Paper Presented at the Joint AARE/
APERA Conference, Sydney, 2012
What is popular is not always right - Measuring teacher professional behaviour

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WHAT IS POPULAR IS NOT ALWAYS RIGHT - MEASURING TEACHER PROFESSIONAL BEHAVIOUR

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Teaching is considered one of the most trusted professions, yet literature evaluating teachers' understanding of professional behaviour is scarce. Recently, technological advancements such as Social Networking Sites (SNS; e.g. Facebook) have created fresh debate about appropriate behaviour for teachers: in school and online. The "Professional Interactions and Behaviours Scale" (PIBS) was developed to assess the degree to which teachers have developed an understanding of appropriate professional interactions with students. 30 items were developed with reference to the "Victorian Institute of Teachers Profession Code of Conduct" (2008) which states teachers are required to maintain professional relationships with students which are centered on learning at all times whether at school or not. Preservice teachers recruited for the study (N=197) rated acceptability of specific student-teacher interactions and/or behaviours (e.g. "hugging a student as a form of consolation", "being friends with a student on a SNS") on a Likert scale of 1 (unacceptable) to 5 (acceptable). The dimensionality of the PIBS was evaluated using principal components analyses with varimax rotation and 20 items were retained yielding four components; befriending, hugging, external engagement and teacher disclosure. Confirmatory factor analyses were conducted and the model demonstrated adequate fit. The PIBS is a unique and promising measure for stimulating dialogue and contribute to the developing definition of "appropriate boundaries" for teachers.

Key Words

Preservice teachers, professional behaviour, scale construction

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Teachers as professionals

Professionalism refers to the standards of behaviour that are determined by a given professional community (Blake & Gutierrez, 2011). The ethical obligations of professionals are in addition to, rather than substituted for, the moral expectations of any lay person (Campbell, 2003). In this way, professionals are held to higher moral standards than others. This is particularly for teachers who are held accountable to and within their profession. Teachers often scrutinised by the wider community, and the media, for their character, competence and professional conduct, even outside their workplace (Stewart, 2006). Teachers are often rated by the public as one of the top five trusted professions alongside paramedics, doctors, fire fighters, nurses and pharmacists (AMA Queensland, 2001; BMA, 2005; GfK trust index, 2009). The investment of time in formal training yields societal expectations for teachers and indeed all professionals to be held accountable for their actions. As such, professionalism is also viewed as a key learning objective of formal training (Blake & Gutierrez, 2011). This paper reports on the development of a measure to assess perceptions of teacher behaviour: professional teacher interactions in an increasingly connected and technologically advanced era of education.

Teacher professional behaviour - what is right?

Humans, even those with extensive professional training, are not infallible, and one of the important functions of a professional registration body is to investigate incidents of misconduct. The Victorian Institute of Teaching (VIT) is the statutory authority for the regulation of the teaching profession in Victoria, established in 2001. Between 2003 and 2010, 47 Victorian teachers were deregistered without inquiry (guilty of sexual offence with a child), and 99 teachers have attended formal hearings with the VIT as a result of serious misconduct, incompetence or fitness to teach (0.06% and 0.14% of those registered respectively: VIT, 2012). While it is likely that not all misconduct will be formally reported, these figures suggest that less than 1% of registered teachers engage in serious misconduct. Yet, even minor transgressions can have devastating impact on an individual teacher's personal wellbeing and professional standing as well as significant impact on the students and school communities involved.

One of the hallmarks of a professional discipline is the status of an ethical code (Lindsay, 1996). In the past 10 years, there have been international efforts to professionalise teaching, particularly in the areas of certification, licensure and regulation (Barrett, Headley, Stovall & Witte, 2006).   The Code of Ethics for teachers adopted in 2005 by the VIT was followed by the release of the Teaching Profession Code of Conduct in 2008 ("Code of Conduct"). The development of such documents further recognised teaching as a profession, in line with medicine and psychology who also released updated codes of conduct during this period. The Code of Conduct (VIT, 2008) outlines a set of principles or standards for the behaviour and conduct of all Victorian teachers in the Victorian Government Teaching Service and the non-Government sector.

The Code of Conduct (VIT, 2008) encompasses aspects of professional conduct, personal conduct and professional competence. Relationships are central to the document, particularly with students, but also with colleagues, parents/guardians and communities. The impetus for the current study is Principle 1.5 which states "Teachers are always in a professional relationship with the students in their school, whether at school or not" (p.3). Five behaviours are listed to illustrate how a teacher would conduct a professional relationship relating to: sexual relationship with a student; physically touching a student; using sexual innuendo or inappropriate language/materials; accepting gifts; and, holding conversations of a personal nature via written or electronic means. Two behaviours in which a professional relationship *may* be compromised are also listed; where a teacher attends parties/socializing with students, or inviting student/s home, particularly if no one else is present. The notion of the behaviour occurring within a "valid context" or being motivated by a "valid reason" is emphasised twice in this principle, yet a definition of "valid" is not explicitly provided.

In general, professional standards in education are less clear-cut than in other fields such as psychology and medicine (Barrett et al., 2006). A central theme of these codes for helping professions

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is the relationship between the professional and the client. Indeed, the teacher-student relationship is considered equally fundamental to education, yet the nature of its boundaries both within the classroom and beyond are seldom researched (for exceptions see Andrzejewski & Davis, 2008; Aultman, Williams-Johnson & Schutz, 2009). This is somewhat surprising given that aspects of the teacher-student relationship has been found to have important implications for students in terms of motivation (Birch & Ladd, 1996); engagement, achievement (Roorda, Koomen, Split, Oort, 2011) social-emotional competence (Jennings & Greenberg, 2008) and well-being (Suldo, Friedrich, White, Farmer, Minch & Michalowski, 2009). Whilst the Code of Conduct (2008) outlines certain behaviours that violate a professional relationship, in terms of everyday student interactions, it does not claim to cover all situations and thus a great deal of professional behaviour is attributed to the teacher's "professional compass" (Landman, Shelton, Kauffmann, & Dattilo, 2010, p. 381).

