Development of a Scale for Measuring Teachers' Attitudes toward Students' Inappropriate Behaviour

Md. Saiful Malak

Faculty of Education, Monash University

md.saiful.malak@monash.edu/ saiful.malak@du.ac.bd

Umesh Sharma

Joanne M. Deppeler

Faculty of Education, Monash University

Abstract

This study aimed at developing a valid and reliable instrument for measuring attitudes of primary schoolteachers toward inappropriate student behaviour. A systematic approach was used to develop the scale. Results provide preliminary evidence that the new instrument (consisting of 13 items on a six-point Likert type scale) meets the standards for reliability. Factor analysis with varimax rotation identified two distinct factors: (1) unproductive behaviour, and (2) aggressive behaviour. The alpha reliability coefficient was found to be 0.91 for the total scale, and 0.92 and 0.75 for first and second subscales respectively. The factor structure was tested using confirmatory factor analysis (CFA), which revealed that with a little modification, the identified model had a good fit for the data as all the key fit indices demonstrate highly accepted values including Goodness-of-Fit Index (GFI)>.95, Comparative Fit Index (CFI)>.96, and Root Mean Error of Approximation (RMSEA)< .05.

Key words: teacher attitudes; inappropriate student behaviour; primary school; instrument development.

Introduction

Inappropriate student behaviour is one of the most significant factors that adversely affect teachers' attitudes (Monsen, Ewing & Kwoka, 2014; Yuen & Westwood, 2001) and their emotional wellbeing (Anderson, 2012; Angus, McDonald, Ormond, Rybarcyk, Taylor & Winterton, 2009; Clunies-Ross, Little & Kienhuis, 2008). Consequently, teachers appeared to develop a sense of rejecting the students who display inappropriate behaviour in the classroom (Erbas, Turan, Aslan & Dunlap, 2010; Graham, Van Bergen & Sweller, 2015; Henricsson & Rydell, 2004) and in some cases, teachers may withdraw themselves from their profession (Bas, 2011).

Research suggests that inappropriate student behaviour can also have a negative impact on the learning and engagement of all students (Austin & Agar, 2005; McIntosh, Flannery, Sugai, Braun & Cochrane, 2008; Miller, Ferguson & Byrne, 2000), not only those who exhibit inappropriate behaviour (Arcia, 2007; Hossain, 2013; Lane, Barton-Arwood, Nelson & Wehby, 2008; Sugai & Horner, 2009). Inappropriate behaviour was reported to be a key reason for overall instructional as well as administrative time loss of schools (Clunies-Ross, Little & Kienhuis, 2008; Godwin, Almeda, Petroccia, Baker & Fisher, 2013, OECD, 2012)

Previous studies have also found that while inappropriate student behaviour can negatively impact teacher's responses (Anand, 2014; Durrant & Ensom, 2012; Jensen, Sandoval-Hernández, Knoll & Gonzalez, 2012; Sullivan, Johnson, Owens & Conway, 2014), teachers' inappropriate behaviours can influence students to behave inappropriately in the classroom (Angus et al., 2009; LeBlance, Swisher, Vitaro & Tremblay, 2007; Sullivan, 2009). It is evident that one of the most significant factors impacting on teachers' behaviours in the classroom is attitude (Armitage & Conner, 2001; Yan & Sin, 2014).

Research shows that students who display inappropriate classroom behaviour are likely to be at risk of exclusion from regular schools in various contexts around the world including Australia (Van Bergen, Graham, Sweller & Dodd, 2015; Graham et al., 2015), Canada (Alberta Education, 2009 as cited in Wishart & Jahnukainen, 2010, p. 184), and the USA (Kauffman, 2008). Educational researchers have argued that one of the vital reasons for the exclusion of students exhibiting inappropriate behaviour could be linked with attitudes teachers hold toward these students (e.g. see Koutrouba, 2013; Marais & Meier, 2010). Hence teachers' attitudes are an important element that needs to be investigated with care based on systematically developed instruments.

Why Teachers' Attitudes are Vital to Understanding Students' Behavioural Issues

Teachers' attitudes determine how they teach their students in the classroom (Benish & Bramllet, 2011). Attitude is "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (Eagle & Chaiken, 1993, p. 1). Psychological tendency is referred to as a state that is internal to the individual, and a type of bias that predisposes the individual toward evaluative responses that could be positive or negative (Eagle & Chaiken, 1993). Attitude comprises three components: cognitive, affective and behavioural (Eagle & Chaiken, 1998). Ajzen (1991) argues that the behaviour of an individual is predominantly influenced by a number of factors of which attitude is the most significant. Attitude is considered to be a key variable in predicting teachers' intentions in several studies conducted in the area of inclusive education (e.g. Kuyini & Desai, 2007; Sato & Hodge, 2009; Stanovich & Jordan, 1998). Most importantly, attitude was found to be one

of the significant predictors of teachers' behavioural intention in a number of studies (e.g. Sato & Hodge, 2009; Stanovich & Jordan, 1998). Ajzen et al. (2011) emphasise that teachers' attitudes and knowledge regarding particular student types influence their intention to teach such students in their classrooms.

Creating learning space for each student in the classroom is thereby largely dependent on the attitudes teachers hold for their students. Evidences from the previous research suggest that teachers having less favourable attitudes toward students displaying inappropriate behaviour are more likely to focus on teaching behaviours instead of engaging students in classroom activities (OECD, 2012; Sugai & Horner, 2009). Consequently, retention of students who exhibit inappropriate behaviour in the classroom may be threatened, because inappropriate student behaviour has a significant relationship with academic failure leading to school dropout (Angus et al., 2009; Jimerson, Ferguson, Whipple, Anderson & Dalton, 2002; Horner & McIntosh, 2016). When teachers' attitudes are understood systematically and effectively, an evidence-based suitable intervention could be implemented to shape their belief system positively towards each student learning and engagement in the classroom (Sugai, & Horner, 2010). In order for achieving the broader goal of inclusive education, including all in learning together, it is imperative to underpin research that adequately analyses teachers' attitudes in a systematic manner.

While attitude is highly important for teachers when responding to students' behavioural issues (Fisher, 2011), it is important that stakeholders involved in teacher preparedness better understand the practical dynamics which emphasise the ways in which teachers develop their attitudes (Sullivan, Johnson, Owens & Conway, 2014). However, the critical point is that the existing instruments looked at some other aspects of student behaviour and they were less likely to emphasize on investigating teachers' attitudes towards students' inappropriate behaviours. For example, *Discipline in Schools Questionnaire* developed in Australia by Adey, Oswald and Johnson (1991) consisted of 19 items each of which captured a particular inappropriate behaviour of students (e.g., hindering other students, physical aggression to teacher, leaving school without permission etc.). This questionnaire seems to be an effective instrument for identifying students' inappropriate behaviours based on the responses of teachers. However, the ultimate question, whether this instrument is suitable for measuring the attitudes of teachers towards student behaviour, remains unclear as the design of this scale is less likely to capture the construct "teachers' attitudes towards students' inappropriate behaviour".

