

Learning a musical instrument: the case for parental support

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The aims of this research were to identify the ways in which parents may most constructively support their children's musical development, and to ascertain whether styles of parent–teacher and parent–pupil interaction would influence the extent to which parents engage in different types of supportive behaviours. A model of parent involvement as comprising behavioural support, cognitive/intellectual support and personal support was applied to a sample of 337 parent–pupil–teacher trios, in the context of individual violin instruction. A typological approach was taken; using a quantitative survey that measured interpersonal interaction behaviours, as well as learning outcomes, six distinct categories of parent–pupil–teacher interaction types in instrumental learning were identified. The three categories of parental support were compared across these interaction types. The extent to which parents engaged in various types of support was found to vary according to interpersonal relating style, and the interaction types in turn were found to impact on learning outcomes. Learning outcomes, including enjoyment of music, motivation, self-esteem, self-efficacy and personal satisfaction with music lessons, were found to be enhanced when parents: (1) elicited their children's views regarding appropriate parental involvement, (2) negotiated with their children over practising issues, within parameters set by the teacher, (3) provided a structured home environment for practice, (4) took an interest in promoting good teacher–pupil rapport, (5) communicated with the teacher in relation to the child's progress and (6) remained as a supremely interested audience.

Keywords: parental support; interpersonal interaction; learning outcomes

Introduction

Powerful images of musicians' parents have been immortalised in accounts of the lives of many iconic figures in Western music. Parents have been depicted as exerting enormous influence on their children's musical development, as in the cases of *Mozart* (Solomon 1994), *Clara Schumann* (Galloway 2002), and more recently, Menuhin (1977) and *Jacqueline du Pré* (Easton 1989), to name but a few. At the other end of the spectrum are exceptional accounts of musicians who attained high levels of expertise and musical intelligence without parental support, as in the case of Louis Armstrong (Collier 1983). Pruett (2003) invites us to conjure up our 'most enduring stereotype of the musician's parent. Then consider the opposite pole. Next, reflect on the intermediaries'. The purpose of this paper is to respond to Pruett's challenge by exploring the role of parental support amongst

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these ‘intermediaries’. Evidence from a study of interpersonal relationships amongst pupils of the violin, their teachers and parents will be discussed. A typological approach will be taken, with the interface between three categories of parental support and children’s musical development discussed in relation to six distinct types of parent–pupil–teacher partnerships in instrumental learning.

Background

Years of educational research, theory and wisdom sustain the view that parents play a key role in their children’s academic achievement and motivation (Baker 1997; Grolnick et al. 2002). In the domain of music, and specifically relating to the acquisition of expertise on musical instruments, the question of how families can best support their children’s interest has been a preoccupation of many researchers. Positive relationships between musical home environments and the musical responsiveness of children from these homes have been reported (Kirkpatrick 1962; Shelton 1965; Wermuth 1971), and these findings have been elucidated by more recent research that has found children’s musical development to be influenced by parental musical background (Bloom and Sosniak 1981; Klinedinst 1991), socioeconomic background (Klinedinst 1991), parent support for practice and lessons (Brokaw 1982; Davidson, Howe, and Sloboda 1995; Doan 1973; Sloboda and Howe 1991; Zdzinski 1992), parental goals, aspirations and values (Addison 1990; Davidson and Scott 1999; Sosniak 1985), parental self-efficacy (Creech 2001), family interaction patterns (Davidson and Borthwick 2002) and parent–teacher–pupil relationships (Creech 2009; Hallam 1998; Manturzewska 1990). This growing body of research suggests that the ways parents might support their children in persisting with learning musical instruments and developing musical expertise are diverse and complex.

The advent of the Japanese Suzuki method of violin teaching, which came to the West during the 1960s holding as a central tenet the importance of the parent as ‘home teacher’, played a powerful role in highlighting the issue of parent participation in the realm of children’s instrumental learning. The Suzuki method, however, cannot claim sole ownership of the concept of parent–teacher–pupil partnership in instrumental learning; it has been demonstrated through biographical evidence (Lewis and Saryk 2000; Lochner 1950; Menuhin 1977; Milstein and Volkov 1990; Stern and Potok 1999; Weschler-Vered 1986) that parents, across cultures and historical time frames, have chosen to involve themselves integrally in the process of their children’s instrumental learning. Empirical studies into the role of parents in instrumental learning (Brokaw 1982; Creech 2001, 2006; Davidson et al. 1996; Doan 1973; Sloboda and Howe 1992; Sosniak 1985) have indicated that parental involvement in their children’s musical development is not unusual; parents from diverse backgrounds and with children learning by a range of teaching methods have supported their children in pursuit of musical excellence. Furthermore, recent research investigating early musical influences in the lives of undergraduate music students and professional musicians has demonstrated that musicians across instrument groups and musical genres consistently cite their parents as being significant influences in their musical development (Welch et al. 2006).