Ludmerer (1999) highlights the three essential characteristics of a professional 1) expert knowledge, 2) self-regulation, and 3) responsibility to place the needs of the client (student) ahead of the self-interest of the practitioner (teacher). These are important characteristics and align somewhat with the VIT Code of Ethics (2008) core values of integrity, respect and responsibility. With the professionalisation of the teaching profession, increased pressure has been placed upon preservice training institutions to produce graduates who are "fit to practice" and possess the internal awareness, ethical knowledge and decision making skills to operate professionally and ethically in an independent manner (Solmon & Wingard-Schiff, 2004). Yet the measurement of professional competence remains challenging (Lynch, Surdyk, & Eiser, 2004; Sofronoff & Helmes, 2010).

The increased focus on accountability over the last 20 years has seemingly had little influence on the curriculum of preservice teacher training. Tobias and Boon (2009) reported nearly three-quarters of Australian preservice teachers wanted more overt instruction and clarification of teacher ethics and professionalism in their training. Glanzer and Ream (2007) studied the curriculum of religious colleges and universities in the USA. Of those that offered a major in education ($N = 151$), only 6% required students to complete an ethics course. The education discipline was the least likely professional major of the seven disciplines surveyed, to include a compulsory ethics component. A greater percentage of universities offering business (46%), nursing (43%) and social work/criminal justice (39%) majors were likely to include a compulsory ethics unit. These results are concerning, as teaching is considered an inherently emotional moral and ethical activity (Campbell, 2003) that involves high levels of interpersonal contact with often vulnerable young people (Zembylas & Schutz, 2009).

In summary, what is "right" for teachers in terms of professional behaviour appears to be increasingly important, ever more prescribed, yet ambiguously defined and poorly emphasised in preservice curriculum. It is important to understand current practice to gain a sense of what is "popular" in terms of teacher behaviour, so that training and interventions can be appropriately planned.

Teacher professional behaviour - what is popular?

Self-disclosure in classrooms is generally common practice and teachers disclose of themselves by choice and also unintentionally (Zhang, Shi, Tonelson & Robinson, 2009). Whilst self-disclosure might be utilised effectively in the classroom (e.g. offering practical examples to assist in comprehension of theoretical concepts), it can also have a negative impact on student learning (Zhang, Shi, Tonelson, & Allen, et al., 2007). In the fields of psychology and medicine, self-disclosure is a contentious strategy, and should be used with only with thought and consideration for the welfare of the client (APS, 2008). Recent social shifts have led researchers to be interested in the ethical and professional implications of online self-disclosure by health professionals, as information becomes increasingly available search engines (e.g. Google) and Social Networking Sites (SNS; e.g. Facebook, Twitter; See Guseh, Brendal & Brendal (2009); Mazer, Murphy & Simonds, 2007).

Generally ethical principles are stable, yet the interpretation of their implementation is dynamic and influenced by societal shifts. Goodson and Hargreaves (1996) affirm that "teaching today is increasingly complex work" (p. ix) and in more recent years technological and social

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advances have required teachers to apply their code to novel settings. Traditional professional issues such as confidentiality, disclosure, boundaries and multiple relationships remain relevant to the digital landscape, yet have been omitted or sluggishly included in formal professional codes.

The advent of email, internet blogs, digital photography, SNS and the smartphone has created new challenges for all professionals. Teachers in particular now find themselves increasingly connected to their work and by extension, their students beyond regular work hours via email and online portals. Additionally, Facebook, once the territory of university students, is now popular with individuals of all ages, including teenagers. The rapid growth of Facebook and other SNS has created considerable challenges for professionals in various domains internationally. To date, academic literature on professionalism and SNS use has been published in New Zealand (MacDonald, Sohn, & Ellis, 2010), Canada (Brown, 2010), and France (Moubarak, Guiot, Benhamou, Benhamou, & Hariri, 2011) in relation to medical students and doctors (Thompson et al., 2008), pharmacy students (Cain, Scott &Akers, 2009) and psychology trainees (Lehavot, 2009).

The following situations illustrate how teachers can be placed at risk in contemporary spaces:

- A teacher accepts a friend request from a current student on Facebook leading to a personal friendship
- A teacher leaves her laptop in the classroom with students unattended; students are able to access her personal photos and emails.
- A teacher poses for photos with students at school camp. The photos are taken on a student's camera are used to create a 'hate page' on MySpace.
- A teacher provides an email address to a student so that they can email questions regarding their latest assignment. The student emails the teacher over the weekend threatening self-harm.
- A teacher posts a status update on Facebook complaining about a challenging student, and provides partially identifying information about the student (first name, year level).
- Other risks for teachers include cyberstalking (by students, parents or colleagues) and identity fraud, depending on the amount of information disclosed online (Gross & Acquisti, 2005).