Another instrument, *Child Behaviour Survey,* designed in Australia by Martin, Linfoot and Stephenson (1999) identified four distinct factors including aggression, delinquency, disobedience and distractibility. Even though the questionnaire included items about teachers' confidence on dealing with students' misbehaviours, the focus of this instrument was primarily on the identification of students' behaviour problems in terms of their frequency of occurrence and degree of seriousness rather than on measuring teachers' attitudes towards students who misbehave in the classroom.

A questionnaire to examine pre-service teachers' *Perceived Seriousness of Pupils' Undesirable Behaviour* (Kokkinos, Panayiotou & Davazoglou, 2004) was designed in Greece. Twenty-five inappropriate behaviours of students were included in this questionnaire in which the respondents were asked to rate the items based on a 5-point Likert type scale ranging from 'not at all serious' to 'extremely serious'. The purpose of this instrument was also for identifying the seriousness of various forms of undesirable behaviours through the perception of teachers.

One of the most recently developed questionnaires used by Sullivan, Johnson, Owens and Conway (2014) in their study investigating *Teachers' Views of Unproductive Student Behaviours in the Classroom.* This questionnaire was developed in Australia based on the

Discipline in Schools Questionnaire (Adey et al., 1991). The questionnaire consisted of 23 items (e.g., being late for class, talking out of time, physically destructive etc.) in three specific factors namely a) Low-level disruptive behaviours, b) Disengaged behaviours and c) Aggressive and anti-social behaviours. Participants were asked to report each of the behaviours based on a 4-point Likert type scale as *Not at all (1), One/Two Days per Week (2), Almost Daily/Daily (3) and Several Times a Day (4)*. The design of the questionnaire indicates that it was primarily focused upon the identification of students' behavioural problems in terms of frequency of occurrence and degree of seriousness, rather than measuring teachers' attitudes toward students who exhibit inappropriate behaviour in the classroom. It would seem that suitable scales that systematically examine teachers' attitudes toward students' inappropriate classroom behaviour are almost non-existent. Development of a valid and reliable scale to systematically measure such attitudes is timely and appropriate.

Context of the Study

The study was conducted in Bangladesh, a developing country located in the Bay of Bengal in South Asia. Bangladesh is undergoing major reforms in education. One such reform is the inclusion of students with diverse learning needs in regular classrooms. Another significant reform strategy to make classrooms safer for all students is the abolition of corporal punishment in schools (Ministry of Education, 2010). Teachers are subject to greater penalties if they are found to use punitive measures in schools.

However, Bangladeshi teachers are traditionally known to be authoritarian in their responses to classroom management issues (Akhter, 2003). Corporal punishment has been an integral part of classroom management strategies in Bangladeshi school culture for several decades (UNICEF, 2008). Bangladeshi teachers used to believe that using corporal punishment was the best way to address inappropriate student behaviour in classrooms.

A relevant study by the authors indicated that Bangladeshi primary schoolteachers perceived an increased rate of inappropriate student behaviour in the classroom. The teachers were more likely to feel helpless in responding to student behavioural issues due to the removal of corporal punishment, as they were largely unaware of positive ways to address inappropriate student behaviour (Malak, Sharma & Deppeler, 2015). In other contexts, other than Bangladesh, a variety of proactive approaches, for example, positive behaviour support, are widely used in classrooms (Sugai & Horner, 2010). In most cases, these create better outcomes for both teachers and students alike. However, these practices have not yet been implemented in the teacher education program or in-service training program in Bangladesh. Although the policy has abolished corporal punishment, no other alternatives have been introduced to support policy changes. Accordingly, teachers' attitudes regarding students' inappropriate behaviour has not been understood in the context of Bangladesh. In the following sections, we describe different stages considered to develop the TASIB scale.

Method

The present study consists of two separate investigations. Study one, which purposively sampled a total of 190 primary schoolteachers, aimed at developing a TASIB scale. Study two aimed to examine scale structure with a different sample comprising 1090 primary schoolteachers.

Procedures

5

In order to recruit participants for this study, the Director General of the Directorate of Primary Education (DPE) in Bangladesh was requested to give permission. Once permission had been granted and ethical approval of the relevant university obtained, the education offices of respective subdistricts were contacted and provided with a copy of the permissions letter along with a survey package containing explanatory statements and questionnaires. The process of data collection for this study was discussed with relevant *Upazila* (subdistrict) Education Officers (UEO) and Assistant *Upazila* Education Officers (AUEO) of the selected subdistricts. Survey packages were sent to respective education offices in all relevant subdistricts. These survey packages were distributed to those teachers attending the continuous professional development program during their sub-cluster meeting. In a sub-cluster meeting around 50 teachers participated in a day-long training program.

Development of the Instrument

The development of the TASIB scale instrument involved the following stages (DeVellis, 2011).

Step 1: Generation of item pool. Two sources were used to generate the item pool. First, a review of literature was conducted to identify statements relevant to the measurement of participants' attitudes toward student behaviour (Charles, 2011; Didaskalou & Millward, 2001; Ding et al., 2008; Erickson, Stage & Nelson, 2006; Esturgo-Deu & Sala-Roca, 2010; Gregory & Thompson, 2010; Kokkinos & Kargiotidis, 2014; Martin et al., 1999; Nuttall & Woods, 2013; Poulou & Norwich, 2000a, 2000b; Romi & Freund, 1999; Shen et al., 2009; Sullivan et al., 2014; Sun & Shek, 2012; Wilczenski, 1992). Second, one-on-one interviews were conducted with 22 primary schoolteachers to understand their views about the latent variable the scale aimed to address. Questions like "how would you define students' inappropriate behaviour?" and "what type of behaviours do you find challenging to manage in the classroom?" were asked during interviews (see Author, 2014). Analysis of interview data, review of the relevant literature on student behaviour (see Charles, 2011; Erickson, Stage & Nelson, 2006; Sun & Shek, 2012) and existing questionnaires on student behaviour (see Martin et al., 1999; Romi & Freund, 1999; Sullivan et al., 2014; Wilczenski, 1992) helped develop an initial item pool for the proposed instrument. At this stage, a total of 23 items were developed in Bangla. All items were positively framed. They began with a type of student behaviour such as: "students who refuse to follow the teacher's direction…" and ended with a phrase "…can be taught in my classroom".

