One Year on: First-Year Primary Teachers' Perceptions of Preparedness to Manage Misbehaviour and Their Confidence in the Strategies They Use

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This article reports the findings of a one-year follow-up study of Australian beginning primary teachers' perceived preparedness to manage a variety of problematic student behaviours, and their confidence and use of behaviour management strategies based on their preservice coursework in classroom behaviour management. A total of 216 primary teachers in their first year of employment located across Australia responded to the online survey. Based on their coursework preparation in classroom behaviour management, the first-year teachers felt, at best, only somewhat prepared to manage disruption, noncompliance and disorganisation problems, and closer to not at all prepared to manage aggressive, antisocial, or destructive behaviours. Their perceptions of preparedness to manage all categories of problem behaviours had decreased significantly since course completion in the past year. First-year teachers were aware of a wide range of strategies for responding to problem behaviours, and felt somewhat confident in using most of the strategies. Their confidence in use had increased for most strategies, but only minimally, since completing their teacher education programs. Issues with current preservice coursework in classroom behaviour management in teacher education programs are discussed, and suggestions for addressing preparation and confidence issues are offered.

Keywords: classroom and behaviour management, preparedness, beginning teacher perceptions

Over the past few decades, the literature published on the experiences of beginning teachers has been dominated by their concerns (see, for example, Kokkinos, Panayiotou, & Davazoglou, 2004; Veenman, 1984). Among the possible causes of these concerns have been challenging teaching assignments (Public Agenda, 2007; Valli, 1992), lack of support from school administrators (Ingersoll & Strong, 2011), poor student behaviour and motivation (Public Agenda, 2007), and inadequate preservice teacher preparation (Oliver & Reschly, 2007). Many of these concerns have been linked to the high attrition rate of beginning teachers in both regular and special settings (Billingsley, Carlson, &

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Klein, 2004; Ingersoll & Strong, 2011), with classroom behaviour management problems reported as the main reason that some beginning teachers have left the teaching profession (Buchanan, 2011; Eick, 2002).

For beginning and experienced teachers, being able to manage a class is of prime importance (Merrett & Wheldall, 1993), with many claiming that their teacher preparation programs did not prepare them adequately for the realities of the classroom and in particular for classroom behaviour management (Atici, 2007; Giallo & Little, 2003; Merrett & Wheldall, 1993). In Australia and elsewhere, few studies have examined the content of preservice teacher preparation units in classroom behaviour management. Classroom behaviour management content appears to be most often delivered embedded within other units, rather than in dedicated units (Blum, 1994; O'Neill & Stephenson, 2011; Wesley & Vocke, 1992). Typical units contained many psychological or philosophical models of management (Allen, 2010; Banks, 2003; O'Neill & Stephenson, 2012a), and offered little more than a couple of hours of instruction per model (Blum, 1994; O'Neill & Stephenson, 2011, 2012a). Seldom offered were stand-alone units or content on managing more challenging behaviours (O'Neill & Stephenson, 2011, 2012a). Teacher education program coursework cannot be expected to provide all of the classroom behaviour management knowledge and skills that teachers require (Martin, Linfoot, & Stephenson, 1999), but they should provide content that 'can give teachers a conceptual map or schema to understand what they are experiencing and trying to accomplish in the classroom' (LePage et al., 2005, p. 354).

In order to quantify the experiences of beginning teachers in classroom behaviour management, researchers have used various constructs to develop measurement instruments. One such construct has been teacher preparedness. Preparedness is akin to self-assessment of teaching competence, and is a measure based on personal perceptions (Housego, 1990). Preparedness is thought to be related to self-efficacy in that teachers who feel well prepared to teach are likely to have a good sense of efficacy in executing teaching tasks (Giallo & Little, 2003). Teachers with a greater sense of preparedness to teach have been shown to have a greater sense of classroom behaviour management efficacy (Giallo & Little, 2003). What remains unexplored is whether the association between a teacher's sense of efficacy in classroom behaviour management and teaching preparedness extends more specifically to beginning teachers' preparedness to manage a variety of problematic student behaviours. Given that behaviour management concerns are high for beginning teachers (Australian Education Union, 2008), understanding their perceived preparedness for managing specific problematic behaviours might be useful information for designers of coursework units in initial teacher education programs and for employers planning in-service training programs.

Beginning generalist and special education teachers have been asked to assess their preparedness to undertake a range of teaching tasks competently, including classroom management, with a focus on broader classroom behaviour management tasks such as managing difficult classes (Boe, Shin, & Cook, 2007; Cains & Brown, 1996, 1998; Giallo & Little, 2003; Housego, 1990; Kee, 2012). Longer teacher preparation was related to higher behaviour management preparedness scores of United Kingdom (UK) and United States (US) graduates (Boe et al., 2007; Cains & Brown, 1996; Kee, 2012). Secondary teachers in the UK were found to feel better prepared than their primary counterparts (Cains & Brown, 1998), and special education graduates in the US felt slightly better prepared than general education graduates (Boe et al., 2007). In Australia, Giallo and Little (2003) reported that final-year primary preservice teachers felt slightly better prepared for teaching tasks than newly graduated teachers.

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The Preparedness in Managing Behaviour Problems Scale (PMBPS; O'Neill & Stephenson, 2012b) has been used to assess the preparedness of final-year Australian preservice primary teachers to manage problematic behaviours, based on their undergraduate classroom behaviour management coursework. The preservice teachers surveyed felt slightly more than somewhat prepared to manage disruption and noncompliance, and student disorganisation problems, but less than somewhat prepared to manage aggressive, antisocial, and destructive behaviours. What is not known is whether perceptions of preparedness change from the end of teacher education programs into the first years of teaching.

Another vein of research has focused on the confidence beginning teachers have in using classroom behaviour management strategies. Reupert and Woodcock (2010) developed the 25-item Survey of Behaviour Management Practices (SOBMP) and found that Canadian preservice teachers felt most confident in using preventative and initial correction strategies, and least confident in using later correction strategies. They reported that Australian preservice teachers felt most confident in using rewards, and Canadians, preventative strategies (Reupert & Woodcock, 2011). Canadians and the Australians both felt least confident in using later correction strategies. The Behaviour Management Strategies Scale (BMSS) was used with a sample of Australian preservice primary teachers (O'Neill & Stephenson, 2012b). These preservice teachers felt most confident about using praise, encouragement, and rewards, and least confident about collaboration with a school counsellor. There appear to be no longitudinal or one-year follow-up studies that explore changes in teacher confidence from the end of preservice teacher education programs into the first years of teaching. Understanding beginning teacher confidence in using behaviour management strategies, and in particular those strategies known to be effective, and the changes that occur in the first year of teaching, could alert teacher educators as to what parts of their classroom behaviour management curriculum to strengthen.

In order to extend what is known about the experiences of beginning teachers as they transition from their preservice teacher education into the first year of teaching, this study sought to answer the following research questions: How prepared do first-year primary teachers perceive themselves to be in managing problematic student behaviours based on their preservice coursework preparation in classroom behaviour management? Has their perceived level of *preparedness* changed since completing their teacher education programs? Is their preparedness to manage problematic student behaviours related to their sense of efficacy in classroom management? How confident do they feel in using classroom behaviour management strategies, particularly those suited to addressing challenging behaviours, and how frequently do they use them? Has their *confidence* in using these strategies changed since completing their teacher education programs?

Method

Participants

This study follows on from a survey of 573 final-year primary preservice teachers in Australia carried out in 2009 (O'Neill & Stephenson, 2012b). The previous study recruited participants from 21 consenting tertiary institutions that had a 4-year undergraduate primary teaching program, via an invitational e-mail forwarded to the students by a nominated faculty liaison person at each institution. These 21 programs had approximately 4000 final-year students enrolled. In the earlier study, participants were asked to indicate an interest in a follow-up study to be conducted one year after completion of their teacher education programs. At that time 282 participants supplied their preferred contact details (e-mail address and a phone number). After ethical approval was granted, an invitation

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e-mail was sent to these possible participants with a link to an online survey questionnaire hosted by Surveymonkey.com. Invitees had 30 days in which to respond to the survey before the link was closed, and were sent two reminder e-mails, one 7 days after the initial invitation, and another 5 days before the survey closed. A total of 275 e-mails were delivered to operational e-mail addresses.

