antecedents of aggression may be more readily addressed than others: for example, teacher personality characteristics are likely to be less malleable, but may be modified using interventions such as counselling, motivational retraining, and anger management. In contrast, aggression brought about by stressful school

settings may be amenable to intervention through methods such as classroom management skills and coping strategies. Where we might be able to identify different kinds of beginning teachers for whom aggression is a problem as a result of personality, or where it arises in response to a particular environment, there is a better chance to design appropriate interventions to prevent or reduce aggression. This underpins our concern to understand the range of individual and situational factors associated with teacher aggression.

The Present Study

Using surveys with 412 Australian beginning primary and secondary school teachers, we examined the extent of teacher-reported aggressive behaviours in response to student misbehaviour (Yell angrily, Deliberately embarrass, Sarcastic comments); and correlations with dimensions of teacher personality, unconscious motives, self-efficacy for student behaviour management, role stress, and burnout symptoms. We were also interested to explore whether there were subgroup differences according to gender, primary or secondary strand, and undergraduate Bachelor or graduate-entry teaching qualification. Our major aims were to establish the extent and level of these teachers' self-reported aggressive behaviours; relate aggression to personality characteristics, unconscious motives, self-efficacy for student behaviour management, role stress, and burnout symptoms; and, recommend practical and policy implications.

METHOD

Participants

The 412 participants were primary (162 females, 21 males) and secondary (165 females, 64 males) beginning teachers from the 'FIT-Choice' ongoing research program of Watt and Richardson (www.fitchoice.org). At the time of the survey, participants had up to five years of teaching experience. Those who had undertaken teacher education through an undergraduate Bachelor degree typically had one year's teaching experience ($n = 192$); graduate-entry teachers typically had four years' teaching experience ($n = 220$).

Instrumentation

Data came from the FIT-Choice surveys, and included measures of:

- personality (TIPI; Gosling, Rentfrow, & Swann, 2003);
- unconscious motives: Anxiety about close relationships, and Avoidance of intimacy (2 items per subscale selected from Brennan, Clark, & Shaver, 1998);
- self-efficacy for managing difficult student behaviour (items from: the Sentiments, Attitudes and Concerns about Inclusive Education [SACIE] scale; Loreman, Earle, Sharma, & Forlin, 2007; and from Watt & Richardson, 2008)

- experience of role stress (single item);
 - teacher aggression (3 items based on Lewis, et al., 2008); and
 - teacher burnout symptoms (Maslach Burnout Inventory - Educators Survey [MBI-ES]; Maslach & Jackson, 1986), containing subscales Emotional exhaustion, Personal accomplishment, and Depersonalisation;
- Table 1 reports details of the measures. Cronbach alpha measures of internal consistency were adequate for all measures except the TIPI Agreeableness ($\alpha = .38$) and Openness ($\alpha = .35$) subscales (as has also been found in previous studies, see Gosling et al., 2003). For the dimension of Attachment anxiety intimacy, Cronbach's alpha for the two selected items was .86; consistent with the alphas reported for the whole scale (.91; Brennan et al., 1998). However, reliability for the two items from the Avoidance scale, .55, was substantially different from the full subscale .92, reported by Brennan and colleagues (1998). We had no alternative measure of avoidance, and strong theoretical reasons for its inclusion.

Although Cronbach's alpha among the 3 self-reported aggression items was adequate overall (alpha = .67), Yell angrily had similarly low correlations with each of Deliberately embarrass (rho = .33) and Sarcastic comments (rho = .33, $p < .001$, $n = 360$). However, the correlation between Deliberately embarrass and Sarcastic comments was substantially higher (rho = .57, $p < .001$). For exploratory purposes we analysed both the composite aggression factor, as well as disaggregating the 3 aggression items, to allow for indications of possibly different patterns of relationships for different kinds of teacher aggression.