Types of parental involvement

Parent involvement has been defined as ‘the dedication of resources by the parent to the child within a given domain’ (Grolnick 1997). Grolnick conceptualises parent involvement as comprising behavioural support, cognitive/intellectual support and personal support.

Behavioural support

Overt manifestations of parental support, including participatory activities and modelling the importance of the subject area, are included under the umbrella of *behavioural support* (Grolnick 1994). In the domain of instrumental learning parents may offer behavioural support in the form of monitoring and participating in practice, attending lessons and adopting the role of home teacher.

In an experimental study involving beginning band students Brokaw (1982) found that:

while it was not surprising to discover a strong relationship between the amount of time a student spends practising and the student’s achievement in performance,... the amount of time spent by parents in supervising home practice is even a better predictor of successful achievement in the initial stages of development (97).

Previously, Doan (1973) had produced similar results, in his study of seventh and eighth grade violin students. Amongst a number of factors, parental supervision of practice and parent attendance at the child’s concerts were identified by Doan as being significantly correlated to student achievement on the violin (Doan 1973, 79).

Other research has helped to elucidate Doan and Brokaw’s findings. In a study of American concert pianists, Sosniak (1985) found that although many of the parents of her cohort had little musical background, their role of stimulating and supporting practice had been vital in sustaining their children’s growth in musical competence. Sloboda and Howe (1991) concurred with Sosniak when they found that high achieving students in a specialist music school had benefited from the support and encouragement of parents who, with little formal knowledge of music, took responsibility for helping with home practice and for encouraging their children to gain and maintain good practice habits. Davidson, Howe, and Sloboda (1995) demonstrated that parental commitment to assisting, encouraging and supporting the child in the early stages of learning was a more important predictor of successful musical outcomes than any specialist knowledge on the part of the parent. ‘Without the positive involvement of the parent in the process, the highest levels of achievement are likely to remain unattainable’ (Davidson, Howe, and Sloboda 1995, 44).

In a study involving teenage woodwind players Zdzinski (1992) demonstrated that parental involvement’s effects upon musical achievement may differ with student age. The ages of 12–18 have been described as the mid-life crisis of young musicians, when the need to acquire or disown the interest in music becomes paramount (Bamberger 1987). This is the point at which behavioural support may become less helpful, while an increasing emphasis on cognitive/intellectual support and personal support (see following sections) may become more valuable to the developing musician.

Cognitive/intellectual support

Exposing the child to cognitively stimulating activities and resources and engaging in intellectually domain-specific activities in the home have been found to comprise an important area of parental support (Grolnick 1994). Kulieke and Olszewski-Kubilius (1989) demonstrated that families of gifted children engaged in this form of support by espousing values relating to persistence and achievement in the subject area and by facilitating the progress of their children along particular domain-specific paths.

According to Csikszentmihalyi, Rathunde, and Whalen (1993, 174) high levels of cognitive/intellectual support and challenge have a positive effect on teenagers across all talent areas. Parents of these accomplished children typically devote great amounts of time and energy to meeting the needs of their children, set high standards, encourage productive use of time, provide challenging opportunities, make sure lessons and materials are available and set aside areas of the home where child can work privately (Csikszentmihalyi, Rathunde, and Whalen 1993).

In the context of instrumental learning parents offering this type of support provide the opportunities and materials that will assist the development of their children's musical intelligence, including arranging instrumental lessons, attending professional concerts with their children, listening to and discussing music in the home, encouraging participation in extra-curricular musical activities and providing musical resources.