The response rate to the online survey questionnaire was 78.5%, with 216 invitees residing in six of the eight Australian states or territories responding. Of the 216, 12 (5.6%) had not worked as teachers in 2010, five (2.3%) were working in secondary schools, three (1.4%) in preschool settings, and one as an English teacher in South Korea, leaving 195 (90.3%) participants who were working as primary school teachers in 2010. Just over 10% ($n = 20$) had fulfilled specialist roles within primary schools. Five had taught students with special education needs, four in physical education, four in creative arts, two in technology, two in languages other than English, two as English as a second language teachers, one as a science teacher, and one as a librarian. Of the 195 primary teachers, 10 (5.1%) were working in locations other than where they had trained as teachers, eight in another Australian state, and two in the United Kingdom.

The mean age of the first-year teachers in this sample was 26.3 years ($SD = 6.9$, $Mdn = 23$), and was similar in mean age to other first-year teaching populations in the US (Çapa, 2005; Moore, 2007) and Malaysia (Murshidi, Konting, Elias, & Fooi, 2006), but older than beginning teachers in Turkey ($M = 22$; Şahin & Atay, 2010). The sample appeared to be slightly gender biased as 89.8% of the participants were female, which is higher than the national average of 81% for Australian primary teachers (Australian Bureau of Statistics, 2011), and 81.8% for US elementary teachers (Bureau of Labor Statistics, 2010).

Instruments

The online survey questionnaire included items about respondents' teaching experience in the past year (number of days taught, current working location including overseas if applicable, employment tenure, key teaching responsibility, and location of main employing school). Respondents were asked to complete three measurement instruments: the PMBPS, a scale that measures confidence in use of classroom behaviour management strategies, the BMSS, and the Teachers' Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk Hoy, 2001). All three scales had been previously administered to the participants in 2009. A final item pertained to participation in a follow-up study in 2011. The focus of this paper is on the results of the preparedness scale (PMBPS) and the strategies scale (BMSS), and the relationship between participants' preparedness scores and their sense of efficacy.

The Preparedness in Managing Behaviour Problems Scale. The 40-item PMBPS was designed to measure how prepared beginning teachers feel about managing specific problematic student behaviours based *only* on their preservice coursework preparation. Included items related to student disorganisation problems (e.g., forgetting materials), off-task behaviours (e.g., fidgeting), disruptive behaviours (e.g., hindering others), aggressive behaviours (e.g., verbal aggression directed at staff), destructive behaviours (e.g., throwing objects), noncompliant behaviours (e.g., defiant when corrected), and antisocial behaviours (e.g., lying; see Table 1 for all items). The problematic behaviours included in this scale were those reported in the research literature as troublesome or stressful to teachers (see, for example, Beaman, Wheldall, & Kemp, 2007), and suggestions made by experts in the field and authors' knowledge. Perceived preparedness was measured using

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TABLE 1

Component Structure and Factor Loadings for the PMBPS ($n = 181$), With Oblimin Rotation, 2009 and 2010

	2009					2010				
Item	DNC	AAD	DIS	Mean	*SD*	DNC	AAD	DIS	Mean	*SD*
Talking to peers during instruction	.86			**2.48**	0.87	.89			2.19	0.86
Out of seat/wandering	.87			2.27	0.91	.85			2.07	0.89
Talking out of turn/calling out	.81			2.51	0.92	.83			**2.26**	0.84
Limited persistence with set task	.89			2.19	0.84	.81			1.94	0.79
Inattentive behaviour	.85			2.42	0.74	.80			2.12	0.76
Noises	.69			2.18	0.92	.79			1.95	0.82
Hindering others/disrupting peer activities	.72			2.23	0.89	.78			1.98	0.81
Fidgeting	.84			2.33	0.87	.79			2.10	0.88
Idleness/slow to begin set task	.82			2.26	0.84	.75			1.94	0.80
Lack of motivation	.63			2.45	0.85	.72			2.04	0.82
Rocking/swinging on chairs	.75			2.29	1.00	.74			2.06	0.96
Whinging, whining, pulling faces	.65			2.09	0.95	.72			1.87	0.82
Excessive demand on teacher for assistance	.62			2.08	0.86	.61			1.83	0.80
Disobeying class rules	.51			2.23	0.84	.65			2.18	0.83
Non-compliance to request/directions	.57			2.03	0.85	.54			1.83	0.78
Poor sharing or turn-taking						.52			1.92	0.79
Sexually explicit actions		.82		**1.49**	0.71		.93		**1.45**	0.69
Physical aggression to staff		.91		1.62	0.78		.86		1.56	0.78
Self-injurious behaviour		.86		1.57	0.72		.86		1.49	0.72
Offensive language		.75		1.70	0.77		.83		1.55	0.71
Physical aggression to peers		.89		1.71	0.79		.81		1.64	0.77
Verbal aggression to staff		.78		1.92	0.84		.80		1.64	0.78
Verbal aggression to peers		.74		2.01	0.85		.78		1.75	0.78
Bullying or intimidation		.75		2.13	0.90		.78		1.94	0.84

TABLE 1
Continued

	2009					2010				
Item	DNC	AAD	DIS	Mean	*SD*	DNC	AAD	DIS	Mean	*SD*
Stealing		.59		1.65	0.80		.73		1.45	0.70
Throwing objects		.60		1.73	0.79		.71		1.58	0.74
Tantrums/poorly managed anger		.61		1.78	0.86		.69		1.68	0.79
Lying or cheating		.53		1.78	0.84		.68		1.61	0.74
Destroying school property		.72		1.64	0.77		.65		1.46	0.70
Setting others up		.49		1.66	0.81		.63		1.52	0.68
Destroying peers' work or property		.65		1.67	0.81		.61		1.51	0.74
Student–student conflicts		.47		2.08	0.84		.54		1.95	0.79
Untidiness			.60	2.18	0.94			.73	1.83	0.81
Disorganisation			.60	2.33	0.90			.60	1.97	0.82
Forgetfulness			.73	2.14	0.90			.78	1.82	0.86
Late to class			.63	2.12	0.97			.74	1.78	0.88
Eigenvalues	20.81	2.96	1.45			19.81	2.79	2.02		
% of variance	57.79	8.22	4.04			55.03	7.74	5.61		
α	.96	.97	.92			.96	.97	.91		
Component mean	2.26	1.75	2.19			2.03	1.62	1.85		
SD	0.71	0.66	0.83			0.67	0.61	0.75		

Note. For the PCA, the Kaiser–Meyer–Olkin calculation 2009 = .96, 2010 = .95, and Bartlett's test of sphericity 2009, χ^2 (630) = 7013.31, $p < .001$, 2010 χ^2 (630) = 6635.47, $p < .001$. DNC = disruptive behaviours and noncompliance; DIS = disorganisation; AAD = aggressive, antisocial, and destructive.

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TABLE 2
Comparison Component Median Scores for the PMBPS 2009–2010 ($n = 181$)

	Median				
	2009	2010	*z*	*p*	*r*
Disruptive behaviours and noncompliance (DNC)	2.13	2.00	−4.62	.000	−.24
Aggressive, antisocial, and destructive (AAD)	1.58	1.44	−3.34	.000	−.18
Disorganisation (DIS)	2.00	1.75	−4.82	.000	−..25

a 4-point response scale, including *unprepared* (1), *somewhat prepared* (2), *prepared* (3), and *well prepared* (4).

Previous research conducted with the scale (see O'Neill & Stephenson, 2012b) showed that three distinct types of misbehaviours were distinguishable by preservice teachers: (a) disrupted learning and noncompliance; (b) aggressive, antisocial, and destructive behaviours; and (c) disorganisation. Previously, this scale was reported to have a total scale split-half reliability of $\alpha = .98$, and subscale reliabilities ranged from $\alpha = .93$–$.97$. For this study, the total scale split-half reliability was $\alpha = .98$ for both the 2009 and 2010 datasets, and subscale reliabilities ranged from $\alpha = .92$–$.97$ (2009), and .91–.97 (2010).