Procedure and Analyses

Participants completed an online survey interrogating the factors described above. Spearman correlations determined the relative strength of association between each of personality, unconscious motives, self-efficacy for the management of difficult students, role stress, burnout symptoms, and the central teacher aggression outcomes. The single timepoint correlational data in our present study do not allow us to tease out directionality, but they do allow us to probe for associations between dimensions of burnout and teacher-reported aggression. MANOVA also tested for differences between men and women; primary and secondary strand; and undergraduate versus graduate-entry on the teacher aggression items, and potential correlates of teacher aggression. In view of the exploratory nature of the study, and number of tests being conducted, statistical significance was set at $p < .01$.

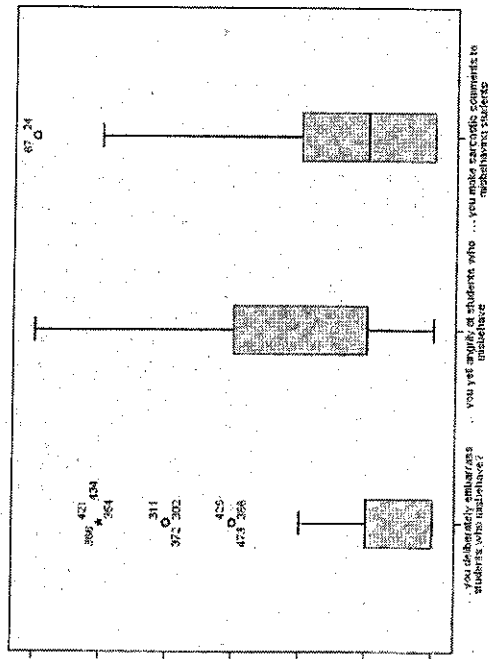
RESULTS

Prevalence of Self-Reported Teacher Aggression

Fifty-four percent of beginning teachers reported Deliberately embarrassing their students at least sometimes, while 45.9% reported they never engaged in this

Table 1. Details of measures.

Higher-order factor (where applicable)	Subscale	N Items	Sample item	Cronbach's alpha
	Aggression	3	To what extent do students in your classes feel... you deliberately embarrass students who misbehave? (1 = not at all, 7 = a lot)	.67
	Self-efficacy for managing difficult student behaviour	3	How confident are you that you have the ability to... manage badly behaved students? (1 = not confident at all, 7 = extremely confident)	.89
	Role stress	1	In general, how stressful do you find being a teacher? (1 = not at all, 5 = extremely stressful)	n/a
Personality			I see myself as... (1 = disagree strongly, 7 = agree strongly)	
	Extraversion	2	Extraverted, enthusiastic	.70
	Agreeableness	2	Critical, quarrelsome (reversed)	.38
	Conscientiousness	2	Dependable, self-disciplined	.60
	Neuroticism	2	Anxious, easily upset	.62
	Openness	2	Open to new experiences, complex	.35
Unconscious motives	Attachment anxiety	2	I am afraid that I will lose other people's love (1 = disagree strongly, 7 = agree strongly)	.86
	Attachment avoidance	2	I prefer not to show how I feel deep down (1 = disagree strongly, 7 = agree strongly)	.55
Burnout symptoms	Emotional Exhaustion	9	I feel emotionally drained from my work (1 = never, 7 = everyday)	.90
	Personal Accomplishment	8	I have accomplished many worthwhile things in this job (1 = never, 7 = everyday)	.82
	Depersonalisation	5	I've become more callous toward people since I took this job (1 = never, 7 = everyday)	.74



The box length is the interquartile range and the solid bar represents the median value. 'o' denotes outliers with values between 1.5 and 3 box lengths from the upper edge of the box.

Figure 1. Distributions for teacher-reported aggressive behaviours.

behaviour. On the other hand, 78.5% of teachers reported Yelling angrily, and 63.8% reported becoming Sarcastic with students at least some of the time. Figure 1 shows the spread of teachers who reported using aggressive behaviours in response to student misbehaviour.