Personal support

A growing body of evidence demonstrates that personal support represents a key area of parent involvement associated with sustaining a child's musical well-being (Creech 2009; Pruett 2003). Education researchers have found that children in all age groups, including secondary school students, value their parents' help, interest and support, and that parental influence on children's behaviour remains extensive in adolescence (Brown et al. 1993; Crozier 1999). However, Crozier emphasises the need for pupils to have some control over parents' involvement, highlighting the importance of negotiation rather than imposition of psychological control characterised by intrusive or manipulative controlling/surveillance measures (Baumrind 2005; Crozier 1999). Crozier here touches on the issue, so stark in adolescence, of the delicate balance between dimensions of 'agency' (the drive for independence) and 'communion' (the need to be engaged with others), which has been identified both in the literature relating to parenting style (Baumrind 1989; Brown et al. 1993; Noack 1998) and that concerned with interpersonal style (Van Tartwijk, Brekelmans, and Wubbels 1998) and relationships (Birtchnell 1993; Noller, Feeney, and Peterson 2001; Tubbs 1984). Researchers and theorists argue that 'people function most cohesively and confidently in contexts in which they experience significant others as being both caring and autonomy-supportive' (Noack 1998, 227); achieving a successful balance in this respect may be a key factor in providing personal support for children's musical development (Creech 2009).

Considering the potential for conflict amongst those involved with musical instrument learning, particularly over practice, musical preferences and time commitment expectations, it is perhaps rather surprising that little research to date has been

directly concerned with this issue. The emotional demands made on parents by their musical children can be considerable. The parent–child relationship is particularly vulnerable when adolescents reach the aforementioned musical mid-life crisis (Bamberger 1987), and as young musicians become increasingly susceptible to performance anxiety and the fear of negative judgement (Robson 1987). As noted above, behavioural and cognitive/intellectual support encourages children to follow domain-specific paths (Kulieke and Olszewski-Kubilius 1989). Whether or not adolescents are likely to incorporate the parental orientation and persevere on these paths has been found by Smith (1991) to be dependent on parent–adolescent communication regarding educational aims, together with perceived agreement between the two parents.

Pruett identifies transcultural qualities of ‘good enough parenting’ (Pruett 2003, 155), amongst which the challenges of personal support are encapsulated. Included on his list are sensitivity to children and their ever-changing needs, the ability to make children feel loved, adored and enjoyed, devotion to sustaining strong values, affirmation of the child’s uniqueness while expecting competence, and sustaining an abiding presence through thick and thin. Research in the domain of music supports the enduring importance of these qualities, suggesting that pupils function best when they perceive the adults as both caring and supportive of autonomy and when they are able to engage in on-going mutual interaction with adults who continue to have a stake in their development and to act as their advocate (Creech 2006; Manturzewska 1990; Noack 1998).

Parent–teacher–pupil interaction: a theoretical framework

Control and responsiveness

Baumrind (2005) suggests that the extent to which parents engage in supportive behaviour is associated with interpersonal qualities she labels as ‘responsiveness’ and ‘demandingness’. This model of interpersonal relating style is reflected in Birtchnell’s relating theory (2001) whereby interaction is conceptualised on a horizontal closeness–distance axis (responsiveness) intersecting with a vertical upperness–lowerness axis (control). Birtchnell does not privilege different positions on his interpersonal model, pointing out that while closeness holds people together, distance provides the space to become autonomous, and while upperness allows the opportunity for people to exert influence on others, lowerness enables individuals to benefit from the care and leadership of others. The models proposed by Baumrind and Birtchnell resemble Leary’s (1957) model for interpersonal interaction comprising control and responsiveness that served as the basis for the typology of interaction types, presented in this paper.

Methodology

Survey

The views of parents, pupils and teachers were elicited via the ‘Survey of Parents’ Views’, ‘Survey of Pupil Attitudes to Learning the Violin’ and the ‘Survey of Teacher Attitudes’ developed for this investigation from existing research instruments that variously purport to measure: (1) children’s satisfaction with instrumental lessons

(Rife et al. 2001), (2) parent involvement in children's instrumental learning (Doan 1973) and (3) interpersonal qualities of teachers (Wubbels, Creton, and Levy 1993).

Wubbels et al.'s (1993) questionnaire on teacher interaction (QTI) provided a model of interpersonal behaviour developed from Leary (1957), who conceptualised all interpersonal behaviour around the two axes of responsiveness and control. Based on the QTI, the surveys of parents, pupils and teachers developed for this research included five-point Likert scales measuring these interpersonal mechanisms as they were operationalised within parent-pupil and parent-teacher dyads.