These situations also pose a degree of risk for the physical and emotional wellbeing of students involved. Teachers are required to act in the student's best interests and to "maintain objectivity in their relationships with students" (VIT, 2008, p. 3) and they should refrain from behaving as a friend or parent. Little practical guidance is provided to assist teachers in recognising when their professional relationships enter the "slippery slope" (Barnett, Lazarus, Vasquez, Moorehead-Slaughter, & Johnson 2007; Gabbard & Walker, 1997; Gottlieb & Younggren, 2009) of boundary violations.

Relatedly, few measures are available to assess teacher, student or parent attitudes towards, or personal conceptions of teacher professional behaviour. Recent research by Barrett, Casey, Visser & Headley (2012) surveyed preservice and inservice teachers in USA regarding perceptions of ethical violations. In the absence of a clear set of professional and ethical standards for practicing teachers, a measure was constructed by the authors consisting of 41 potentially perilous teacher behaviours (e.g. engages in a romantic relationship with a student), and participants rated both the severity and estimated frequency of the behaviour. While 70.2% of participants agreed "gossiping about students to colleagues" exemplified a serious violation of teacher behaviour, 66.4% of the sample reported that this behaviour occurs frequently. Interestingly, only 47.5% rated "unprofessional behaviour outside of the workplace" as a serious violation, with 26% rating such behaviour as frequent. Suggesting that approximately half of the participants did not view their professional role extending beyond the workplace. The results seemed to support the notion that in terms of teacher behaviour "what is popular is not always right" (Albert Einstein).

Research objectives and questions

The current study focuses on professional behaviour between teachers and students in the

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secondary school context. It also extends the discussion of professionalism where teacher-student interactions are technologically mediated, or occur in digital spaces. It is important to consider these new professional challenges, as teachers communicate and socialise through online spaces both privately as part of their work. In order to develop interventions to more effectively train preservice teachers to understand professional boundaries, it is important to understand their current attitudes toward contentious behaviours.

This paper presents evidence for the construct dimensionality of the 20-item *Professional Interactions and Behaviours Scale* (PIBS). Items were developed from consideration of the Victorian Teaching Profession Code of Conduct (VIT, 2008). It was anticipated that in general, minor boundary crossings (e.g., giving your private phone number to a student) would be considered more acceptable than serious boundary violations (e.g., having sex with a student who is over 18). The underlying dimensions of the PIBS were unplanned, though were thought to potentially relate to the function of the behaviour, e.g., befriending (having a personal friendship with a student), emotional support (giving advice and guidance to a student for their personal problems) or physical support (hugging a student as a form of consolation). Alternatively, underlying dimensions might have reflected the two of the four components identified by Barrett et al., (2012) in terms of potential risk to the teacher "personal harm" (e.g., engages in a personal romantic relationship with a student), "fails to recognise boundaries between public and private boundaries" (e.g., communicates socially with students on Facebook, Twitter). The remaining two components of Barrett and colleagues scale (2012) appeared to be beyond the scope of the PIBS as they encompassed behaviours related to collegial relationships and student assessment (gossips about colleagues, returns papers without identifying errors, raises grade due to student pressure).

The paper will also consider preservice teacher evaluations of training in ethics and professionalism and their level of familiarity with their relevant Code of Conduct. These ratings provide a context for the participant responses to the PIBS items in establishing the extent of formal professional socialisation.

Method

Development of the Professional Interactions and Behaviours Scale (PIBS)

The pilot version of the PIBS scale was developed based on the Principal 1.5 of the Victorian Teaching Profession Code of Conduct (VIT, 2008). Participants were asked "To what extent do you view each of the following behaviours as acceptable for teachers to engage in?" Thirteen items were rated on a 5 point scale: 1 *(unacceptable)* - 5 *(acceptable)*. Items included potentially risky teacher student interactions and teacher behaviours which ranged from mild boundary crossings (e.g. showing photos of a significant personal event to a student? (wedding, holiday), using cheek kissing as a means of greeting students) to severe transgressions (e.g. having sex with a student). The scale was piloted with a cohort of 3rd year preservice secondary teachers ($N_{pilot} = 87$, 80% response rate, 65.5% female, $M = 21.44$ years, $SD = 1.72$, 89% English Speaking Background). Unsurprisingly, responses indicated that "having sex with a student" was the least appropriate of the 13 behaviours ($M = 1.10$, $SD = 0.66$) and "giving your email address to a student" was the most endorsed behaviour ($M = 3.79$, $SD = 1.03$). Interestingly, 39% of preservice teachers indicated that "having a personal friendship (non-sexual) with a student was "sometimes acceptable, sometimes not" with a further 8% rating this item as "mostly acceptable".

Principal components analysis using varimax rotation was conducted to assess the underlying structure. Scree plots and Kaiser criterion both indicated three components were appropriate ($R^2 = 55.28\%$; $KMO = .85$, Bartlett's test of Sphericity $\chi^2 (78) = 568.16$, $p < .001$) yet the components were not meaningful, with multiple items cross loading on all components, and Component 3 contained only one item. Deleting these items did not improve the rotated factor matrix, or the stability of the third component.

To improve the psychometric properties of the scale, a problematic item was deleted (indicating your sexual preference to a student) and three of the remaining pilot items were reworded

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for clarity (e.g. accepting a gift from a student" became "accepting an *expensive* gift from a student". The item stem and 5-point rating scale was retained from the pilot version and additional items were created through further consideration of the VIT Teaching Profession Code of Conduct as well as the transcripts of formal disciplinary hearing decisions by the VIT from 2004 to 2010 which are publically available (VIT, 2012). The resultant PIBS included a total pool of 30 items, including 12 revised from the pilot version. New items included behaviours that relate to SNS (e.g. being friends with a student on a SNS), behaviours which might occur outside of the classroom environment (e.g. Driving a student somewhere in your car), interactions which involved a degree of personal disclosure by the teacher (e.g. speaking with a student on the phone about non-school related topics) and purposeful physical interactions between teacher and student (e.g. hugging as a form of consolation). The items used in the current study therefore represented a range of contemporary behavioural interactions with variable amount of risk associated for the teacher and student.