Step 2: Response format. Investigating researchers' views on the use of a Likert type scale (Infosurv, 2006) found that five-point scales were widely favoured by researchers. However, because of a 'neutral' or 'uncertain' category, use of a five- to seven-point response format is often discouraged (Cummins & Gullone, 2000; Feuerborn, Tyre & King, 2015). Researchers pointed out that these types ('neutral' or 'uncertain') of anchors attract participants' responses, as these may involve equal appropriateness for both agreement and disagreement (Balon, Franchini, Freeman, Hassenfield, Keshavan & Yoder, 1999; Bond & Fox, 2001; DeVellis, 2011). Consistent with contemporary psychometric studies (see Anguiana-Carrasco et al., 2015; Lu & Yeo, 2015), we decided to use a six-point Likert type scale ranging from Strongly Disagree (1) Disagree (2), Somewhat Disagree (3), Somewhat Agree (4), Agree (5), and Strongly Agree (6).

Step 3: Content validation of the items. Content validation of the 23-item draft questionnaire was undertaken in two stages. In stage 1, the draft questionnaire was sent to a

panel of experts consisting of three education researchers, two university academics and two teacher educators, who were working in the field of special and inclusive education, who all had adequate research experience in educational psychology and primary education in the context of Bangladesh. The reason for choosing experts within the area of special and inclusive education was to get an intense feedback from them about the items as student behavioural issues are predominantly discussed within these professionals in the context of Bangladesh. These experts were asked to complete three tasks. First, they were asked to rank each item regarding applicability to measure the construct (TASIB) based on a specific response format: 1 = low, 2 = average and 3 = high. Second, they were asked to look at the clarity of the items and suggest any changes. Third, they were asked to comment on conciseness of each item. The draft scale was revised in line with suggestions and comments provided by the panel of experts. Several items were revised and seven items that obtained a rating of one were removed. Consequently, a total of 16 items were retained.

In stage 2, content validation was carried out with a number of primary schoolteachers (n-17) who were purposively selected and were not included in the main study. The teachers were asked to give their opinion on the 16-item Bangla questionnaire regarding the degree of difficulty of items, language used, and any addition and removal of items. Based on the feedback received at this stage, wording of two items was changed and three items were removed. A number of teachers strongly recommended the removal of those items for several reasons. For example, one of the removed items was "*students who physically attack their teachers can be taught in my classroom*". Several teachers commented that to their knowledge not one primary school student had ever physically attacked his/her teacher in the context of Bangladesh. Finally, a 13-item questionnaire was finalised in Bangla to be used in the main study.

Study One

The 13-item questionnaire was administered to a sample of 190 government primary schoolteachers in the capital city of Dhaka. The study cohort consisted of 52.4% male and 47.6% female participants. The mean age was 32.5 years and experience in teaching ranged from 4 to 20 years while a vast majority (56%) had taught for 10 to 12 years.

Several statistical procedures were utilised to analyse data for this study. The eligibility of the data for factor analysis was screened out with Kaiser-Mayer-Olkin (KMO) coefficient and Bartlett's Sphericity test. In order to determine the factor structure of the TASIB scale, principal component analysis method was used with varimax rotation, as it is suggested that varimax rotation allows for less correlation between factors (Pallant, 2013). Further, the number of factors retained was determined by several procedures that considered eigenvalues, scree plotting, and parallel analysis.

Results

Prior to conducting any further analysis, reliability of the TASIB scale items was calculated by using Cronbach's alpha, showing a value of 0.91 which is greater than the generally accepted alpha of 0.70 or above for determining the internal consistency of a Likert type scale (DeVellis, 2011; Nunnaly & Bernstein, 1994). All items had item-scale correlations of 0.40 and above. As mentioned earlier, the possibility of the factors was determined by KMO and Bartlett's Sphericity test. The KMO value was 0.90, exceeding the recommended value of 0.6 (Kaiser, 1974) and Bartlett's Sphericity test was statistically significant at $p= 0.000$ (Bartlett, 1954), indicating that factor analysis is appropriate (Tabachnick & Fidell, 2007).

The number of factors was determined by examining eigenvalues and scree plot analysis. Factors with eigenvalues greater than one were retained (Henson & Robert, 2006). Principal component analysis reveals the existence of two factors with eigenvalues above one. The first factor (with eigenvalues 6.77) explains 52.10% of variance while the second factor (with eigenvalues 1.469) explains 11.30% of variance. Therefore, the identified factors combined explain 63.40% of the total variance, which is widely recommended as an accepted value (Sharma et al., 2012; Ugulu, Shahin & Baslar, 2013).

A parallel analysis was also undertaken to determine the actual number of meaningful factors, as this is considered to be more accurate compared with eigenvalues and scree plot analysis (Hensen & Roberts, 2006). The result shows that the first two eigenvalues obtained from Principal Component Analysis (PCA) were larger than the first two values from the random eigenvalues by parallel test (Table 1). This analysis suggested that the first two factors be accepted.

Table 1

Confirming number of factors by using parallel analysis

Factor	Eigenvalues from PCA	Criterion value from parallel analysis	Decision
1	6.774	1.449	Accept
2	1.469	1.334	Accept
3	.883	1.248	Reject

Structuring the factors to better interpret the pattern of item loadings is an integral part of analysis (Pallant, 2013). In order to determine factor structure, an exploratory factor analysis (EFA) of the correlation matrix using a PCA with varimax rotation with a .40 cut off was utilised. Items for relevant factors were specified based on the highest loading for each item. Factor 1, named as Unproduced Behaviour, consists of 9 items such as requesting to leave classrooms, complaining, stealing, inappropriate language use, work avoidance, unnecessary movement, lying, and refusal to teacher's direction and classroom rules. In a recent study, these types of student behaviours were termed as unproductive classroom behaviour (Sullivan et al., 2014). In this paper, the term 'unproductive behaviour' refers to a range of frequently observed disengaged classroom behaviours (Angus et al., 2009), which are not aggressive in nature but are challenging for teachers to deal with in the classroom. This factor is related to teachers' attitudes toward those students who generally remain off-task in the classroom, but are not aggressive towards their peers and teachers in the classroom (Table 2). Factor 2, named as Aggressive Behaviour, consists of four items, most of which are related to students' aggressive behaviours toward their peers as well as their teachers (Table 2). The reliability coefficient alphas for factors were calculated by using Cronbach's alpha, revealing a highly accepted value of 0.92 for the first factor and moderately accepted value of 0.75 for the second factor.

In order to confirm TASIB scale factors, a Confirmatory Factor Analysis (CFA) was performed with a different sample (Study two) using Structural Equation Modelling (SEM). The contemporary literature on scale development has largely emphasised testing an EFA-created model by using CFA (Jackson, Gillaspy & Purc-Stephenson, 2009; Worthington & Whittaker, 2006), as this is a theory driven approach through which factors of a construct are confirmed (Tavakol, Dennick & Tavakol, 2011).