Different Aggression Levels for Different Teachers

A 3-way ANOVA explored differences in Aggression between graduate and undergraduate trained, primary and secondary, and male and female teachers. A univariate effect of gender was found, $F(1, 352) = 11.58, p = .001$, partial $\eta^2 = .032$, with male teachers reporting higher Aggression levels ($M = 2.83, SD 1.18$) than females ($M = 2.24, SD 1.02$). Additionally, a univariate effect of teaching strand was present, $F(1, 352) = 11.05, p = .001$, partial $\eta^2 = .030$, with secondary teachers reporting higher Aggression ($M = 2.54, SD 1.14$) than primary teachers ($M = 2.16, SD 0.96$). A significant interaction between strand and degree type, $F(1, 352) = 8.81, p = .004$, partial $\eta^2 = .023$ (secondary graduates: $M = 2.36, SD = 1.10$; secondary undergraduates: $M = 2.85, SD = 1.16$; primary graduates: $M = 2.22, SD = 0.92$, primary undergraduates: $M = 2.12, SD = 0.98$), suggested higher

Aggression by undergraduate- relative to graduate-trained secondary teachers, in comparison to no degree differences among primary school teachers; no such significant interactions were identified in the following analyses according to type of aggression, and so this effect was not further interpreted.

A similar 3-way MANOVA was repeated with the 3 aggression items as dependent variables, to explore potentially different subgroup findings for different kinds of aggression. There was a multivariate effect of strand, $F(3, 350) = 6.33, p < .001$, partial $\eta^2 = .051$, accounted for by univariate effects of higher scores from secondary than primary teachers on each of Deliberately embarrass, $F(1, 352) = 7.00, p = .009$; partial $\eta^2 = .019$ (Secondary: $M = 2.10, SD = 1.37$; Primary: $M = 1.83, SD = 1.01$); and Sarcastic comments, $F(1, 352) = 18.92, p < .001$; partial $\eta^2 = .051$ (Secondary: $M = 2.64, SD = 1.50$; Primary: $M = 1.96, SD = 1.26$). A multivariate effect of gender was significant $F(3, 350) = 6.24, p < .001$; due to men reporting higher scores than women for Deliberately embarrass, $F(1, 352) = 7.26, p = .007$; partial $\eta^2 = .020$ (Male: $M = 2.60, SD = 1.43$; Female: $M = 1.81, SD = 1.10$). Therefore, there were no significant subgroup differences at all for Yelling angrily, implying similar scores regardless of gender, strand, and degree type. There were no significant effects of degree type on any of the 3 aggression items.

Factors Which Relate to Teacher Aggression

The following factors correlated significantly with the Aggression factor: Agreeableness. Personal accomplishment, Depersonalisation, Self-efficacy for managing student behaviour, Conscientiousness, Emotional exhaustion, Neuroticism and Openness (arranged from highest in strength to lowest). There were some differences in the patterns of relationships with the 3 different kinds of aggression: Yell angrily was the only kind which did not significantly relate to self-efficacy; Sarcastic comments was the only kind which did not relate to Attachment anxiety and Conscientiousness, and, the only kind which did relate to Emotional exhaustion; Deliberately embarrass was the only kind which did not relate to Neuroticism, and, the only kind which did relate to Openness ($p < .01$).

Teacher Differences on Correlates of Aggression

A MANOVA investigated differences in correlates of the Aggression factor and the individual aggression items, by gender, type of teaching qualification, and strand of teaching. A multivariate effect of gender was found, $F(12, 277) = 3.41, p < .001$, partial $\eta^2 = .129$, with univariate effects for Agreeableness, $F(1, 288) = 17.18, p < .001$, partial $\eta^2 = .056$, and Conscientiousness, $F(1, 288) = 17.18, p < .001$, partial $\eta^2 = .056$. Females reported higher levels of Agreeableness ($M = 5.63, SD = 1.00$) and Conscientiousness ($M = 6.02, SD = 1.01$) than male teachers (A: $M = 5.10, SD = 1.18$; C: $M = 5.38, SD = 1.189$). A multivariate effect of strand, $F(12, 277) = 3.41, p < .001$, partial $\eta^2 = .129$, was accounted for by a univariate effect on

Depersonalisation $F(1, 288) = 6.33, p = .01$, partial $\eta^2 = .022$. Secondary teachers reported higher levels of depersonalisation ($M = 2.29, SD = 1.16$) than primary teachers ($M = 1.97, SD = 0.92$).