Participants

Participants were secondary preservice teachers (3rd year) from a Melbourne University. The data was collected over consecutive years so that two separate cohorts were sampled ($N_1 = 124$, $N_2 = 75$). Two additional participants were deleted from analyses as they did not complete the PIBS scale. Participants ranged in age from 19 to 31 years ($N_1 M = 21.13$ $SD = 2.63$; $N_2 M = 21.35$, $SD = 2.11$) and gender was generally representative of teacher education enrolment with 64.5% and 70.7% of each cohort being female respectively. The majority of participants were from an English speaking background ($N_1 = 91.1\%$, $N_2 = 92.0\%$). Participants had undertaken an average of 23 days of practicum placements in secondary schools at the time of survey completion.

Materials

The survey instrument contained the Professional Interactions and Behaviours Scale (PIBS; Morris, Richardson & Watt, 2011) and a number of other items relating to ethical training ("how much ethical training has been included in your current degree so far" (1 = *none* – 4 = *a lot, i.e. more than 10 hours*), "how adequately has your training prepared you to deal with ethical issues for the teaching profession" (1 = *not at all* - 4 = *very adequate*) and "how familiar are you with the VIT professional code of conduct for teachers in Victoria?" (1 = *not at all* - 4 = *very familiar*).

Procedure

Participants were invited to complete a survey during tutorial groups of a 3rd year core education unit. Response rates for each cohort were generally good $N_1 = 82.1\%$, $N_2 = 65.0\%$. The smaller response rate for N_2 is likely due to the removal of the attendance requirement (80%) for tutorials in that year, which unfortunately led to lower attendance across the semester compared to previous years. The survey took 25-35 minutes to complete.

Statistical analyses

Data analyses involved two procedures; Principal Components Analysis (PCA) conducted with SPSS Version 20 and Confirmatory Factor Analyses (CFA) using AMOS Version 19. PCA was conducted to explore underlying dimensionality of the items in the PIBS.

Following this procedure, CFA was employed using the maximum likelihood method to confirm the proposed structure. CFA is considered to be current best practice as it simultaneously estimates measurement error and factor loadings. The primary goodness of fit statistic utilised in the current study is the root mean square error of approximation (RMSEA), also presented in order of subsequent emphasis are the normed fit index (NNFI or Tucker-Lewis Index - TLI), the comparative fit index (CFI) and the χ^2 statistic. By means of interpretation, RMSEA values which are <.05 are considered excellent, and ≤ .08 satisfactory. The NNFI and CFI have possible values between 0 and 1, with higher values indicating satisfactory degree of data fit; where .90 is satisfactory and .95 being excellent. A χ^2 statistic which has a probability value >.05 indicates acceptable model fit, that is, the

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proposed model is consistent with the observed data (Bentler, 1990; Browne & Cudeck, 1993; Martin & Marsh, 2005; Tabachnick & Fidell, 2007; Tucker & Lewis, 1973).

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Results

Assumption testing

Prior to conducting statistical analyses, it is important to assess the appropriateness of the data in the current study. Researchers tend to conduct CFA with a separate sample after completing PCA or EFA (Brown, 2006). Based on Comrey and Lee's (1992) guidelines, the combined sample of $N_{1\ \&\ 2} = 197$, is termed "fair" for such analyses. The authors chose to conduct PCA and subsequent CFA with the same sample ($N_{1\ \&\ 2}$). Whilst not ideal, it was considered more important to accurately identify the underlying structure of the PIBS, than replicate underlying components derived from a less than ideal sample size.

There were concerns regarding the sample size and normality of data due to the nature of the PIBS items being related to an ethical or professional judgment of potentially risky behaviours, it was not surprising that the standardized skewness and kurtosis statistics were > 1.96 for 17 and 15 of the 30 PIBS items respectively. This was particularly true for "having sex with a student who is over 18". Items were mostly positively skewed and demonstrated positive kurtosis. Factor analysis/PCA is generally robust to minor violation of assumptions of normality (Kline, 2011).

Evaluation of Preservice Ethical Training

The three items related to the ethical and professional training received by preservice teachers yielded interesting results. The majority of preservice teachers (52.1%) indicated that they had engaged in some ethical training (approximately 1 to 5 hours) in their current degree; 21.9% reported a moderate amount (6 to 10 hours); 20.8% recalled none and 5.2% engaged in more than 10 hours. Considering all preservice teachers were enrolled in the same education degree, the variation may be explained by recall or possibly additional ethical training incorporated into other subjects as part of double degree program (e.g. psychology major).

The second item assessed the adequacy of the level of ethical training; 57% of participants rated the training as somewhat adequate, 22.3% moderately adequate, 17.6% not at all adequate, and 3.1% as very adequate. It was thought that the Code of Conduct would feature as part of teacher ethical and professional training as was adopted prior to the preservice teachers' enrolment. However, 70.4% of preservice teachers were not at all familiar, and a further 25.0% somewhat familiar. 3.1% and 1.5% of preservice teachers were moderately familiar and very familiar respectively. These ratings provide a context for the exploration of teacher professional behaviour as preservice teachers revealed they were on the whole, not very familiar with the Code of Conduct, thus would use their own values and judgement to respond to the PIBS items.