Table 2

Factor loadings of the items

Item No.	Items (statement structure: *Students who…should be taught in my classroom*)	Factor loadings 1	2
10	frequently request to leave classrooms	.919	
12	frequently complain against peers	.897	
08	frequently steal from others	.735	
09	use inappropriate language	.710	
11	do not work on assigned tasks	.710	
03	frequently move around classroom	.695	
02	refuse to follow classroom rules	.695	
07	frequently tell lies for various purposes	.651	
04	refuse to follow teacher's direction	.576	
06	are verbally aggressive towards their teachers		.815
05	are verbally aggressive towards their peers		.762
01	are physically aggressive towards their peers		.667
13	are disrespectful to their teachers		.580

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Study Two

This study involved a survey in which the TASIB scale was used for 1090 government primary schoolteachers. Participants consisted of 57.7% males and 42.3% females. The mean age and mean teaching experience were 34.45 years and 11.09 years respectively. Educational qualifications included Masters (26.5%), Bachelor (34%) and below Bachelor (39.50%) degrees. With regard to professional degrees, 59.3% held a certificate in education (C-in-Ed), 1.4 % held a diploma in education (Dip-in-Ed), 6.8 % held a bachelor of education (B. Ed) and 32% (n=349) had no professional degree. This figure can be regarded as representative of teaching population in the primary education sector in Bangladesh.

In order to obtain a wide variation in response, data were collected from three different locations including urban, suburban and rural schools based on the five-stage cluster sampling method. In stage 1, one division (out of 6 divisions) was selected purposively. Stage 2 involved selection of districts. Three districts (out of 16): one urban, one suburban and one rural, were selected randomly (using lottery technique). In stage 3, one subdistrict from each urban, suburban and rural district was taken randomly. Generally, the number of subdistricts ranges from five to seven. In stage 4, all government primary schools (n-263) in the chosen

subdistricts were selected. Typically, the number of teachers in a government primary school ranges from seven to ten. In stage 5 (the final stage) all teachers (n-1571) were invited to participate in the study.

A survey package consisting of a questionnaire and explanatory statement was sent to a population of 1571 teachers. The package was distributed to teachers in a continuous professional development program called sub-cluster training, a day-long training program that takes place every month for in-service teachers who are coordinated by Assistant *Upazila* (subdistrict) Education Officers (AUEO) in respective subdistricts. The teachers were asked to return completed questionnaires to a cardboard box placed in the training room. The first author then received survey questionnaires from the respective AUEOs who were requested to send questionnaires using the postal service. A total of 1130 survey questionnaires were returned. Forty questionnaires were discarded due to a large number of missing data. Therefore, data from a sample of 1090 primary schoolteachers was used in this study.

Results

Confirmatory factor analysis (CFA) was performed with the data to evaluate fitness of the two factor model by using Structural Equation Modelling (SEM) with AMOS 22. Parameters were estimated for the CFA model based on maximum likelihood procedure involving fitting the variances and covariance among observed variables. Several key model fit indices, as suggested by the relevant literature (see Brown, 2006; Cabrera-Nguyen, 2010; Jackson, Gillaspy & Purc-Stephenson, 2009; Worthington & Whittaker, 2006) and used in the most recent studies (see Choo, Walsh, Chinna & Tey, 2013; Oncu, 2013; Stuart, Sartorius & Liinamaa, 2014) including Chi-square (χ^2), degrees of freedom (df), χ^2/df, Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Residual (RMR) and Root Mean Error of Approximation (RMSEA) were used. The first model revealed a poor fit for the data (as to have inappropriate values in several of the key fit statistics such as χ^2/df was 9.33, highly exceeded the expected value of 3), RMSEA was well above the .06 threshold at .08 and the TLI index of .881 was considerably less than the desired .95 threshold (Table 3). Therefore, modification of the model was deemed necessary. The modification indices suggested changes in the correlations between items 2 and 3, and items 10 and 12. Modification indices generally indicate that the data has a high probability to improve model fit (Harrington, 2009). However, it is strongly suggested that when a model is modified it should have theoretical background (Simsek, 2007), that is, modification can be performed between meaningfully close items in the same factor when error covariance is added between observed variables (Evrekli, Inel, Balim & Kesercioglu, 2010). Since items 2 and 3 and items 10 and 12 resided within a single factor, the modification was added at once for a new model (Model 2). The analysis yielded improvement in fit indices (Table 3). Though χ^2/df is slightly over 3 and *p* is significant at .000, all other key fit indices significantly improved in Model 2, especially, CFI > .96, GFI> .95 and RMSEA<.06, which indicates a good model fit for the data (Brown, 2006; Hu & Bentler, 1999).

The new model revealed acceptable Chi-square values. Researchers generally tend to use a Chi-square test statistic to find overall model fit in SEM. However, the Chi-square test is widely criticised for its sensitivity to sample size (Babyak & Green, 2010; Dickey, 1996; Hu & Bentler, 1999; Stevens, 2001), especially when sample size is over 200; typically, it appears to be significant (Stuart et al., 2014). There are also variations in deciding an acceptable value of χ^2/df. In the range of two or lower, or three or lower indicates a good fit between the hypothetical model and sample data (Carmnines & McIver, 1981). However, it is

recommended that when the ratio is five or lower, it reflects that the model has an acceptable goodness of fit (Boyac & Atalay, 2016; Şimşek, 2007). The debate in selecting an acceptable

Table 3

Comparison of CFA fit indices in different models

Model	χ^2	df	χ^2/df	P	CFI	TLI	GFI	AGFI	RMR	RMSEA
Model 1	597.462	64	9.335	.000	.907	.887	.917	.881	.108	.087
Model 2	223.855	62	3.611	.000	.969	.961	.970	.955	.070	.049