Table 2. Spearman correlates of teacher aggression (component items and factor scores).

Higher-order factor (where applicable)	Subscale	N	Deliberately embarrass	Sarcastic comments	Yell angrily	Aggression (composite factor)
	Self-efficacy	347	-.173*	-.206*	-.122	-.213*
	Role stress	336	-.105	.071	-.072	-.031
Personality	Conscientiousness	330	-.212*	-.091	-.206*	-.197*
	Neuroticism	331	.120	.171*	.147*	.184
	Extraversion	328	.000	-.057	.072	.010
	Agreeableness	326	-.258*	-.249*	-.308*	-.342*
	Openness	325	-.153*	-.125	-.083	-.156*
Unconscious motives	Attachment anxiety	329	.156*	.052	.180*	.135
	Attachment avoidance	327	.058	-.046	.008	-.006
Burnout symptoms	Personal accomplishment	326	-.212*	-.334*	-.226*	-.342*
	Emotional exhaustion	324	.130	.187*	.128	.193*
	Depersonalisation	326	.246*	.253*	.271*	.321*

* $p < .01$.

DISCUSSION

The implications of aggressive teacher strategies include a dislike by students of those teachers (Friedel, Marachi, & Midgeley, 2002). The different techniques appear to result in different student perceptions of the interpersonal relationships they form with teachers. For example, deliberate embarrassment attacks a student's self-esteem (Parrott, Sabini, & Silver, 1988) in that it is a personal attack, rather than a management strategy based on demonstrating care toward students, even when admonishing them, such as the way in which yelling might be interpreted. On the other hand, sarcasm is not necessarily personal in nature, and if identified by students as irony, could even be interpreted as witty. Students may think that the teacher has understood the situation and reacted intelligently, if not ideally, to it. Previous studies (Romi et al., 2011) suggest that students are not as put off by teachers who yell at them, perhaps seeing this behaviour as driven by identifiable

classroom events. At times they may be yelled at by people who care about them, such as parents, as a result of frustration or stress, understanding that the underlying interpersonal relationship remains one of care, even in difficult situations.

The prevalence of beginning teachers' self-reported aggressive responding to student misbehaviour was similar to the 60% reported in previous studies (Lewis et al., 2008). However, the frequency with which these beginning teachers reported engaging in aggressive responding was generally quite low. Yelling angrily was the most common form of aggression displayed by these teachers, and also the most ubiquitous, unaffected by gender or strand. Men were more likely to deliberately embarrass students, a type of aggression which is likely to cause harm to the student-teacher relationship (Romi et al., 2011). Secondary teachers also deliberately embarrassed and were more sarcastic to students than their primary colleagues. Perhaps this stems from the lesser time available to secondary teachers with the same group of students, to be able to build strong interpersonal relationships. Such an interpretation is supported by secondary teachers' higher reported levels of depersonalisation.

The fact that a range of dispositional dimensions did relate to aggressive teacher responding to student misbehaviour, suggests that teachers may not be choosing to behave this way deliberately. In a separate study with 233 experienced teachers who reported responding aggressively, the authors suggested many teachers may simply react to student misbehaviour (Riley, Lewis & Brew, 2010). Men's higher use of deliberately embarrassing students was partly accounted for by their lower scores on Agreeableness and Conscientiousness. The relationship between teachers' aggressive responding and their self-efficacy for managing difficult student behaviour further points to the importance of developing a suite of effective class management skills for beginning teachers. If aggressive responding is chosen deliberately, it may be that the technique has been evaluated as efficacious in the short term, while conforming to the accepted school culture.