The overall purpose of the survey was to establish a measurement of how the interpersonal dimensions of control and responsiveness influenced learning and teaching outcomes (Creech 2001). Hence, in addition to the groups of statements relating to scales for interpersonal mechanisms (control and responsiveness) the survey included scales for outcomes that were defined as professional/personal satisfaction, self-efficacy and (for parents) behavioural, cognitive/intellectual and personal involvement. For pupils additional measures were included for enjoyment of music, satisfaction with lessons, self-esteem, motivation and attainment.

This paper will specifically examine the measures of parental involvement and pupil outcomes in relation how the parent-pupil-teacher trios clustered according to their scores for control and responsiveness.

Survey distribution

Two hundred and sixty-three violin teachers were surveyed. The teachers were all members of at least one of the professional organisations including the British branch of the European String Teacher's Association (ESTA), the Incorporated Society of Musicians (ISM) and the British Suzuki Institute (BSI), and postal return questionnaires were distributed as inserts with the official newsletters of these professional organisations. Respondents from around Britain were aged from 20 to 75, their years of teaching experience ranged from 1 to over 30 and they taught in maintained schools, independent schools, private studios, specialist music schools, music colleges and university music departments. Their pupils ranged from beginner to post-grade eight, and from age five to adult. Eighty of these violin teachers distributed surveys to parents and pupils; of these 80 teachers, 68 (85%) were female and 12 (15%) were male.

Three hundred and fifty-two parents were surveyed. Two hundred and ninety-one were female while 47 were male (14 unknown). The majority (217) of parent respondents were aged 40-49, while 68 were aged 30-39 and just 52 were aged 50 or over. Ninety-three respondents claimed to have no musical background, while 144 parents had learnt an instrument as a child. Eleven parents had attended Music College and 16 were professional musicians.

Three hundred and thirty-seven children (all of whom studied the violin) of the parent participants completed the survey; 251 were female and 76 were male (10 unknown sex). The age range was 6-18, and the sample included those who had just begun learning ranging up to those who had been learning for in excess of six years. The average musical attainment level was Associated Board of the Royal Schools of Music Grade 4. The mean number of years studied was five, while the mean pupil age was 12. Sixty per cent of pupils learnt by 'no particular

Table 1. Behavioural support.

Behavioural support	Mean ^a	SD
I arrange for my child to have individual violin lessons	4.28	1.51
I attend my child's violin lessons	3.27	1.80
I assist with my child's practising	3.46	1.32
I make sure that my child does daily practise	3.49	1.29
I listen to my child's violin practise	3.71	1.09
I provide transport to music lessons and rehearsals	4.14	1.51
I offer constructive criticism when my child practises the violin	3.69	1.20
I offer material rewards for achievement on the violin	2.41	1.31

^aMinimum score = 1; maximum score = 5.

method', 19% learnt by the Suzuki method and the remainder learnt by a number of other specified teaching methods.

Findings

Types of parental support

Behavioural support

Monitoring, supporting and assisting with lessons and practice, providing feedback during practice sessions and attending instrumental lessons were included on the scale for behavioural support (Table 1). The results indicated that generally parents did provide relatively high levels of behavioural support and that the greatest amount of ambivalence amongst participants was in relation to offering material rewards for achievement on the violin. The overall mean score for the scale was $M = 3.6$, $SD = 0.81$.

Table 2. Cognitive/intellectual support.

Cognitive/intellectual support	Mean ^a	SD
I attend my child's concerts.	4.45	1.21
I make sure my child has regular rehearsals with a piano accompanist.	2.85	1.45
I send my child to summer music courses.	2.53	1.69
I take my child to professional concerts.	2.71	1.05
I encourage my child to participate in extra-curricular musical activities.	3.89	1.16
I maintain a space in our home which is conducive for practising.	4.26	1.35
I provide a quality instrument for my child.	4.42	1.32
I ensure that my child's instrument is maintained properly.	4.37	1.24
My child has access to listening equipment in our home.	4.52	1.24
I arrange for lessons on a second instrument for my child.	3.78	1.87

^aMinimum score = 1; maximum score = 5.

Table 3. Personal support.