value of χ^2/df and the sample size tendency of the Chi-square test statistic have led to "the proposal of numerous alternative fit indices that evaluate model fit, supplementing the Chi-square test statistic" (Worthington & Whittaker, 2006, p.828). Therefore, since all the key goodness-of-fit statistics, with the exception of the Chi-square test, indicated a great fit for Model 2, the two-factor model could be considered an acceptable structure. Figure 1 shows the parameter estimation for the model.
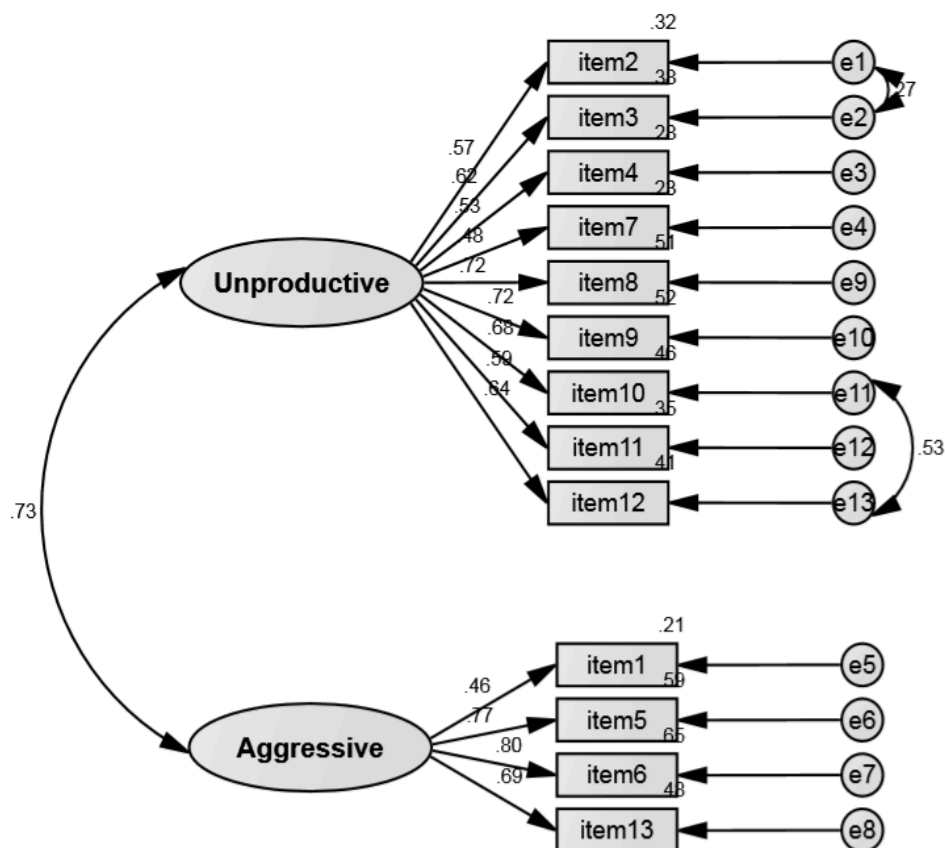
Figure 1. Path diagram for the two-factor model

Discussion

This study reported the development of an instrument, Teachers' Attitudes toward Students' Inappropriate Behaviour (TASIB), to measure the attitudes of regular primary schoolteachers. Exploratory factor analysis identified a 13-item scale with two distinct factors which provides evidence that the scale meets the standards for reliability. Confirmatory factor analysis using a different sample confirmed that the identified model fits well with the data. This means that the 13-item scale with responses recorded on a six-point Likert type scale ranging from Strongly Disagree = 1 to Strongly Agree = 6 has the potential to be used in wider samples.

Consistent with literature about the multi-dimensional aspect of the construct 'student behaviour' (Gazquez et al., 2005; Veiga, 2008), the present study identified two distinct dimensions of the newly developed scale, namely, unproductive and aggressive behaviours. Student behaviour is a context-specific construct and teachers' perceptions of inappropriate behaviour types can widely vary from culture to culture. Cross cultural studies have shown that the views of teachers regarding the seriousness of a particular behaviour vary from context to context (see Gu, Lai & Ye, 2011; Lewis, Romi, Qui & Katz, 2005). For example, in Greece, aggressive behaviour (Didaskalou & Millward, 2001) and in Canada, Australia, the UK and the USA, disruptive behaviour (Gu, Lai & Ye, 2011) were perceived by teachers to be the most serious behaviour. In contrast, in China, non-attention (Ding et al., 2008; Shen, et al., 2009) was perceived to be the most serious behaviour while aggressive behaviour was less serious according to Chinese teachers (Shen et al., 2009).

Therefore, simply regarding the term 'disruptive behaviour' as a whole for measuring the attitudes of teachers, without considering the multidimensionality of student behaviour could be problematic, as disruptive behaviour is not considered significant for the most part in relation to students' challenging behaviours (Charles, 2011). The newly developed instrument has captured the two-dimensional aspect of students' inappropriate behaviour.

The newly developed TASIB scale can be applied in various ways in educational research. First, it has the potential to contribute to knowledge of teachers' perspectives about student behaviour. In particular, the identification of two distinct dimensions (aggressive and unproductive behaviours) of TASIB could provide substantial knowledge to future educational researchers in relation to positive behavioural support.

Second, this scale can fill in a significant gap for researchers who plan to use the Theory of Planned Behaviour (TPB) (Ajzen, 1991) as a conceptual framework in investigating teachers' perspective of inappropriate student behaviour. TPB has widely been recognised as a vital framework to understand individuals' behavioural intentions. In TPB, one of the important constructs is attitude, which needs to be understood thoroughly in order to predict the behavioural intention of an individual. However, there are not many reliable scales available on this construct. The TASIB scale could be useful for those who intend to explore students' behavioural issues based on TPB.

Third, the benefit of using this scale could be significant within educational contexts like Bangladesh, where corporal punishment was recently removed from the school setting in 2010. Bangladesh has had a long history of punitive approaches in schools. Parental pressure and increased attention to this issue (in both print and electronic media) resulted in prohibition of corporal punishment. As a result, student behaviour is of great concern to primary schoolteachers. In this regard, the TASIB scale, especially the dimensions identified therein could allow teacher educators and university professionals in primary education to

better understand the practical dynamics embedded within teachers' attitudes. Consequently it will help them design suitable professional development programs for pre- and in-service teachers to bring about positive change in their responses to students' behavioural issues.

Conclusion

An important strength of the TASIB scale is that the items included therein were actual reflections of primary schoolteachers, as these were primarily derived from the data gathered from one-on-one in-depth interviews. Furthermore, the approach that followed the development of this scale is based on the results of two different samples, not necessarily homogenous in nature. Instead, a relative heterogeneous sample was drawn from a total of 263 schools ensuring urban, suburban and rural locations. This means, it can be expected that this scale will behave well with a wider assortment of samples. However, it is important to acknowledge that the TASIB scale has some limitations. For example, the scale reflects the perception of those teachers whose schools were located in Rajshahi and Dhaka divisions in Bangladesh. Teachers from other divisions may have different perceptions, as the views of teachers about student behaviour can vary from school to school within the same region. Finally, since the TASIB scale was designed in Bangla then translated into English, it is strongly recommended that future users of this scale will be required to test the scale's validity in a different context prior to its use.

References

Adey, k., Oswald, M., & Johnson, B. (1991). Discipline in South Australian schools: A survey of teachers-Survey no. 1: Teachers in metropolitan schools (Education of South -Australia, Trans.). Adelaide: University of South Australia.