The Behaviour Management Strategies Scale. The BMSS was designed by O'Neill and Stephenson (2012b) to collect data on beginning teachers' confidence in using specific classroom behaviour management strategies based *only* on their preservice coursework. The strategies were drawn from classroom management texts, statements of knowledge required for teaching competency, and from experts' and authors' knowledge. It contained items comprising four main types of strategies: motivational (e.g., token economies); reductive (e.g., time-out); preventative (e.g., forming and establishing classroom rules); and communicative (e.g., reflective listening; see Table 2). The original scale used a 5-point response scale and included the response option of *unfamiliar with*. In 2010, a 4-point response scale was used where the category of *unfamiliar with* was replaced by an additional precursor Yes/No question for each strategy that asked participants if they could recall being taught about it. Respondents were asked about the frequency of the use of the strategy in the past year. Response options included, 1 = *never used*, 2 = *once/twice this year*, 3 = *once/twice a month*, 4 = *weekly*, and 5 = *daily*. The split-half reliability for the full BMSS was $\alpha = .98$.

Teachers' Sense of Efficacy Scale. Participants also completed the 24-item TSES. The scale was designed to measure teachers' sense of efficacy in important teaching tasks or activities across a number of domains that were representative of teachers' work lives, and includes classroom management, instruction, and student engagement items (see Tschannen-Moran & Woolfolk Hoy, 2001 for scale items). The scale employs a 9-point response scale, with options ranging from *nothing* (1) to *a great deal* (9), to indicate how much influence they feel they have over student learning and behaviour. Previous research conducted using this scale with beginning teachers has shown that the scale and subscales have excellent internal consistency reliability (O'Neill & Stephenson, 2012c). The split-half reliability for the total TSES was $\alpha = .96$, with component reliability scores ranging from $\alpha = .92$–$.94$ (O'Neill & Stephenson, 2012c).

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Instrument Validation

Pilot-testing of the online survey questionnaire was conducted with five first-year teachers known to the first author who had not participated in the previous studies. Testers were asked to comment on item clarity, time taken to complete the survey (not including optional open-ended items), and online functionality. The survey took approximately 30 minutes to complete, instructions and item wording were reported to be clear by the five pilot-testers, and minor issues reported regarding the online functionality were subsequently rectified.

Data Collection and Analysis

Respondents could complete the survey anonymously or in confidence if they were interested in participating in a follow-up study toward the end of 2011. All were invited to enter a prize draw (a chance to win one of five A$150 gift vouchers) for survey completion, and, if interested, were asked to supply a nonidentifiable e-mail address to ensure their anonymity.

As the PMBPS is a relatively new measurement instrument that had not been previously used with first-year teachers, it seemed appropriate to explore its component structure using principal component analysis (PCA). The TSES was also subjected to a PCA as previous studies conducted with beginning teachers had not shown the existence of a stable factor structure for the TSES (O'Neill & Stephenson, 2012d). Our sample was not large enough to split to allow us to conduct both exploratory and confirmatory factor analysis techniques. To determine the correct component rotation method, orthogonal and oblique rotations were conducted. If the oblique rotation component correlation matrix yielded correlation coefficients in excess of .30, then the components were not independent, and the orthogonal rotation solution should not be used (Pedhazur & Schmelkin, 1991). Components to be retained were determined by multiple means: eigenvalues greater than one; examination of the scree plot for the point of inflexion; and parallel analysis (Thompson & Daniels, 1996).

For the PMBPS and the TSES, subscale reliability was calculated using the split-half reliability method (Cronbach's alpha). For the PMBPS and TSES, component means for each participant were calculated by summing item scores that belonged to the constituent component and then dividing the dividend by the number of items. For the PMBPS, BMSS and the TSES, missing values were examined for any patterns, and if participants had in excess of 25% of item scores missing, they were removed from further analysis. Missing values for individual items were few (PMBPS 2009, $n = 6$, 0.09%, 2010, $n = 0$; BMSS 2009, $n = 366$, 4.5%, 2010, $n = 0$; and TSES 2010, $n = 0$). Missing values were replaced with the sample mean score for that item (Tabachnick & Fidell, 2007). When conducting PCA, missing values were excluded pairwise rather than listwise to preserve as much data as possible (Tabachnick & Fidell, 2007).

To explore if statistically significant changes had occurred in participants' scores from 2009 to 2010 for the PMBPS and BMSS, 2009 scores were subtracted from 2010 scores and the quotient became a new variable called *difference*. The difference variable data was checked for a normal distribution via Kolmogorov–Smirnov tests as parametric texts require data to be normally distributed (Field, 2009). Data that were found to be non-normal in distribution ($p < .05$) were subjected to nonparametric tests such as the Wilcoxon matched-pairs test and Spearman's correlation coefficient test for exploring associations between variables. Where the difference variable had a normal distribution, paired *t*-tests were conducted. Where multiple tests were conducted, a Bonferroni correction factor

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($p < .05$/number of tests conducted) was applied to reduce the likelihood of Type I errors (Field, 2009).

Results

Preparedness in Managing Behaviour Problems

The participants' PMBPS data from 2009 and 2010 was subjected separately to principal components analysis first using orthogonal (Varimax) rotation and then an oblique (Oblimin) rotation. For the 2009 and 2010 datasets, the correlations between the identified components were greater than .30, suggesting that the components were not independent, leading to the retention of the oblique rotation solution. Examination of the scree plots for the point of inflexion for the 2009 and 2010 data suggested that for both datasets, a three-to-five component solution was possible. One item, argumentative, loaded highly onto two factors, and three items, absconding, tattling, and ignoring the feelings of others, had factor loadings below .40, leading to all four items being removed from further analyses. A parallel analysis was conducted to determine the correct number of components to retain for a matrix of 36 items (variables) with 181 participants. Only the first three eigenvalues generated by the parallel analysis were larger than the first three eigenvalues obtained from the PCA for the 2009 and the 2010 datasets, confirming that three components should be retained. The PCA was then re-run with 36 items for the 2009 and 2010 datasets.

The three component model for the 2009 PMBPS data explained 70.1% of the variance in participants' scores, and a three component model for the 2010 data explained 68.4% of the variance in their scores. Table 1 shows the component structure and factor loadings for the PMBPS for the 2009 and 2010 datasets. The component item constituents for the 2009 and 2010 PMBPS data were almost identical except for poor sharing and turn-taking, which had a factor loading of less than .40 for the 2009 PMBPS data. This item's score was omitted when comparing component means. Factor loadings for the three components for the 2009 and 2010 PMBPS were good to high (2009, $M = .71$, 2010, $M = .74$) indicating that the components had stable and reliable structures, with items sharing 50% and 54%, respectively, of their variability with the component they had aligned with.

Component one contained items related to student behaviour problems that disrupted learning and indicated noncompliance (disruptive behaviours and noncompliance). The second component contained problem behaviours associated with aggressive, antisocial, and destructive behaviours, and the third component contained four disorganisation items. The component mean scores for the 2009 and 2010 datasets are shown in Table 1. Disruptive behaviours and noncompliance had the highest component mean scores for 2009 ($M = 2.26$) and 2010 ($M = 2.03$), equating to respondents feeling *somewhat prepared* to manage this type of misbehaviour. The component with the lowest mean score was aggressive, antisocial, and destructive behaviours for both the 2009 ($M = 1.75$) and 2010 ($M = 1.62$) data, and equated to participants feeling less than *somewhat prepared* to manage this type of misbehaviour.