There were no significant differences between those with typically four years of teaching experience (graduate-entry) versus those who had typically only one year's experience (undergraduates) on levels of aggressive responding to student misbehaviour. Also, no significant relationship existed between how stressful teachers found their role and their reported levels of aggression. Our speculation about time spent teaching in a stressful setting predicting aggressive responding was therefore not supported. The findings support an interpretation of teacher aggression arising from dispositional and personality based dimensions, and self-efficacy for class management skills. Therefore aggressive teachers are likely to need more profound interventions than are typically available as professional development. This has implications for the higher education sector and suggests a holistic approach where initial teacher education and ongoing professional development are integrated, not distinct from each other. For example, if school culture is the underlying cause, only interventions aimed at cultural change in a particular school would be likely to succeed in lessening teacher aggression. There

is a substantial literature that suggests this is very much long-term work (Neville & Dalmau, 2008), even longer than the length of a teacher's initial training.

Our speculation that 'burned out' teachers would engage in more aggressive behaviours was supported. Teachers experiencing higher levels of Personal accomplishment were less likely to engage in aggressive behaviours. It seems that teachers who lack skills to sensitively respond to student misbehaviour are those more likely to resort to aggressive forms of response. On the other hand, the Emotional exhaustion and Depersonalisation dimensions of burnout showed a positive relationship; teachers higher on those dimensions reported more frequent aggressive student management. Because Emotional exhaustion has been well documented in samples of beginning teachers (Goddard, O'Brien, & Goddard, 2006), the relationships we report, while weak, are important. Depersonalisation showed a stronger relationship with aggression. Depersonalisation has been hypothesised to occur as a result of Emotional exhaustion (Maslach, 2003) whereby individuals attempt to disengage in order to cope with emotional strain (Schwarzer & Hallum, 2008), representing a more chronic aspect of the burnout syndrome. The higher incidence of aggression among secondary teachers may be partly explained by their higher Depersonalisation scores. For example, the number of students a secondary teacher deals with each day and the frequency of transitions from class to class may exacerbate the risk of Depersonalisation. The impacts of different kinds of job demands, classroom structures and accountability systems for primary and secondary teachers require further investigation.

As hypothesised, teachers who reported elevated scores on Agreeableness, Conscientiousness or Openness reported lower aggression; whereas, teachers higher on Neuroticism had higher aggression scores, and Extraversion showed no significant relationship. It may be that greater Openness and Conscientiousness predict seeking alternative, constructive strategies and solutions to resolving student misbehaviour; while Agreeable teachers should be less likely to behave in an aggressive way even if provoked. In our continuing work, we will examine which constellations and combinations of factors interact together to produce aggressive teacher behaviours using longitudinal data.

Attachment anxiety correlated with two aggression items (Deliberately embarrass and Yell angrily). This finding suggests that aggression in the classroom may be founded on an unconscious need to be 'loved' by the students. Student misbehaviour could prompt teacher separation protest behaviours, which are largely beyond conscious control (Bowly, 1975). The lack of a reliable short measure of Attachment avoidance made interpretation of the lack of association with teacher-reported aggression more difficult. Because avoidant people are not likely to seek help, and, are less likely to accept it if offered, this relationship requires further exploration using more sensitive measures. Teachers, who perceived themselves to have lower self-efficacy for managing student misbehaviour, were also more likely to use aggressive behaviours, particularly making sarcastic comments, supporting an interpretation that this was because they lacked a suite of alternative effective strategies and skills.

Limitations and Future Directions

This study relied on self-report measures to tap levels of beginning teachers' aggression in response to student misbehaviour in their classroom. It is possible this approach may underestimate aggressive teacher behaviours, given a possible social desirability bias. Future research could fruitfully incorporate observational and student-report data to overcome this limitation. Effect sizes, where significant effects were identified, were typically small, suggesting that other factors are at play and should be examined in relation to teacher aggression. A greater range of dispositional dimensions such as we have included. The poor alphas for certain subscales, and the single-item indicator for measured perceived role stress, provide insufficiently sensitive measures which also reduce power to identify and precision to estimate significant effects, likely contributing to the small effect sizes identified. The fact that significant effects were still able to be identified, points to the need to develop improved measures in order to productively pursue this line of research inquiry. What is clear is that this is a rich area for researchers to explore, and develop interventions to improve, teachers' professional development.

NOTES

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