Ahmmed, M., Sharma, U., & Deppeler, J. (2014). Variables affecting teachers' intentions to include students with disabilities in regular primary schools in Bangladesh. *Disability & Society, 29*(2), 317-331.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

Ajzen, I., Joyce, N., Sheikh, S., & Gilbert Cote, N. (2011). Knowledge and the prediction of behavior: The role of information accuracy in the theory of planned behavior. *Basic and Applied Social Psychology, 33*(2), 101-117.

Akhter, S. (2003). *The relationships between teachers' control orientations, perceived teachers' control behaviour and students' motivation.* Unpublished Doctoral thesis, University of Auckland. Online. Retrieved from www.aare.edu.au/03pap/akh03346.pdfn

Anand, M. (2014). Corporal punishment in schools: Reflections from Delhi, India. *Practice, 26*(4), 225-238. DOI: 10.1080/09503153.2014.934798

Anderson, M. (2012). Another one of those days. *Educational Leadership, 70*. Retrieved from http://www.ascd.org/

Anguiana-Carrasco, C., MacCann, C., Geiger,M., Seybert, J. M., & Roberts, R. D. (2015). Development of a forced-choice measure of typical-performance emotional intelligence. *Journal of Psychoeducational Assessment, 33*(1), 83-97.

Angus, M., McDonald, T., Ormond, C., Rybarcyk, R., Taylor, A., & Winterton, A. (2009). *Trajectories of classroom behaviour and academic progress: A study of student engagement with learning. Mount Lawley.* Western Australia: Edith Cowan University.

Arcia, E. (2007). A comparison of elementary/K-8 and middle schools' suspension rates. *Urban Education, 42*(5), 456-469.

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology, 40*(4), 471-499.

Austin J. L, & Agar, G. (2005). Helping young children follow their teachers' directions: The utility of high probability command sequences in pre-k and kindergarten classrooms. *Education and Treatment of Children*, *28*(3), 222–236.

Babyak, M. A., & Green, S. B. (2010). Confirmatory factor analysis: An introduction for psychosomatic medicine researchers. *Psychosomatic Medicine, 72*(6), 587-597.

Balon,R., Franchini, G., Freeman,P., Hassenfield, I., Keshavan, M., & Yoder, E. (1999). Medical students' attitudes and views of psychiatry: 15 years later. *Academic Psychiatry*, 23, 30-36.

Barriga, A. Q., Doran, J. W., Newell, S. B., Morrison, E. M., Barbetti, V., & Robbins, B. D. (2002). Relationships between problem behaviors and academic achievement in adolescents: The unique role of attention problems. *Journal of Emotional and Behavioral disorders, 10*(4), 233-240.

Bartlett, M. S. (1954). A note on the multiplying factors for various χ^2 approximations. *Journal of the Royal Statistical Society. Series B* (Methodological), 296-298.

Bas, G. (2011). Teacher student control ideology and their burnout: Their correlation. *Australian Journal of Teacher Education, 36*(4), 84-94.

Benish, T. M., & Bramllet, R. K. (2011). Using social stories to decrease aggression and increase positive peer interactions in normally developing pre-school children. *Educational Psychology in Practice, 27*, 1-17.

Bond, T. G., & Fox, C. M. (2001). *Applying the Rasch model: Fundamental measurement in the human sciences*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

Boyac, S. D. B., & Atalay, N. (2016). A scale development for 21st century skills of primary school students: A validity and reliability study. *International Journal of Instruction, 9*(1), 133-148.

Brown, T. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford Press.

Cabrera-Nguyen, P. (2010). Author guidelines for reporting scale development and validation results in the Journal of the Society for Social Work and Research. *Journal of the Society for Social Work and Research, 1*(2), 99-103.

Carmines, E. G., &McIver, J. P. (1981). Analyzing models with unobservable variables. In G. W. Bohrnstedt & E. F. Borgatta (Eds.), *Social measurement: Current issues* (pp. 65–115). Beverly Hills, CA: Sage Publications.

Charles, C. M. (2011). *Building classroom discipline*. New York: Pearson Education, Inc.

Choo, W. Y., Walsh, K., Chinna, K., & Tey, N. P. (2013). Teacher reporting attitudes scale (TRAS) confirmatory and exploratory factor analyses with a Malaysian sample. *Journal of Interpersonal Violence, 28*(2), 231-253.

Clunies-Ross, P., E. Little, & M. Kienhuis. (2008). Self-reported and actual use of proactive and reactive classroom management strategies and their relationship with teacher stress and student behaviour. *Educational Psychology, 28*(6), 693-710.

Cook, B. G., & Cameron, D. L. (2010). Inclusive teachers' concern and rejections towards their students: Investigating the validity of ratings and comparing student groups. *Remedial and Special Education, 31*(2), 67-76.

Cummins, R. A., & Gullone, E. (2000, March). *Why we should not use 5-point Likert scales: The case for subjective quality of life measurement.* In Proceedings, second International Conference on Quality of Life in Cities (pp. 74-93).

DeVellis, R. F. (2011). *Scale development: Theory and applications* (3rd ed.). Washington DC: Sage Publication, Inc.

Dickey, D. (1996). Testing the fit of our models of psychological dynamics using confirmatory methods. In T. B. Greenwich (Ed.) *Advances in social science methodology* (pp. 219-227). CT: JAI Press.

Didaskalou, E. S., & Millward, A. J. (2001). Greek teachers' perspective on behaviour problems: Implication for policy makers and practitioners. *European Journal of Special Needs Education, 16*(3), 289-299.

Ding, M., Li,Y., Li, X., & Kulm, G. (2008). Chinese teachers' perceptions of students' classroom misbehaviour. *Educational Psychology, 28*(3), 305-324.

Durrant, J., & Ensom, R. (2012). Physical punishment of children: Lessons from 20 years of research. *Canadian Medical Association Journal, 184*(12), 1373–1377.

Eagle, A. H., & Chaiken, S. (1993). *The psychology of attitudes.* Fort Worth, TX: Hardcourt Brace Jovanovich.

Eagle, A. H., & Chaiken, S. (1998). Attitude structure and function. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 269-322). Boston: McGraw-Hill.

Erbas, D., Turan, Y., Aslan, Y. G., & Dunlap, G. (2010). Attributions for problem behaviour as described by Turkish teachers of special education. *Remedial and Special Education, 31*(2), 116-125.

Erickson, M. J., Stage, S. A., & Nelson, J. R. (2006). Naturalistic study of the behaviour of students with EBD referred for functional behavioural assessment. *Journal of Emotional and Behavioral Disorders, 14*(1), 31-40.

Esturgo-Deu, M. E., & Sala-Roca, J. (2010). Disruptive behaviour of students in primary education and emotional intelligence. *Teaching and Teacher Education, 26*(7), 830-837.