Change in Component Mean Scores From 2009 to 2010. The distribution of scores for the three components of the PMBPS was checked for a normal distribution prior to conducting statistical analyses. For all three components, the distribution of the change in scores from 2009 to 2010 was found to be non-normal, disorganisation, $D(181) = 0.12$, $p < .05$; disruptive behaviours and noncompliance, $D(181) = 0.08$, $p < .05$; aggression, antisocial, and destructive, $D(181) = 0.08$, $p < .05$. As the distribution was non-normal, Wilcoxon

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TABLE 3
Correlations Among Sense of Efficacy in Classroom Management and Motivation Scores and Preparedness to Manage Problematic Student Behaviour Category Scores ($n = 181$)

Measures	1	2	3	4
1. Mean CMM	1.00	.03	.25*	.39*
2. Mean DIS		1.00	.55*	.48*
3. Mean DNC			1.00	.74*
4. Mean AAD				1.00

Note. CMM = classroom management and motivation; DIS = disorganisation; DNC = disruptive behaviours and noncompliance; AAD = aggressive, antisocial, and destructive.
*$p < .001$.

signed-rank tests were used, with p adjusted to .017 (.05/3) to reduce the likelihood of Type I error. Participants' preparedness scores for all three components were found to have significantly ($p < .001$) declined from 2009 to 2010, and the effect was low to medium in size (see Table 2).

Relationship Between Preparedness to Manage Misbehaviour and Sense of Efficacy in Classroom Management. As previously reported in O'Neill and Stephenson (2012c), the results of the principal component analysis of the TSES resulted in two distinct components emerging that were named classroom management and motivation, and instruction and learning (see O'Neill & Stephenson, 2012c). Spearman correlation coefficients were calculated to assess the relationships between participants' classroom management and motivation subscale scores and their PMBPS subscales scores (disorganisation, disruptive behaviours and noncompliance, and aggressive, antisocial, and destructive behaviours). There was a highly significant positive correlation between participants' classroom management and motivation efficacy scores and their preparedness to manage disruptive behaviours and noncompliance ($r_s = .25$, $p < .001$) and aggressive, antisocial, and destructive behaviours ($r_s = .39$, $p < .001$), and a nonsignificant positive correlation between their classroom management and motivation scores and preparedness to manage disorganisation behaviours ($r_s = .03$, *ns*). All three PMBPS subscale scores were also strongly correlated to one another, especially the disruptive behaviours and noncompliance and aggressive, antisocial, and destructive behaviour subscale scores ($r_s = .74$; see Table 3).

Behaviour Management Strategies Scale. In October 2010, with the passing of a full year, it was of interest to determine what respondents could recall being taught. Table 4 shows the percentage recall for each strategy. More than 95% of first-year teachers could recall being taught about forming and establishing rules, and praise, encouragement, and rewards. Conversely, just over one-third could recall being taught about restitution (34.6%), or levels systems (40.7%).

Table 4 shows the item mean scores for confidence in using the 55 different listed strategies in the BMSS for this sample of beginning teachers from 2009 and 2010, and the change in item mean score. The strategy with the highest mean confidence score in 2009 and 2010 was using praise, encouragement, or rewards (2009, $M = 3.22$, $SD = 0.77$;

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TABLE 4

Item Mean Scores for 2009 and 2010 and Frequency of Use of Behaviour Management Strategies Scale for 2010 ($n = 149$)

	2009 scores (out of 4)		2010 scores (out of 4)							Frequency of use in 2010 (out of 5)	
	Mean	*SD*	Mean	*SD*	Δ in mean	*t* score	*p*	*r*	2010 % recall	Mean	*SD*
Motivational strategies											
Praise, encouragement, rewards	**3.22**	0.77	**3.53**	0.62	+0.31	−4.87	.000	.37	95.68	**4.82**	0.59
Token economies	2.74	0.82	3.30	0.77	+0.56	−6.86	.000	.49	77.78	3.83	1.51
Levels systems	2.44	0.83	2.19	1.10	−0.25				40.74	2.41	1.59
Group contingency (whole-class incentives)	2.87	0.84	2.94	0.85	+0.07				67.90	2.72	1.27
Student self-monitoring and evaluation	2.52	0.85	2.59	0.90	+0.07				74.69	3.03	1.53
Behavioural momentum	2.29	0.91	2.05	0.98	−0.24	2.54	.006	.21	43.83	2.40	1.42
Partial agreement	2.28	0.78	2.93	0.86	**+0.65**				59.88	3.95	1.19
Premack principle	2.45	0.85	2.36	1.16	−0.09	0.83	.204	.07	41.98	2.95	1.72
Behavioural contracts	2.32	0.90	2.32	0.92	0.00	−0.02	.490	.001	72.84	2.06	1.27
Reductive strategies											
Suggesting loss of time, item, privilege	2.64	0.82	3.11	0.72	+0.47				82.72	3.96	1.09
Time out to reflect on choices	2.81	0.81	3.09	0.79	+0.28				86.42	3.57	1.09
Time out from positive reinforcement	2.74	0.83	2.83	0.89	+0.09				77.78	3.17	1.28
Response cost	2.59	0.91	2.82	0.91	+0.23	−2.62	.005	.21	70.37	2.83	1.51
Tactical ignoring	2.70	0.88	2.97	0.90	+0.27				79.01	4.02	1.17
Reprimands	2.49	0.87	2.74	0.90	+0.25				69.75	3.54	1.43
Logical consequences	2.84	0.78	2.97	0.85	+0.13				79.63	3.86	1.30
Restitution	2.30	0.78	**1.86**	0.94	**−0.44**				**34.57**	2.09	1.35
Least to most intrusive	2.54	0.91	2.31	1.05	−0.23				61.73	2.71	1.56
Offering choices and following through	2.69	0.80	2.93	0.83	+0.24	−3.05	.002	.24	82.10	3.87	1.10
Diagnostic thinking about underlying causes	2.27	0.85	2.15	0.89	−0.12				56.79	2.72	1.37
Diagnosing student- or teacher-owned problems	2.27	0.85	2.00	0.87	−0.27				52.47	2.34	1.33
Follow-up discussions after class	2.68	0.81	2.95	0.80	+0.27	−3.49	.000	.28	79.63	3.64	1.11

TABLE 4
Continued

	2009 scores (out of 4)		2010 scores (out of 4)							Frequency of use in 2010 (out of 5)	
	Mean	*SD*	Mean	*SD*	Δ in mean	*t* score	*p*	*r*	2010 % recall	Mean	*SD*
Distraction via questioning or personal invitation	2.48	0.85	2.59	0.95	+0.11				56.79	3.48	1.40
Physical proximity	2.77	0.97	2.95	0.93	+0.18	−2.15	.015	.17	74.69	3.86	1.47
Line management	2.32	0.85	2.67	1.00	+0.35				65.43	2.51	1.14
Preventative strategies											
Forming and establishing rules	3.20	0.73	3.34	0.75	+0.14	−2.10	.018	.17	**96.30**	3.59	1.43
Creating and using behaviour intervention plans	2.60	0.92	2.32	1.03	−0.28				67.90	2.32	1.43
Diagnosing can't from won't problems	2.36	0.87	2.28	0.92	−0.08				50.00	2.81	1.48
Teaching social skills	2.55	0.82	2.43	0.98	−0.12	1.39	.084	.12	59.26	3.03	1.48
Teaching conflict resolution skills	2.45	0.83	2.41	0.83	−0.04				66.05	3.06	1.41
Bibliotherapy	2.36	0.96	2.28	0.91	−0.06				52.47	2.27	1.21
Rule reminders/pre-corrections	2.89	0.84	3.07	0.80	+0.18	−2.21	.015	.18	76.54	4.03	1.27
Verbal cuing to the appropriate	2.92	0.81	3.17	0.76	+0.25				82.72	4.40	1.02
Monitoring student behaviour (withitness)	2.68	0.83	2.68	0.95	0.00				67.90	3.86	1.58
Multi-tasking (overlapping)	2.56	0.79	2.28	1.04	−0.28				43.83	3.08	1.73
Planned transitions (smoothness)	2.65	0.89	2.81	0.92	+0.16				78.40	4.25	1.28
Nonverbal gestures or signals	2.99	0.84	3.36	0.68	+0.37				88.27	**4.82**	0.56
Seating or room arrangements	3.01	0.81	3.24	0.76	+0.23				90.12	3.44	1.23
Removing or minimising distractions	2.96	0.75	3.13	0.70	+0.17				86.42	4.09	1.08