Principal Components Analysis

The dimensionality of the PIBS scale was assessed using PCA (varimax rotation) on the combined sample ($N = 197$). The scree plot indicated that items were best represented by 4 components. The original 30-item pool was gradually reduced to 20 items based upon the rotated component matrix loadings and component interpretability. Items were considered to load significantly on a component if their loading was above .30, and there were no concerning cross-loadings (acceptable range was .00 to .31). This final solution explained 50.11% of the variance and converged in 6 iterations ($KMO = .78$, Bartlett's test of Sphericity $\chi^2 (190) = 1192.898$, $p < .001$). The resultant 4 component structure is shown in Table 1.

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Table 1
PIBS Four Component Structure and Item Factor Loadings

Item	Item description	1	2	3	4
PIBS 6	Inviting a student to a social party	**.741**	.156	.016	.009
PIBS 14	Text messaging with a student (SMS)	**.704**	.059	-.157	.266
PIBS 20	Being friends with a student on a Social Networking Site (e.g. Facebook)	**.696**	-.010	.178	.016
PIBS 18	Accepting an invitation to a student's social event (e.g. dinner or party)	**.651**	.117	.258	-.009
PIBS 1	Giving your private phone number to a student	**.608**	.009	-.139	.305
PIBS 31	Giving a student an expensive reward for achievement	**.537**	.232	.139	.117
PIBS 15	Giving gifts to a student	**.517**	.153	.027	.148
PIBS 17	Driving a student somewhere in your car	**.516**	.211	.062	.164
PIBS 7	Having a personal friendship with a student	**.511**	.087	.197	.033
PIBS 2	Having sex with a student who is over 18	**.476**	.042	-.016	-.113
PIBS 16	Accepting a hug from a student	.177	**.864**	.107	.028
PIBS 3	Using hugging as a means of congratulating a student	.216	**.826**	.033	.173
PIBS 12	Hugging a student as a means of consolation	.191	**.745**	.169	.111
PIBS 25	Giving advice and guidance to a student for their personal problems	.032	.251	**.754**	.095
PIBS 29	Being involved in community activities alongside students (e.g. sports clubs)	.072	.061	**.678**	-.071
PIBS 28	Offering advice to a student on how to deal with family problems	-.031	.125	**.559**	.301
PIBS 21	Interacting online with students through online blogs/discussion forums	.175	-.066	**.542**	.140
PIBS 10	Discussing your partner or significant other in the company of a student	.186	.174	.123	**.725**
PIBS 4	Showing photos of significant personal events to a student (e.g. wedding, new pet, newborn child)	-.004	.147	.024	**.711**
PIBS 22	Talking about your social life outside of school, with a student	.177	-.043	.246	**.692**
	α	*.806*	*.826*	*.591*	*.660*

Notes: Components are listed in order of extraction; Eigenvalues and percent variance accounted for were
1) 19.252% 2) 11.490% 3) 9.783% 4) 9.592

The largest component consisted of 10 items and was interpretable as "befriending" behaviour. The items consisted of behaviours or activities which generally occur between friends, for example engaging in communication through SMS, voice calls, attending social events and giving gifts. The lowest loading item could be viewed as a very serious and intimate form of friendship where two consenting adults engage in a sexual relationship. Component two was termed "hugging" as all three items related to a teacher offering or accepting a hug from a student in a range of circumstances. Component three consisted of four items and was termed "external engagement". In this dimension, the teacher engaged with the student with their personal and private matters external to the classroom, or participated with students in community/sporting groups, or online blogs/discussion groups external to the classroom environment. Component four consisted of three items and was termed "teacher disclosure", as items related to the teacher sharing information or photos about their personal/social life with students.

Table 1 also presents the Cronbach's alpha coefficient for each of the components. Component one, two and four demonstrated adequate internal consistency, however component three was unsatisfactory. Of all dimensions, these four items appear to have the least unity at face value, with two items referring to the provision of emotional support to students and two items referring to engagement in activities which are outside the classroom environment. At some level, these four behaviours could also be considered typical work of teachers, particularly those of adolescents, and teachers who work in rural areas in the case of community activities. Further, the element of risk is possibly more salient in other items of the PIBS. Teachers frequently provide emotional support to

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students with personal difficulties, yet the item may need to be reworded to include an element of immersion or over involvement with student issues. Component three is therefore of both concern and interest, and therefore the analyses will proceed to CFA with all four dimensions with an element of caution. The means, standard deviations and component correlations are summarised below in Table 2.