Evreklı, E., İnel, D., Balim, A. G., & Kesercıoğlu, T. (2010). A confirmatory factor analysis on the attitude scale of constructivist approach for science teachers. *Bulgarian Journal of Science & Education Policy, 4*(2), 185-201.

Feuerborn, L. L., Tyre, A. D., & King, J. P. (2015). The staff perceptions of behaviour and discipline survey: A tool to help achieve systematic change through schoolwide positive behaviour support. *Journal of Positive Behavior Interventions, 17*(2), 116-126.

Gazquez, J. J., Cangas, A. J., Padilla, D., Cano, A., & Perez-Moreno, P. J. (2005). Assessment by pupils, teachers and parents of school coexistence problem in Spain, France, Austria and Hungary: Global psychometric data. *International Journal Of Psychology and Psychological Therapy,* 5, 101-112.

Godwin, K. E., Almeda, M. V., Petroccia, M., Baker, R. S., & Fisher, A. V. (2013). Classroom activities and off-task behavior in elementary school children. *Cognitive Science Society,* 2428-2433. Retrieved from http://repository.cmu.edu/cgi/viewcontent.cgi?article=1813&context=psychology

Graham, L. J., Van Bergen, P., & Sweller, N. (2015). To educate you to be smart: Disaffected students and the purpose of school in the (not so clever) lucky country. *Journal of Education Policy*, *30*(2), 237-257.

Gregory, A., & Thompson, A. R. (2010). African American high school students and variability in behaviour across classroom. *Journal of Community Psychology,* 38(3), 386-402.

Gu, H., Lai, S., & Ye, R. (2011). A cross-cultural study of student problem behaviors in middle schools. *School Psychology International, 32*(1), 20-34.

Harrington, D. (2009). *Confirmatory factor analysis*. New York: Oxford University Press.

Henricsson, L., & Rydell, A. M. (2004). Elementary school children with behaviour problems: Teacher-child relation and self-perception. A prospective study. *Merrill-Palmer Quarterly, 50*(2), 111-138.

Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research. *Educational and Psychological Measurement, 66*(3), 393-416.

Horner, R. H., & McIntosh, K. (2016). Reducing coercion in schools: The impact of school-wide positive behavioral interventions and supports. In T. Dishion & J. Synder (Eds.), *The Oxford handbook of coercive relationship dynamics: Basic machanisms, developmental process, and intervention applications* (pp. 330-340). New York: Oxford University Press.

Hossain, S. (2013). A study of determining the relationship between academic achievement and problem behavior of urban secondary school students in Bangladesh. *The International Journal of Social Science, 8*(1), 1-10.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.

Infosurv (2006). *5-point vs. 6- point likert scales*. Retrieved from http://www.infosurv.com/wp-content/uploads/5-point-vs.-6-point-Likert-Scales.pdf

Jackson, D. L., Gillaspy Jr, J. A., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological methods, 14*(1), 6-23.

Jensen, B., Sandoval-Hernandez, A., Knoll, S., & Gonzalez, E. (2012). *The experience of new teachers*. Paris, France: OECD Publishing.

Jimerson, S. R., Ferguson, P., Whipple, A. D., Anderson, G. E., & Dalton, M. J. (2002). Exploring the association between grade retention and dropout: A longitudinal study examining socio-emotional, behavioural, and achievement characteristics of retained students. *The California School Psychologist, 7*(1), 51-62.

Johnson, B., Down, B., Le Cornu, R., Peters, J., Sullivan, A. M., Pearce, J., & Hunter, J. (2014). Promoting early career teacher resilience: A framework for understanding and acting. *Teachers and Teaching: Theory and Practice, 20*(5), 530-546. doi:1080/13540602.2014.937957

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39*(1), 31-36.

Kauffman, J. M. (2008). *Characteristics of emotional and behavioral disorders of children and youth* (8th ed.). Columbus, OH: Merrill.

Kokkinos, C. M., & Kargiotidis, A. (2014). Rating students' problem behaviour: The role of teachers' individual characteristics. *Educational Psychology*, 1-17.

Kokkinos, C. M., Panayiotou, G., & Davazoglou, A. M. (2004). Perceived seriousness of pupils' undesirable behaviours: The student teachers' perspective. *Educational Psychology, 24*(1), 109-120.

Koutrouba, K. (2013). Student misbehaviour in secondary education: Greek teachers' views and attitudes. *Educational Review*, *65*(1), 1-19.

Kuyini, A. B., & Desai, I. (2007). Principal and teachers' attitudes and knowledge of inclusive education as predictors of effective teaching practices in Ghana. *Journal of Research in Special Educational Needs, 7*(2), 104-113.

Lane, K. L., Barton-Arwood, S. M., Nelson, J. R., & Wehby, J. (2008). Academic performance of students with emotional and behavioral disorders served in a self-contained setting. *Journal of Behavioral Education 17*(1), 43–62.

Lassen, S. R., Steele, M. M., & Sailor, W. (2006). The relationship of school-wide positive behaviour support to academic achievement in an urban middle school. *Psychology in the Schools, 43*(6), 701-712.

LeBlanc, L., Swisher, R., Vitaro, F., & Tremblay, R. E. (2007). School social climate and teachers' perceptions of classroom behavior problems: A 10-year longitudinal and multilevel study. *Social Psychology of Education, 10*(4), 429-442.

Lewis, R., Romi, S., Qui, X., & Katz, Y. J. (2005). Teachers' classroom discipline and student misbehaviour in Australia, China and Israel. *Teaching and Teacher Education, 21*(6), 729-741.

Lu, X., & Yeo, K. J. (2015). Psychometric properties of the Internet Addiction Test in a sample of Malaysian undergraduate students. *Psicología Educativa, 21*(1), 17-25.

MacFarlane, K., & Woolfson, L. M. (2013).Teacher attitudes and behavior toward the inclusion of children with social, emotional and behavioural difficulties in mainstream schools: An application of the theory of planned behaviour. *Teaching and Teacher Education, 29*, 46-52.

Malak, M. S., Deppeler, M. J., & Sharma, U. (2014). Bangladeshi teachers' perceptions about student behaviour in primary schools. *The International Journal on School Disaffection, 11*(1), 59-78.

Malak, M. S., Sharma, U. & Deppeler, J. M. (2015). 'Can I really teach without my *magic cane*?*' Teachers' responses to the banning of corporal punishment. *International Journal of Inclusive Education, 19*(12), 1325-1341.

Marais, P., & Meier, C. (2010). Disruptive behaviour in the Foundation Phase of schooling. *South African Journal of Education*, *30*(1), 41-57.

Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. *Psychological Bulletin, 97*(3), 562.