TABLE 4
Continued

	2009 scores (out of 4)		2010 scores (out of 4)							Frequency of use in 2010 (out of 5)	
	Mean	*SD*	Mean	*SD*	Δ in mean	*t* score	*p*	*r*	2010 % recall	Mean	*SD*
Rescheduling activities due to previous overstimulation or fatigue	2.68	0.84	2.86	0.86	+0.18				61.73	3.53	1.13
Teaching class routines	2.99	0.78	3.06	0.78	+0.07				83.33	3.77	1.35
Communicative strategies											
Voice modulation	2.93	0.86	3.24	0.71	+0.33				79.01	4.81	0.70
Negotiating solutions	2.59	0.88	2.66	0.82	+0.07				64.81	3.80	1.20
Supportive replies, reflective listening	2.81	0.86	2.82	0.82	+0.01				67.90	4.08	1.22
'I' messages	2.78	0.86	2.62	1.00	−0.16				69.75	3.48	1.53
Communicating expectations	2.89	0.82	3.07	0.74	+0.18	−2.38	.009	.19	86.42	4.38	0.98
Gaining whole-class attention	2.82	0.83	3.25	0.75	+0.43				77.78	4.78	0.74
Instruction at a good pace (momentum)	2.76	0.83	2.97	0.78	+0.21				71.60	4.72	0.79
Identifying mistaken goals	2.52	0.91	2.26	0.88	−0.26				47.53	3.08	1.51
Teacher modelling appropriate behaviour	2.99	0.76	3.10	0.74	+0.11	−1.41	.008	.12	85.19	4.39	1.00
Humour to diffuse tense situations	2.42	0.94	2.66	0.89	+0.24				54.32	3.51	1.30
Class meetings	2.41	0.90	2.43	0.85	+0.02				67.28	2.78	1.27
Conferencing with student and others (peers or parents)	2.36	0.89	2.53	0.80	+0.17				72.22	2.82	1.27
Collaboration with parents or carers	2.21	0.87	2.34	0.86	+0.13				75.93	2.68	1.29
Collaboration with school counsellor	**2.10**	0.87	2.24	0.89	+0.14				56.79	**2.00**	1.14

Note. Items in bold are those with the highest and lowest scores. Items shaded in grey were the strategies selected by the authors that are suitable for use with aggressive, antisocial, and destructive behaviours.

2010, $M = 3.53$, $SD = 0.62$). The strategy with the lowest mean confidence score in 2009 was collaboration with the school counsellor ($M = 2.10$, $SD = 0.87$), and in 2010, it was restitution ($M = 1.86$, $SD = 0.94$). A score of 3 represents feeling *confident*, and a score of 2, *somewhat confident*.

First-year teachers' mean confidence scores increased for 38 of the 55 items in the BMSS from the end of preservice training in October 2009 to October 2010. Changes in mean scores ranged from 0.00 to 0.65 (out of a score of 4), representing overall changes of 0% to 16.3% in mean scores, respectively. The mean change in item score was 0.10 (2.4%). Of the four main types of strategies, participants' confidence in use increased for 12 out of 14 communication strategies, but for only nine out of 16 preventative strategies.

Given that our sample of first-year teachers had the lowest mean score for aggressive, antisocial, and destructive behaviours from the PMBPS scale, it was of interest to more closely examine a selected number of strategies ($n = 14$) listed in the BMSS (see Table 4 items shaded in grey) for 2010 mean confidence scores, and change in mean item scores from 2009 to 2010. The selected strategies included, for example, behavioural contracts, response cost, and praise, encouragement, and rewards (forms of positive reinforcement). These strategies have received support in the literature as effective in managing aggressive, antisocial, and destructive behaviours (see Akin-Little, Little, Bray, & Kehle, 2009; Colvin, 2010; Lane, Menzies, Bruhn, & Crnobori, 2011; Larson & Lochman, 2005; Walker, Colvin, & Ramsey, 1995).

In October 2010, the first-year teachers felt *confident* or nearer to confident (as indicated by a score of ≥ 2.75) in using 10 out of the 14 strategies, but only *somewhat* confident in using behavioural momentum, Premack principle, behavioural contracts, and social skills instruction (see Table 4). As explained more fully in the Method, for these 14 items, the difference between the mean 2009 and mean 2010 item scores was calculated by subtracting 2010 from 2009 scores, and this new variable labelled *difference* was tested for, and found to have, a normal distribution via a Kolmogorov–Smirnov test, $D(14) = 0.16$, $p > .05$. To determine if the changes in mean score were statistically significant (a p value of less than $.05/14 = .004$ was required, 1-tailed), repeated t-tests were conducted on the 14 item scores from 2009 and 2010. Statistically significant increases in mean confidence scores were found for using praise, encouragement, and rewards, token economies, delivering choices and then following through, and follow-up discussions after class (see Table 4). The effect sizes of these changes were medium to strong for praise, encouragement, and rewards, and for token economies, and close to medium in effect for delivering choices and follow-up discussions (see Table 4).

First-year teachers were also asked about the frequency with which they had used the strategies listed in the BMSS. Response choices included *never* (score of 1), *once a year*, *once a month*, *weekly*, and *daily* (score of 5). Table 4 shows that all of the listed strategies were used by first-year teachers at least on a yearly basis (score of 2). Five strategies had mean scores in the range of closer to daily (above midpoint of 4.5); praise, encouragement, and rewards (a selected aggressive, antisocial, and destructive strategy), nonverbal gestures, voice modulation, gaining whole-class attention, and momentum. The least frequently used was collaboration with the school counsellor with a mean score that suggested that first-year teachers used this strategy once or twice a year ($M = 2.00$). Seven of the selected strategies useful in managing aggressive, antisocial, and destructive behaviours were used on a weekly basis (see Table 4), with Premack principle, response cost, and social skills instruction used less than once a month, and behavioural momentum and behavioural contracts used once or twice a year.

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Discussion

Preparedness in Managing Problem Behaviours

The results from the principal component analyses of the 2009 and 2010 data from the PMBPS suggest that beginning teachers do not view all student misbehaviours similarly. Three distinct problem behaviour components were discernible (disruptive behaviours and noncompliance, disorganisation, and aggressive, antisocial, and destructive behaviours) from the 2009 and 2010 data, suggesting the scale has good component stability when used with beginning teachers. This three-component model explained a good proportion of the variance in participants' scores from 2009 and 2010. The split-half reliability for the components was also very high for the 2009 and 2010 data, indicating that the scale reliably measures the construct under investigation.

It seems likely that the first-year teachers sampled had personally or vicariously experienced a range of problematic student behaviours. A year since completing their teacher education programs, they perceived themselves, at best, as only *somewhat* prepared to manage disruptive behaviours and noncompliance, then less than *somewhat* prepared to manage student disorganisation, and, lastly, just above the midpoint between *not at all* prepared and *somewhat* prepared to manage aggressive, antisocial, and destructive behaviours based on their coursework preparation in classroom behaviour management. Over the past year, a statistically significant decrease of low to medium effect size had occurred in their perceived preparedness to manage all three types of problem behaviours. That their perceived preparedness to manage disruptive behaviours and noncompliance decreased appears consistent with previous research on beginning teacher concerns conducted by Watzke (2007). Using a longitudinal research design, Watzke found that over the course of the first year of teaching, K–12 teachers in the US experienced an increase in their concerns for managing disruptive students, and became moderately concerned about managing this behaviour.

The results reported here are, however, different to previous preparedness research conducted in Australia. Using cross-sectional research methods, Giallo and Little (2003) found no significant difference in preparedness scores for behaviour management between Australian preservice and newly graduated teachers, with final-year preservice teachers having a mean score of 4.90/7 and the graduate teachers, who had up to two years of teaching experience, a mean score of 4.84. The scale they used, however, contained only one specific item on managing a disruptive student, and the other items were more general than those in the PMPBS (see Cains & Brown, 1998). Participants in that study were not asked to judge preparedness based solely on their coursework preparation.