Table 2

PIBS item and component descriptive statistics

Component	Item	*M*	*SD*
BF[10]	Having sex with a student who is over 18	1.03	.158
*	Using cheek kissing as a form of greeting a student	1.19	.474
BF[1]	Inviting a student to a social party	1.31	.565
*	Sharing your own personal problems with a student	1.43	.664
BF[6]	Giving a student an expensive reward for achievement	1.52	.711
*	Having sex with a former student who is over 18	1.65	.900
BF[3]	Being friends with a student on a SNS (e.g. Facebook)	1.66	.869
*	Speaking with a student on the phone about non-school related topics	1.73	.804
BF[2]	Text messaging with a student (SMS)	1.74	.838
*	Giving a student money	1.76	.815
BF[4]	Accepting an invitation to a student's social event (e.g. dinner or party)	1.77	.849
HG[2]	Using hugging as a means of congratulating a student	2.02	.928
BF[5]	Giving your private phone number to a student	2.11	.841
TD[1]	Discussing your partner or significant other in the company of a student	2.11	.952
*	Accepting an expensive gift from a student	2.17	.910
BF[7]	Giving gifts to a student	2.24	.880
*	Letting a student take photos of you with their personal camera	2.26	.943
*	Giving your private email address to a student	2.30	.999
*	Being friends with the parent of a student on a SNS	2.33	.913
TD[3]	Talking about your social life outside of school with a student	2.33	.919
BF[9]	Having a personal friendship with a student	2.34	1.050
BF[8]	Driving a student somewhere in your car	2.38	.858
HG[3]	Hugging student as a form of consolation	2.43	1.026
HG[1]	Accepting a hug from a student	2.46	.982
EE[4]	Interacting online with students through online blogs/discussion forums	3.00	1.143
TD[2]	Showing photos of significant personal events to a student (e.g. wedding, new pet, newborn child)	3.10	.907
EE[1]	Giving advice and guidance to a student for their personal problems	3.10	.892
EE[3]	Offering advice to a student on how to deal with family problems	3.23	.787
*	Giving a student a pat on the back to congratulate them	3.90	.926
EE[2]	Being involved in community activities alongside students (e.g. sports clubs).	3.97	.912
External engagement (EE)		3.327	.631
Teacher disclosure (TD)		2.513	.715
Hugging (HG)		2.301	.844
Befriending (BF)		1.801	.481

Note: All items are rated on a scale of 1 (unacceptable) to 5 (acceptable); SNS = Social Networking Site; * indicates item was not retained in the final measurement model; Numbers in superscript (e.g. BF[1]) indicate the item number in Figure 1.

Overall component means indicated that student befriending behaviours were the least appropriate behaviours overall, whereas engaging with students externally through outside activities or sharing of student concerns were considered the most appropriate group of behaviours for teachers to

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engage in. The mean for this dimension was situated above the midpoint of the scale and indicated that such behaviours were "sometimes appropriate, sometimes not".

Correlations between dimensions indicated significant, positive relationships ($p = .01$) between underlying components. The strength of the relationships varied from weak to moderate; with a weak relationship between befriending and both hugging behaviour ($r = .281$) and external engagement ($r = .242$); a weak relationship was also observed between hugging behaviour and teacher disclosure ($r = .283$). Moderate relationships were observed between hugging and befriending behaviours ($r = .395$) and teacher disclosure and befriending behaviour ($r = .333$). These correlations provide some support for the 'slippery slope' phenomenon (Barnett, Lazarus, Vasquez, Moorehead-Slaughter, & Johnson 2007; Gabbard & Walker, 1997; Gottlieb & Younggren, 2009), for example, teachers who engage in teacher disclosure are somewhat more likely to engage in student befriending behaviours, which are considered overall to be less acceptable than teacher disclosure. It is likely that in practice, this tendency would be found in a small number of teachers, who could be described as an at risk minority.

Confirmatory Factor Analyses

CFA was conducted using the two combined preservice cohorts ($N_{1 \& 2} = 197$) so that measurement error and factor loadings could be simultaneously estimated. The 20 PIBS items were specified as indicators of the 4 latent constructs based upon the PCA. On the initial analysis, modification indices indicated a high level of error covariance between "giving your private phone number to a student" and "text messaging with a student (SMS)" ($M.I. = 63.379$), this was hypothesised to occur due to the overlap in shared variance between the items as the wording was considerably related. There was a moderate correlation ($r = .59$) between the two measurement errors and acknowledging this in the model improved the goodness-of-fit (Kline, 1998). The resultant CFA fitted the data well across the fit indices $\chi^2 (163) = 236.154$, $RMSEA = .048$, $NFI = .810$, $NNFI = .919$, $GFI = .893$, $AGFI = .863$. Despite low reliability, the external engagement items and latent construct did not function in an unexpected manner. Figure 1 presents a visual summary of the standardised factor loadings and factor correlations.
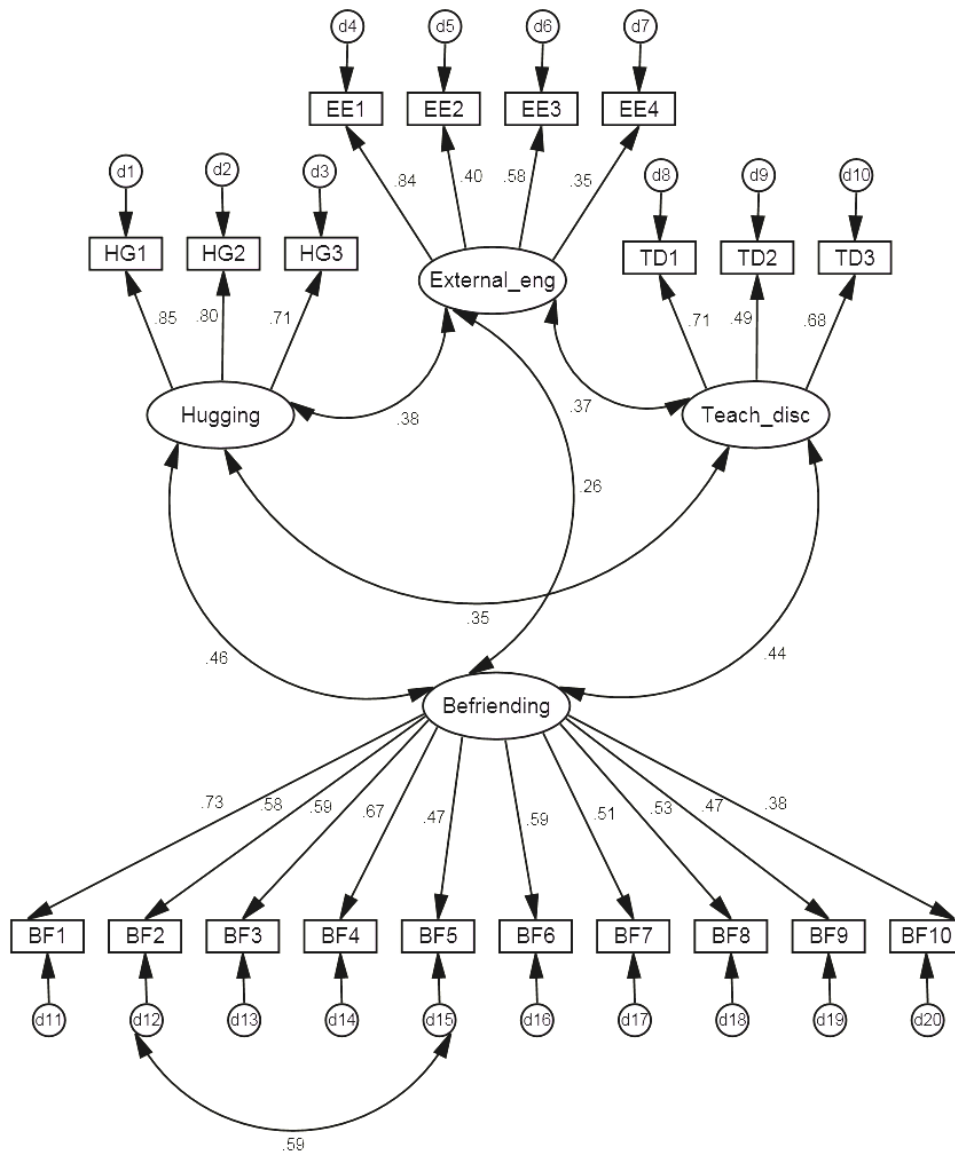
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Figure1. PIBS structure based on CFA