Martin, A.J., Linfoot, K., & Stephenson, J. (1999). How teachers respond to concerns about misbehaviours in their classroom. *Psychology in the Schools, 36*, 347–358.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*(1), 397-422.

McInerney, P. (2009). Toward a critical pedagogy of engagement for alienated youth: Insights from Freire and school-based research. *Critical Studies in Education, 50*(1), 23-35.

McIntosh, K., Flannery, K. B., Sugai, G., Braun, D. H., & Cochrane, K. L. (2008). Relationships between academics and problem behavior in the transition from middle school to high school. *Journal of Positive Behavior Interventions*, *10*(4), 243-255.

Miller, A., Ferguson, E., & Byrne, I. (2000). Pupil's causal attributions for difficult classroom behaviour. *British Journal of Educational Psychology, 70*(1), 85-96.

Ministry of Education. (2010). *The ending of corporal punishment on students in educational institutions*. Dhaka: Legal Cell.

Monsen, J. J., Ewing, D. L., & Kwoka, M. (2014). Teachers'attitudes towards inclusion, perceived adequacy of support and classroom learning environment. *Learning Environment Research, 17*(2), 113-126.

Nunnally, J.C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

Nuttall,C., & Woods, K. (2013). Effective intervention for school refusal behaviour, *Educational Psychology in Practice, 29*(4), 347-366.

OECD. (2012). *What can be done to support new teachers?* Retrieved from http://www.oecd.org/edu/preschoolandschool/What%20Can%20Be%20Done%20to%20Support%20New%20Teachers.pdf

Oncu, E. (2013).The psychometric properties of the physical education lesson attitude scale for preservice classroom teachers. *Australian Journal of Teacher Education, 38*(1), 97-114.

Pallant, J. F. (2013). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (5th ed.). Maidenhead, England: McGraw Hill.

Poulou, M., & Norwich, B. (2000a). Teachers' casual attributions, cognitive, emotional and behavioral responses to students with emotional and behavior difficulties. *British Journal of Educational Psychology*, 70, 559–581.

Poulou, M., & Norwich, B. (2000b). Teachers' perceptions of students with emotional and behavioural difficulties: Severity and prevalence. *European Journal of Special Needs Education, 15*(2), 171-187.

Romi, S., & Freund, M. (1999). Teachers', students' and parents' attitudes towards disruptive behaviour problems in High School: a case study. *Educational Psychology, 19*(1), 53-70.

Sato, T., & Hodge, S. R. (2009). Japanese physical educators' beliefs on teaching student with disabilities at urban high schools. *Asia Pacific Journal of Education, 29*(2), 159-177.

Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs, 12*(1), 12-21.

Shen, J., Zhang, N., Zhang, C., Caldarella, P., Richardson, M. J., & Shatzer, R. H. (2009). Chinese elementary school teachers' perceptions of students' classroom behaviour problems. *Educational Psychology, 29*(2), 187-201

Şimşek, Ö. F. (2007). *Yapısal eşitlik modellemesine giriş: Temel ilkeler ve LISREL uygulamaları*. Ankara: Ekinoks Basın Yayın Dağıtım Ltd Şti.

Stanovich, J. P., & Jordan, A. (1998). Canadian teachers' and principals' beliefs about inclusive education as predictors of effectors teaching in heterogeneous classrooms. *The Elementary School Journal, 98*(3), 221-238.

Stevens, J. (2001). *Applied multivariate statistics for the social science.* Mahwah, New Jersey: Erlbaum.

Stuart, H., Sartorius, N., & Liinamaa, T. (2014). The images of psychiatry scale: Development, factor structure, and reliability. *BMC psychiatry, 14*(1), 1-9.

Sugai, G., & Horner, R. H. (2009). Defining and describing school-wide positive behavior support. In W. Sailor, G. Dunlap, G. Sugai, & R. Horner (Eds.), *Handbook of positive behavior supports* (pp. 307-326). New York: Springer.

Sugai, G., & Horner, R. H. (2010). School-wide positive behavior support: Establishing a continuum of evidence based practices. *Journal of Evidence-Based Practices for Schools, 11*(1), 62-83.

Sullivan, A. L., Norman, E. R. V., & Klingbeil, D. A. (2014). Exclusionary discipline of students with disabilities: Student and school characteristics predicting suspension. *Remedial and Special Education, 35*(4), 199-210.

Sullivan, A. M. (2009). How can teachers enable students to become empowered? *Curriculum Perspectives, 29*(1), 53-63.

Sullivan, A. M., Johnson, B., Owens, L., & Conway, R. (2014). Punish them or engage them? Teachers' views of unproductive student behaviours in the classroom. *Australian Journal of Teacher Education, 39*(6), 43-56.

Sun, R.C.F., & Shek, D.T.L. (2012). Student classroom misbehavior: An exploratory study based on teachers' perceptions. *The Scientific World Journal*, 1-8.

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

Tavakol, S., Dennick, R., & Tavakol, M. (2011). Empathy in UK medical students: Differences by gender, medical year and specialty interest. *Education for Primary Care, 22*(5), 297-303.

Ugulu, I., Shahin, M., & Baslar, S. (2013). High school students' environmental attitude: Scale development and validation. *International Journal of Education and Science, 5*(4), 415-424.

UNICEF (2008). *Opinions of children of Bangladesh on corporal punishment: Children's opinion poll 2008.* Retrieved from http://www.unicef.org/bangladesh/Opinion_Poll_2009.pdf

Van Bergen, P., Graham, L. J., Sweller, N., & Dodd, H. F. (2015). The psychology of containment: (Mis) representing emotional and behavioural difficulties in Australian schools. *Emotional and Behavioural Difficulties, 20*(1), 64-81.

Veiga, F. (2008). Disruptive behaviour scale professed by students (DBS-PS): Development and validation. *International Journal of Psychology and Psychological Therapy*, *8*(2), 203-216.

Wilczenski, F. L. (1992). Measuring attitudes towards inclusive education. *Psychology in the Schools, 29*(1), 306–312.

Wishart, D., & Jahnukainen, M. (2010). Difficulties associated with the coding and categorization of students with emotional and behavioural disabilities in Alberta. *Emotional and Behavioural Difficulties*, *15*(3), 181-187.

Worthington, R. I., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist, 34*, 806-838.

Yan, Z., & Sin, K. F. (2014). Inclusive education: Teachers' intentions and behaviour analysed from the viewpoint of the theory of planned behaviour. *International Journal of Inclusive Education*, *18*(1), 72-85.

Yuen, M., & Westwood, P. (2001). Integrating students with special needs in Honk Kong secondary schools: Teachers' attitudes and their possible relationship to guidance training. *International Journal of Special Education, 16*(2) 69-84.