Although disorganisation and disruptive and noncomplaint behaviour problems can impact on teacher instruction, and reduce on-task behaviours in students (Colvin, 2010), these types of problems are more likely frustrating to teachers (Beaman et al., 2007; Merrett & Wheldall, 1993). Of greater risk to the physical, psychological, and emotional wellbeing of teachers, classmates, and the student displaying the behaviours are aggressive, antisocial, and destructive behaviours (Stephenson, Linfoot, & Martin, 2000; Walker, Colvin, & Ramsey, 1995). Very aggressive behaviour is exhibited by 5–10% of children, more so by boys (Kazdin, 1998). Carter, Clayton, and Stephenson (2006) showed that more than 50% of students exhibiting challenging behaviours ($n = 51$) from a sample of 43 Catholic primary schools in Australia exhibited verbal aggression, threw objects, or bullied or intimidated others on a daily basis. More than 20% destroyed property or exhibited physical aggression toward peers on a daily basis, and more than 50% were physically aggressive on a weekly basis. Students displaying such behaviours are least welcomed in

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regular classrooms, even with assistance (Kauffman, Lloyd, & McGee, 1989), their presence is associated with teachers' lowered sense of efficacy in classroom behaviour management (Giallo & Little, 2003), and teachers would like more information and support in managing them (Stephenson, Linfoot, & Martin, 1999).

With the likelihood of at least one student, on average, who displays aggressive, antisocial, and destructive behaviours in every school, if not most classes (Atici, 2007), all teachers need to be prepared to deal with these behaviours to ensure a safe environment in classrooms and in the playground. The results reported here suggest that first-year teachers do not feel that their preservice classroom behaviour management coursework has prepared them well. It is conceded that even with training, teachers may never truly feel psychologically prepared to manage the more severe forms of aggressive, antisocial, and destructive behaviours, but with adequate training, they may be better informed about effective proactive and reactive strategies that increase instruction and learning (Allen, 2010; Alvarez, 2007; Lane et al., 2011).

Previous research conducted with this sample of teachers (see O'Neill & Stephenson, 2012b) showed that those who had completed two or more focused preservice classroom behaviour management units had statistically significantly higher preparedness scores for managing aggressive, antisocial, and destructive behaviours than those who had completed only one or none. Their level of preparedness was, however, still less than *somewhat* prepared, but was better than those who had completed none, whose scores were closer to *not at all* prepared. Martin (2004) also noted the benefits of completing focused classroom management units on first-year teachers' feelings of competence.

An examination of the content of Australian preservice coursework units in classroom behaviour management may, in part, explain why first-year teachers felt at best only *somewhat* prepared to manage problematic student behaviours. The classroom behaviour management content of preservice teacher education programs has shown a lack of evidence-based models, and a tendency for units to cover a wide range of models and strategies in a relatively short period of time (O'Neill & Stephenson, 2011, 2012a). In addition, only 24% of the Australian primary teacher education programs surveyed by O'Neill and Stephenson (2011) offered a specific unit on managing challenging behaviours, and only 22.6% of units that included content on classroom behaviour management specifically mentioned managing challenging behaviours in their unit descriptions (O'Neill & Stephenson, 2011).

Although first-year teachers preparedness for managing aggressive, antisocial, and destructive and disruptive behaviours and noncompliance was less than desirable, the finding that their sense of efficacy in classroom management and motivation tasks was moderately associated with their aggressive, antisocial, and destructive and disruptive and noncompliance scores (and vice versa) is potentially useful for teacher educators, and established some measure of construct validity for the PMBPS subscales. Enhanced instruction in classroom behaviour management will likely raise both perceptions, and may protect the beginning teachers against burnout and attrition (Brouwers & Tomic, 2000). The moderate association found between the disruptive behaviours and noncompliance preparedness subscale and classroom management and motivation efficacy subscale scores seems logical as this subscale contains five items that pertain to disruptive or defiant type behaviours. It is less clear why a moderately strong association ($r_s = .39$) existed between the aggressive, antisocial, and destructive preparedness and the classroom management and motivation subscale scores, as only one item on getting through to the most difficult students might be viewed as pertaining to aggressive, antisocial, and destructive behaviours. The strong correlation ($r_s = .74$) between the disruptive behaviours and noncompliance and aggressive,

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antisocial, and destructive subscale scores might, in part, explain this result. Giallo and Little (2003) reported a similar moderately strong and highly significant association ($r = .35$, $p = .002$) between Australian beginning teachers' classroom behaviour management self-efficacy scores and their preparedness to teach scores. The results of these two studies would appear to partially confirm Housego's (1990) suggestion that the constructs of perceived preparedness and sense of efficacy are related.

Behaviour Management Strategies

More than half of the first-year teachers could recall being taught 49 of the 55 strategies in the BMSS from their teacher education program coursework. Of the listed strategies, they felt most confident about using praise, encouragement, and rewards, and least confident in using restitution. Praise, encouragement, and rewards can act as positive reinforcers of desirable student behaviours (Alberto & Troutman, 2009), and when praise is given descriptively, it is a highly effective strategy (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). Confidence in using restitution was below *somewhat* confident. It may be that newly graduated teachers do not feel confident in providing monitoring and feedback in the restitution process, preferring instead to act as managers, determining and delivering consequences (Gossen, 1996).

The sample reported increased confidence in using 38 of the 55 listed behaviour management strategies, but most increases (and decreases) were small. It would appear that their confidence in use ratings of behaviour management strategies imparted in their preservice coursework are somewhat set by the end of their teacher education programs. Most increases (albeit mostly small) were in the communication strategies category, and perhaps the daily to weekly frequency with which they were using communication strategies, such as voice modulation and stating expectations, afforded greater opportunities to hone these strategies, leading to additional confidence. The largest increases in confidence were for the motivational strategies of partial agreement and using token economies. The first-year teachers' weekly use of these strategies may have assisted in their increased confidence in use, and perhaps they realised the benefits of these strategies in promoting positive classroom interactions (Kazdin & Bootzin, 1972; Rogers, 1995). Of the 14 strategies selected that can be useful in managing aggressive, antisocial, and destructive behaviours, participants' confidence for using 11 of the strategies increased, four significantly so, which is an encouraging finding in itself.

Few of the behaviour management strategies listed in the BMSS were reported to be used on a daily basis, despite some being advocated as effective strategies suitable for daily use, such as smooth transitions (Kounin, 1970) and token economies (Simonsen et al., 2008). Praise, encouragement, and reward were the most frequently used. Reupert and Woodcock (2011) reported that reward-type strategies were the second most frequently used by preservice Australian teachers after initial correction strategies. It may be that once teachers are wholly responsible for the management of their classrooms, they realise the benefits of using positive approaches to promote desirable student behaviours (Simonsen et al., 2008), rather than drawing attention to the inappropriate behaviours by using correction strategies.

Apart from praise, encouragement, and rewards, respondents reported using strategies suitable for aggressive, antisocial, and destructive behaviours on a weekly basis or less. Not all strategies may be required on a daily basis (e.g., follow-up discussions after class) for students who display aggressive, antisocial, or destructive behaviours, and not all classes may have had a student who displayed aggressive, antisocial, or destructive behaviours.

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Other strategies such as physical proximity, rule reminders, and communicating expectations were reported to be used on a weekly basis, but these effective strategies are suitable for daily use with all students (Kounin, 1970; Simonsen et al., 2008). Beginning teachers may be underestimating the frequency with which they used many of the strategies in the BMSS, or underusing potentially valuable strategies such as behavioural momentum and the Premack principle.

Limitations

The sample was slightly gender biased with more females than males responding to the survey (by proportion) than have been reported in the Australian Bureau of Statistics employment data. Another limitation lies within the nature of self-report data, which may suffer from inaccurate recall or over- or underestimation of confidence (Bandura, 1997; Roehrig, Bohn, Turner, & Pressley, 2008), preparedness (Housego, 1990), or use. Another limitation is that observations were not conducted of the beginning teachers responding to problem behaviours, such as those listed in the PMBPS or using the strategies listed in the BMSS, to validate their preparedness or confidence data. A further limitation was that the participants were not asked about the frequency at which they were encountering problem behaviours, or the perceived severity of those problem behaviours listed in the PMBPS. Doing so may have provided prevalence data that allowed greater exploration of the relationship between prevalence and perceived severity of problem behaviours encountered, and preparedness to deal with them.