Note: HG = Hugging; External_eng = External engagement; Teach_disc= Teacher disclosure

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Discussion

Interpretation of findings

The findings of the present study provide mixed support for the PIBS scale and its underlying components related to befriending, hugging, external engagement and teacher disclosure. The dimensions explore four key types of interactions/behaviours which are relevant to teacher-student interactions in contemporary education.

As anticipated, interactions which presented as minor boundary crossings (e.g. being involved in community activities alongside students or giving a student a pat on the back for congratulations) were considered more acceptable that serious boundary violations (e.g. having sex with a student who is over 18, or inviting a student to a social party). Unexpectedly, and in contrast to Barrett et al. (2012) behaviours involving technology did not cluster together, rather, behaviours which used technology to befriend students (e.g. text messaging with a student or adding a student as a friend on a SNS) combined with face to face befriending behaviours in component 1. In component 2, online engagement through blogs and internet discussion boards combined with face to face engagement through community or sports groups. A similar process occurred for behaviours which involved physical interactions; physical intimacy was grouped with non-physical befriending behaviours such as inviting a student to a party. The three items involving hugging established component two, indicating that hugging with intent to console or congratulate is distinct from teacher-student physical interactions which intend to befriend.

The initiation of romantic and physical relationships between teachers and students remains poorly understood. It is likely that teachers (and students) do not intend to violate professional boundaries; nevertheless minor boundary crossings make way for more serious behaviours. For example, hugging a student to console them may lead to the exchange of phone numbers to provide ongoing support for personal problems and so on. The correlations between the underlying PIBS dimensions provide some support for the 'slippery slope' theory (Gottlieb & Younggren, 2009), for example, teachers who engage in teacher disclosure are somewhat more likely to engage in the (less acceptable) student befriending behaviours. Further, the moderate correlation between hugging behaviours and befriending also indicated that teachers who provide or accept hugs with aim to support or console students might also be more likely to engage in befriending behaviours.

The preservice teachers in the current sample will be teaching in secondary schools students who are a minimum of four years their junior. With the median age of secondary teachers being 45 to 49 years (DEEWR, 2009), this age difference is slight in comparison. As a result, early career teachers may be more likely to engage in befriending behaviours due to their generational similarities with students. The results indicated that third year preservice teachers were not at all unfamiliar with the Code of Conduct. Furthermore, at this stage of formal training, the majority of participants report engaging in only 'some' ethical training (1 to 5 hours). It was then comforting to observe that average ratings of the PIBS items indicated that preservice teachers held generally conservative attitudes towards risky behaviours, with scores at the mid-point or below, indicating low levels of acceptability.

Revisiting the concept of what is 'right' and what is 'popular', seems that more popular behaviours could place teachers at risk. In particular, preservice teachers viewed providing advice to students with personal and family problems as moderately acceptable. Yet, teachers are not trained counselors and students may disclose relationship or mental health concerns (e.g. self-harm behaviour) which the teacher is not trained to address.

Implications and Contributions to the Research Field

Research that examines the contemporary professional issues for teachers is likely to be more needed, because of the changes in work practices currently underway. Concurrently, internationally, the teaching profession is becoming increasingly regulated. This is placing pressure on preservice education to produce graduates who are professionally prepared for the contemporary challenges of the teaching profession (Boon, 2011). Such training should be explicit, and should provide knowledge

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of professional codes and expectations, but also encourage reflection and internalisation of the core values (Campbell, 2003; Cruess & Cruess, 2006). Preservice training should encourage teachers to hold the ethical element of practice in the background of their work so that it can become easily activated when faced with an ethical or professional dilemma (Campbell, 2003). This is especially important as teachers, whilst employed collectively; frequently work in autonomously with students, which can be particularly risky for early career professionals (Cattley, 2007).