Personal support	Mean	SD
My life has changed because my child learns the violin.	3.21	1.12
I am prepared to revise my personal expectations, when my child has different goals from my own.	3.91	0.71
I am interested in knowing what my child hopes to achieve, through violin study.	3.96	0.69
I am aware when my child does not understand the teacher's directions.	3.67	0.93
I reward my child's success with praise.	4.40	1.20

Cognitive/intellectual support

Attending concerts, providing opportunities for extra-curricular musical activities, providing resources for musical studies and supporting learning in the home were included in the scale for cognitive/intellectual support (Table 2). The responses indicated that parents in this sample did prioritise providing resources for learning in the home, encouraged extra-curricular musical activities and supported their children by attending their concerts. The least amount of agreement was in relation to those statements that were concerned with widening their involvement to include arranging regular rehearsals with accompanists, attending professional concerts and sending the children to summer music courses. Overall the mean score for this scale was approximately equal to that for behavioural support ($M = 3.7$, $SD = 0.74$).

Personal support

The scale for personal support included variables that indicated parents were interested in their children's goals and views, rewarded their children with praise and were aware of dynamics between the child and the teacher (Table 3). The overall mean score for the scale for parental support was slightly higher than for the other types of support and there was less variability amongst the participants ($M = 3.8$, $SD = 0.49$).

Parent–pupil–teacher interaction: a typological approach

The question of whether the type or extent of parental involvement in the context of instrumental learning would differ according to 'interaction type' (based on measures of control and responsiveness) was investigated empirically in this study of violin pupils, their parents and teachers.

Cluster analysis

A cluster analysis, also known as taxonomy analysis was calculated, in order to ascertain whether the 337 parent–pupil–teacher trios in this sample would group into homogeneous subgroups of cases based on their scores for the measures of control and responsiveness (Romesburg 2004). Cluster analysis refers to a number of mathematical techniques that can be used for determining how cases group together, maximising between-group variation and minimising within-group variation. Of the three main

Table 4. Number of cases in each cluster.

Cluster	Number of cases (total = 337)	Mean pupil age (years)
1	40	10.7
2	54	11.3
3	89	11.6
4	67	10.7
5	38	10.4
6	49	12.2

approaches to cluster analysis, *k* means was the method deemed appropriate for this analysis because the sample size was greater than 200 and less than 1000 (Everitt, Landau, and Leese 2001). The *k* means clustering involves the researcher specifying in advance the number of clusters. There is no statistical criterion for making this choice (Cramer 2003), and in this analysis a six-cluster solution was selected because it generated clusters that were all reasonable in size but were also all reasonably distinct from one another (Table 4). Furthermore, there were no significant differences in the mean pupil age, amongst the clusters, suggesting that the different interaction types were not age dependent.

Predictors of interaction types: control and responsiveness

Scores for underlying dimensions of the control and responsiveness scales (obtained with factor analyses) were entered as predictors of the clusters (for a detailed discussion of how the control and responsiveness factors were obtained and a description of each factor please see Creech 2006).

Analysis of variance *F* statistics provided some information about the relative importance of each control and responsiveness factor in determining the separation of the groups. These statistics are descriptive only, because the clusters were chosen to maximise the differences among cases in different clusters and consequently the observed significance cannot be interpreted as tests of the hypothesis that the cluster means are equal. Table 5 shows the final cluster centres' mean values for each control and responsiveness factor, given in the order of importance suggested by the *F* statistics. The shaded variables in Table 5 are those that produced *F* values greater than 20 and, therefore, possibly contributed the most to the separation of the clusters.

Interpersonal dimensions within the parent–teacher relationship that contributed most to the separation of the clusters were parents' perception of teacher leadership and the degree to which parents felt they could approach teachers and contribute to the learning partnership. Within the parent–pupil relationship it was pupil receptiveness to parental support or conversely pupil autonomy that contributed to differentiation between clusters, while within the pupil–teacher relationship pupil–teacher accord and pupil influence were important differentiating variables.

The table of Euclidean distances (Table 6) between the final cluster centres demonstrates that the biggest differences lay between Clusters 1 and 2 and between Clusters 5 and 6, while the greatest similarity was found between Clusters 3 and 5.

Table 5. Final cluster centres.