Conclusions and Recommendations

The responses of the first-year teachers surveyed suggested that, in their minds, their preservice teacher coursework in classroom behaviour management had been only moderately adequate in preparing them for general classroom and behaviour management, and their perceptions about the adequacy of their coursework instruction in this area had decreased significantly over the past year. Preparation for dealing with challenging behaviours was even less adequate. The rapid presentation of many models of management, many of which lack evidence of effectiveness, in classroom behaviour management coursework units in Australian primary preservice teaching programs (O'Neill & Stephenson, 2012a) may be a contributing factor. Research that examines the coursework content delivered to beginning teachers, coupled with observations of their actual responses to student misbehaviour, could further explain and confirm their preparedness scores.

First-year teachers' preparedness in managing disruptive behaviours and noncompliance and aggressive, antisocial, and destructive behaviour scores were significantly positively correlated with their sense of efficacy in classroom management scores, suggesting that efforts to improve either perception with improved instruction could result in wider benefits. Respondents reported that their classroom behaviour management coursework included a wide range of behaviour management strategies that they felt reasonably confident about using, and their level of confidence appeared to remain stable from the end of their teacher education program to toward the end of their first year of teaching. The first-year teachers, however, reported using some known effective strategies suitable for daily use at lower frequencies than is desirable. What teacher education programs do to prepare their teachers *is* then important, and ensuring sufficient quantity and quality of coursework content and the time to practice strategies in real classrooms under cooperating teacher supervision is needed.

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If teacher educators believe that coursework preparation in classroom behaviour management *is* important, as a number of experts in the field do (see Brophy, 1988; Evertson & Weinstein, 2006), then all teacher education programs should schedule mandatory coursework that focuses exclusively on content providing foundational knowledge, skills, and understanding in evidence-based classroom behaviour management (Lasley, 1989; Simonsen et al., 2008). Ideally, general classroom behaviour management content would be delivered in mandatory stand-alone units by academics who have an active research interest in this area. Past research has shown that when embedded in other units, as little as two hours of instructional time has been allocated (O'Neill & Stephenson, 2011, 2012a).

Additionally, to better meet the new national teaching competency standards that require graduates to 'demonstrate knowledge of practical approaches to manage challenging behaviour' (Australian Institute for Teaching and School Leadership, 2011, p. 14), programs should contain evidence-based content in managing challenging student behaviours (see Lane et al., 2011). The unit content needs to include propositional and procedural knowledge, as well as conditional knowledge of when and why to use various strategies and approaches (Brophy, 1988). Future research that compares the preparedness of beginning teachers who have been provided with a stand-alone unit on evidence-based classroom behaviour management practices and an additional unit on managing challenging behaviour during their preservice training, to those who have not completed a managing challenging behaviour unit could clarify the value of this additional training.

Author Note

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References

Akin-Little, A., Little, S.G., Bray, M.A., & Kehle, T.J. (2009). *Behavioral interventions in schools: Evidence-based positive strategies*. Washington DC: American Psychological Association.

Alberto, P.A., & Troutman, A.C. (2009). *Applied behavior analysis for teachers* (8th ed.). Upper Saddle River, NJ: Pearson.

Allen, K.P. (2010). Classroom management, bullying, and teacher practices. *The Professional Educator*, *34*(1), 1–15. Retrieved from http://theprofessionaleducator.org/articles/Allen_final.pdf

Alvarez, H.K. (2007). The impact of teacher preparation on responses to student aggression in the classroom. *Teaching and Teacher Education*, *23*, 1113–1126. doi:10.1016/j.tate.2006.10.001

Atici, M. (2007). A small-scale study on student teachers' perceptions of classroom management and methods for dealing with misbehaviour. *Emotional and Behavioural Difficulties*, *12*, 15–27. doi:10.1080/13632750601135881

Australian Bureau of Statistics. (2011). *Australian demographic statistics: 2011 census edition – Final*. Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0

Australian Education Union. (2008). *New educators survey 2008: Results and report*. Melbourne, Australia: Author. Retrieved from http://www.aeufederal.org.au/Publications/2009/Nesurvey08res.pdf

Australian Institute for Teaching and School Leadership. (2011, February). *National professional standards for teachers*. Melbourne, Australia: Author.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman & Co.

Banks, M.K. (2003). Classroom management preparation in Texas colleges and universities. *International Journal of Reality Therapy*, *22*(2), 48–51.

Beaman, R., Wheldall, K., & Kemp, C. (2007). Recent research on troublesome classroom behaviour: A review. *Australasian Journal of Special Education*, *31*, 45–60. doi:10.1080/10300110701189014

Billingsley, B., Carlson, E., & Klein, S. (2004). The working conditions and induction support of early career special educators. *Exceptional Children*, *70*, 333–347.

Blum, M.H. (1994). *The preservice teacher's educational training in classroom discipline: A national survey of teacher education programs* (Unpublished doctoral dissertation). Temple University, Pennsylvania.

Boe, E.E., Shin, S., & Cook, L.H. (2007). Does teacher preparation matter for beginning teachers in either special or general education? *The Journal of Special Education*, *41*, 158–170. doi:10.1177/00224669070410030201

Brophy, J. (1988). Educating teachers about managing classrooms and students. *Teaching and Teacher Education*, *4*, 1–18. doi:10.1016/0742-051X(88)90020-0

Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education*, *16*, 239–253. doi:10.1016/S0742-051X(99)00057-8

Buchanan, J. (2011). Teacher dis/appointments? Transitions into and out of teaching. *Curriculum Perspectives*, *31*, 12–24. Retrieved from http://www.acsa.edu.au/pages/page528.asp

Bureau of Labor Statistics. (2010). *Household data annual averages; Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity*. Retrieved from http://www.bls.gov/cps/cpsaat11.pdf

Cains, R.A., & Brown, C.R. (1996). Newly qualified primary teachers: A comparative analysis of perceptions held by B.Ed. and PGCE trained teachers of their training routes. *Educational Psychology*, *16*, 257–270. doi:10.1080/0144341960160303

Cains, R.A., & Brown, C.R. (1998). Newly qualified teachers: A comparison of perceptions held by primary and secondary teachers of their training routes and of their early experiences in post. *Educational Psychology*, *18*, 341–352. doi:10.1080/0144341980180307

Çapa, Y. (2005). *Factors influencing first-year teachers' sense of efficacy*. (Unpublished doctoral dissertation). The Ohio State University, Ohio.

Carter, M., Clayton, M., & Stephenson, J. (2006). Student with severe challenging behaviour in regular classrooms: Prevalence and characteristics. *Australian Journal of Guidance and Counselling*, *16*, 189–209. doi:10.1375/ajgc.16.2.189

Colvin, G. (2010). *Defusing disruptive behavior in the classroom*. Thousand Oaks, CA: Corwin Press.

Eick, C.J. (2002). Job sharing their first year: A narrative of two partnered teachers' induction into middle school science teaching. *Teaching and Teacher Education*, *18*, 887–904. doi:10.1016/S0742-051X(02)00049-5

Evertson, C.M., & Weinstein, C.S. (2006). Classroom management as a field of enquiry. In C.M. Evertson & C.S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 1–16). Mahwah, NJ: Erlbaum.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Los Angeles, CA: Sage.

Giallo, R., & Little, E. (2003). Classroom behaviour problems: The relationship between preparedness, classroom experiences and self-efficacy in graduate and student teachers. *Australian Journal of Educational and Developmental Psychology*, *3*, 21–34. Retrieved from http://www.newcastle.edu.au/Resources/Research%20Centres/SORTI/Journals/AJEDP/Vol%203/v3-giallo-little.pdf

Gossen, D.C. (1996). *Restitution: Restructuring school discipline* (2nd rev. ed.). Chapel Hill, NC: New View Publications.