Improvements and Future Directions

With further development, the PIBS presents as a useful research and training tool. The development of an empirical measure is challenging, particularly in the absence of an established definition of the behavioural boundaries of teacher-student relationships. The reliability issues of the third (external engagement) and fourth (teacher disclosure) dimensions require attention, in addition to the concerns of overall interpretability of Component three. Further item development and piloting is required, and the possibility of higher order dimensional structure explored.

It would be worthwhile to employ a larger sample to assess the refined version of the PIBS and to see the impact of this on the goodness-of-fit values. Lastly it would be valuable to compare the PIBS ratings preservice teachers with those of in-service teachers. Recent research in the USA by Barrett et al., (2012) suggests that preservice teachers hold higher standards of practice than in-service teachers, yet in their study, preservice teachers were recruited early in their degree program, thus may have held more idealistic values. The current study sampled third year students enrolled in a four-year degree program, and therefore was likely to have had greater exposure to the school environment through practicum experiences.

Cross-cultural comparisons of attitudes towards appropriate professional behaviours, particularly in relation to technology are also of interest to assess whether conceptions of teacher professionalism vary across cultures, which might also have disparate systems of governance for the teaching profession. At a local level, teachers operating in diverse geographic settings (urban, suburban, remote, rural) would also be of interest. Teachers working and residing rural areas for example are often members of the same sporting teams as students, and are more likely to engage with students and their families in social settings. Psychologists who work in rural and remote areas are provided with specific, detailed and practical ethical guidelines by the Australian Psychological Society (APS, 2004) with aim to assist these professionals in managing boundaries and confidentiality.

The PIBS might also be used to profile individuals at risk of professional misdemeanors. The four components may be useful to incorporate into cluster analysis or path modeling (e.g. Structural Equation Modelling) in conjunction with other relevant dimensions such as personality or attachment style. Such analyses may identify risk and protective factors associated with engaging in particular types of risky professional behaviours. As with most research which focuses on issues of ethical behaviour and professionalism, social desirability bias is of concern. Therefore, a social desirability or impression management scale should be incorporated into the survey design to address this issue (See Hofstee, Ten Berge & Hendricks, 1998; Paulhus & Reid, 1991).

Conclusions

The present study used statistical procedures to evaluate the PIBS scale which appears to be a promising measure of attitudes towards the professionalism of contemporary teacher interactions with students. It would be useful to both profile risky teacher attitudes and to create discussion in preservice training.

In agreement with Barrett et al., (2012) the authors of this paper believe that the teaching profession should follow the example of other licensed helping professions such as psychology and medicine who have clear codes of conduct and detailed guidelines/standards to assist in their interpretation. However, in order to make an impact on professional practice, it is imperative that preservice teachers receive adequate training to equip them with the appropriate knowledge and skills to create professional and authoritative, yet warm relationships with students.

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Appendix A: PIBS Scale (30-item version)

To what extent do you view each of the following behaviours as <u>acceptable for teachers</u> to engage in? Please circle a rating from 1= unacceptable to 5 = acceptable.

	Unacceptable	Usually unacceptable	Sometimes acceptable, sometimes not	Usually acceptable	Acceptable
1. Giving your private phone number to a student	1	2	3	4	5
2. Text messaging with a student (SMS)	1	2	3	4	5
3. Giving gifts to a student	1	2	3	4	5
4. Showing photos of significant personal events to a student (e.g. wedding, new pet, newborn child)	1	2	3	4	5
5. Inviting a student to a social party	1	2	3	4	5
6. Having a personal friendship with a student	1	2	3	4	5
7. Being involved in community activities alongside students (e.g. sports clubs)	1	2	3	4	5
8. Accepting an expensive gift from a student	1	2	3	4	5
9. Offering advice to a student on how to deal with family problems	1	2	3	4	5
10. Giving your private email address to a student	1	2	3	4	5
11. Discussing your partner or significant other in the company of a student	1	2	3	4	5
12. Using hugging as a means of congratulating a student	1	2	3	4	5
13. Sharing your own personal problems with a student	1	2	3	4	5
14. Accepting a hug from a student	1	2	3	4	5
15. Being friends with the parent of a student on a SNS (e.g. Facebook)	1	2	3	4	5
16. Driving a student somewhere in your car	1	2	3	4	5
17. Giving a student an expensive reward for achievement	1	2	3	4	5
18. Accepting an invitation to a student's social event (e.g. dinner or party)	1	2	3	4	5
19. Using cheek kissing as a form of greeting a student	1	2	3	4	5
20. Hugging a student as a form of consolation	1	2	3	4	5
21. Giving a student a pat on the back to congratulate them	1	2	3	4	5
22. Being friends with a student on a Social Networking Site (e.g. Facebook)	1	2	3	4	5
23. Giving a student money	1	2	3	4	5
24. Interacting online with students through online blogs/discussion forums	1	2	3	4	5
25. Talking about your social life outside of school, with a student	1	2	3	4	5
26. Speaking with a student on the phone about non-school related topics	1	2	3	4	5
27. Letting a student take photos of you with their personal camera	1	2	3	4	5
28. Giving advice and guidance to a student for their personal problems	1	2	3	4	5
29. Having sex with a student who is over 18	1	2	3	4	5
30. Having sex with a former student who is over 18	1	2	3	4	5