Housego, B.E.J. (1990). Student teachers' feeling of preparedness to teach. *Canadian Journal of Teacher Education*, *15*, 37–56.

Ingersoll, R.M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, *81*, 201–233. doi:10.3102/0034654311403323

Kauffman, J.M., Lloyd, J.W., & McGee, K.A. (1989). Adaptive and maladaptive behaviour: Teachers' attitudes and their technical assistance needs. *The Journal of Special Education*, *23*, 185–200. doi:10.1177/002246698902300205

Kazdin, A.E. (1998). Conduct disorder. In R.J. Morris & T.R. Kratochwill (Eds.), *The practice of child therapy* (3rd ed., pp. 199–230). Boston, MA: Allyn & Bacon.

Kazdin, A.E., & Bootzin, R.R. (1972). The token economy: An evaluative review. *Journal of Applied Behavior Analysis*, *5*, 343–372. doi:10.1901/jaba.1972.5-343

Kee, A.N. (2012). Feelings of preparedness among alternatively certified teachers: What is the role of program features? *Journal of Teacher Education*, *63*, 23–38. doi:10.1177/0022487111421933

Kokkinos, C.M., Panayiotou, G., & Davazoglou, A.M. (2004). Perceived seriousness of pupils' undesirable behaviours: The student teachers' perspective. *Educational Psychology*, *24*, 109–120. doi:10.1080/0144341032000146458

Kounin, J.S. (1970). *Discipline and group management in classrooms*. New York, NY: Holt, Rinehart and Winston.

Lane, K.L., Menzies, H.M., Bruhn, A.L., & Crnobori, M. (2011). *Managing challenging behaviors in schools: Research-based strategies that work*. New York, NY: Guilford Press.

Larson, J., & Lochman, J.E. (2005). *Helping schoolchildren cope with anger: A cognitive-behavioral intervention*. New York, NY: Guilford Press.

Lasley, T.J. (1989). A teacher development model for classroom management. *Phi Delta Kappan*, *71*, 36–38.

LePage, P., Darling-Hammond, L., Akar, H., Gutierrez, C., Jenkins-Gunn, E., & Rosebrock, K. (2005). Classroom management. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 327–357). San Francisco, CA: Jossey-Bass.

Martin, A.J., Linfoot, K., & Stephenson, J. (1999). How teachers respond to concerns about misbehavior in their classroom. *Psychology in the Schools*, *36*, 347–358. doi:10.1002/(SICI)1520-6807(199907)36:4<347::AID-PITS7>3.0.CO;2-G

Martin, S.D. (2004). Finding a balance: Impact of classroom management conceptions of developing teacher practice. *Teaching and Teacher Education*, *20*, 405–422. doi:10.1016/j.tate.2004.04.002

Merrett, F., & Wheldall, K. (1993). How do teachers learn to manage classroom behaviour? A study of teachers' opinions about their initial training with special reference to classroom behaviour management. *Educational Studies*, *19*, 91–106. doi:10.1080/0305569930190106

Moore, R. (2007). *Relating 2004–2005 and 2005–2006 beginning, public, elementary, teachers' perceptions of support, efficacy beliefs, and performance on Praxis III*. (Unpublished doctoral dissertation). The Ohio State University, Ohio. Retrieved from https://etd.ohiolink.edu/ap:10:0::NO:10:P10_ACCESSION_NUM:osu1181758980

Murshidi, R., Konting, M.M., Elias, H., & Fooi, F.S. (2006). Sense of efficacy among beginning teachers in Sarawak. *Teaching Education*, *17*, 265–275. doi:10.1080/10476210600849730

Oliver, R.M., & Reschly, D.J. (2007). *Effective classroom management: Teacher preparation and professional development* (TQ Connection Issue Paper). Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved from http://www.gtlcenter.org/sites/default/files/docs/effectiveClassroomManagement.pdf

O'Neill, S.C., & Stephenson, J. (2011). Classroom behaviour management preparation in undergraduate primary teacher education in Australia: A web-based investigation. *Australian Journal of Teacher Education*, *36*(10), 35–52. doi:10.14221/ajte.2011v36n10.3

O'Neill, S., & Stephenson, J. (2012a). Classroom behaviour management content in Australian undergraduate primary teaching programmes. *Teaching Education*, *23*, 287–308. doi:10.1080/10476210.2012.699034

O'Neill, S., & Stephenson, J. (2012b). Does classroom management coursework influence pre-service teachers' perceived preparedness or confidence? *Teaching and Teacher Education*, *28*, 1131–1143. doi:10.1016/j.tate.2012.06.008

O'Neill, S., & Stephenson, J. (2012c). The trajectory of novice Australian primary teachers' sense of efficacy. *Manuscript submitted for publication.*

O'Neill, S., & Stephenson, J. (2012d). Exploring Australian pre-service teachers sense of efficacy, its sources, and some possible influences. *Teaching and Teacher Education*, *28*, 535–545. doi:10.1016/j.tate.2012.01.008

Pedhazur, E.J., & Schmelkin, L.P. (1991). *Measurement, design, and analysis: An integrated approach*. Hillsdale, NJ: Erlbaum.

Public Agenda. (2007). *Lessons learned: New teachers talk about their jobs, challenges, and long-range plans*. New York, NY: National Comprehensive Center for Teacher Quality and Public Agenda. Retrieved from http://www.publicagenda.org/files/pdf/lessons_learned_1.pdf

Reupert, A., & Woodcock, S. (2010). Success and near misses: Pre-service teachers' use, confidence and success in various classroom management strategies. *Teaching and Teacher Education*, *26*, 1261–1268. doi:10.1016/j.tate.2010.03.003

Reupert, A., & Woodcock, S. (2011). Canadian and Australian pre-service teachers' use, confidence and success in various behaviour management strategies. *International Journal of Educational Research*, *50*, 271–281. doi:10.1016/j.ijer.2011.07.012

Roehrig, A.D., Bohn, C.M., Turner, J.E., & Pressley, M. (2008). Mentoring beginning primary teachers for exemplary teaching practices. *Teaching and Teacher Education*, *24*, 684–702. doi:10.1016/j.tate.2007.02.008

Rogers, B. (1995). *Behaviour management: A whole-school approach*. Gosford, Australia: Ashton Scholastic.

Şahin, F.E., & Atay, D. (2010). Sense of efficacy from student teaching to the induction year. *Procedia Social and Behavioral Sciences*, *2*, 337–341. doi:10.1016/j.sbspro.2010.03.021

Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based practices in classroom management: Considerations for research to practice. *Education and Treatment of Children*, *31*, 351–380.

Stephenson, J., Linfoot, K., & Martin, A. (1999). Dealing with problem behaviour in young children: Teacher use and preferences for resources and support. *Special Education Perspectives*, *8*(1), 3–15.

Stephenson, J., Linfoot, K., & Martin, A. (2000). Behaviours of concern to teachers in the early years of school. *International Journal of Disability, Development and Education*, *47*, 225–235. doi:10.1080/713671118

Tabachnick, B.G., & Fidell, L.S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Pearson.

Thompson, B., & Daniels, L.G. (1996). Factor analytic evidence for the construct validity of scores: A historical overview and some guidelines [Editorial]. *Educational and Psychological Measurement*, *56*, 197–208. doi:10.1177/0013164496056002001

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*, 783–805. doi:10.1016/S0742-051X(01)00036-1

Valli, L. (Ed.). (1992). *Reflective teacher education: Cases and critiques*. Albany, NY: State University of New York Press.

Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, *54*, 143–178.

Walker, H.M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in school: Strategies and best practices*. Pacific Grove, CA: Brooks/Cole.

Watzke, J.L. (2007). Longitudinal research on beginning teacher development: Complexity as a challenge to concerns-based stage theory. *Teaching and Teacher Education*, *23*, 106–122. doi:10.1016/j.tate.2006.04.001

Wesley, D.A., & Vocke, D.E. (1992, February). *Classroom discipline and teacher education*. Paper presented at the Annual Meeting of the Association of Teacher Educators, Orlando, FL.

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