		1	2	3	4	5	6
		Solo leader	Dominant duo	Dynamic duo	Double duo	Discordant trio	Harmonious trio
	Relative importance for separation of the clusters (ANOVA)						
Perceived teacher leadership (parent control factor 1)	$F = 52.45_{(323)}, p < 0.0001$	0.418	0.474	-0.282	0.355	-1.570	0.510
Pupil-teacher accord (pupil responsiveness factor 1)	$F = 38.42_{(303)}, p < 0.0001$	-1.105	0.018	0.144	0.494	-1.048	0.726
Pupil-parent autonomy (pupil control factor 3)	$F = 36.52_{(313)}, p < 0.0001$	-0.260	-0.380	0.962	-0.690	-0.144	0.002
Receptive to parental support (pupil responsiveness factor 2)	$F = 30.89_{(303)}, p < 0.0001$	0.682	-0.055	-0.862	0.586	0.305	0.114
Intimidation (parent responsiveness factor 2)	$F = 28.37_{(314)}, p < 0.0001$	0.705	-0.433	0.013	-0.109	1.051	-0.772
Parent isolation (parent control factor 3)	$F = 28.29_{(323)}, p < 0.0001$	1.382	-0.517	-0.087	0.005	0.142	-0.488
Pupil-teacher influence (pupil control factor 2)	$F = 25.00_{(313)}, p < 0.0001$	-0.407	0.383	-0.081	0.312	-1.235	0.568
Approachability (parent responsiveness factor 1)	$F = 21.40_{(314)}, p < 0.0001$	-0.308	0.481	-0.342	0.828	-0.561	-0.230
Parent preponderance (parent control factor 5)	$F = 17.28_{(323)}, p < 0.0001$	0.320	0.675	0.059	-0.804	0.022	-0.064
Pupil-teacher reticence (pupil responsiveness factor 3)	$F = 14.75_{(303)}, p < 0.0001$	0.346	-0.781	0.410	-0.044	0.366	-0.363
Communication (parent control factor 2)	$F = 14.11_{(323)}, p < 0.0001$	-0.284	0.257	-0.425	0.735	-0.034	-0.237
Parental ambition (parent control factor 4)	$F = 13.91_{(323)}, p < 0.0001$	0.322	-0.059	-0.442	-0.210	0.011	0.841
Pupil-teacher deference (pupil control factor 1)	$F = 13.55_{(313)}, p < 0.0001$	1.067	-0.317	-0.314	0.011	0.034	-0.005
Impatience (teacher control factor 3)	$F = 13.07_{(110)}, p < 0.0001$	1.209	-1.309	0.137	0.219	0.332	-0.328
Commitment (teacher control factor 2)	$F = 11.17_{(110)}, p < 0.0001$	0.842	0.365	-0.230	-0.411	0.015	1.238

Table 5 (Continued).

		1	2	3	4	5	6
	Relative importance for separation of the clusters (ANOVA)	Solo leader	Dominant duo	Dynamic duo	Double duo	Discordant trio	Harmonious trio
Acquiescence (parent responsiveness factor 3)	$F = 10.72_{(314)}, p < 0.0001$	0.769	0.265	-0.332	-0.153	-0.422	0.315
Receptiveness to new ideas (teacher responsiveness factor 2)	$F = 10.00_{(111)}, p < 0.0001$	-0.499	0.714	0.273	0.287	0.038	-1.015
Confidence (teacher control factor 4)	$F = 9.77_{(110)}, p < 0.0001$	-0.637	0.952	0.060	-0.110	-0.097	-0.931
Reciprocity (parent responsiveness factor 3)	$F = 8.69_{(314)}, p < 0.0001$	0.401	-0.161	-0.390	0.283	-0.285	0.467
Sensitivity to pupils (teacher responsiveness factor 1)	$F = 5.00_{(111)}, p < 0.0001$	-0.373	0.887	0.102	-0.121	-0.326	-0.270
Communication skills (teacher responsiveness factor 4)	$F = 4.84_{(111)}, p < 0.0001$	-1.343	0.002	-0.288	-0.558	-0.105	0.010
Leadership (teacher control factor 1)	$F = 4.69_{(111)}, p = 0.001$	0.620	0.393	-0.027	0.490	-0.448	-0.394
Interest in views of others (teacher responsiveness factor 3)	$F = 1.34_{(111)}, p = 0.232$	-0.057	-0.002	0.221	0.020	0.216	-0.488

Table 6. Euclidean distances between final cluster centres.

Cluster	1	2	3	4	5	6
1		5.128	4.297	3.998	3.808	4.312
2	5.128		3.403	3.209	4.571	3.749
3	4.297	3.403		3.213	3.048	3.698
4	3.998	3.209	3.213		3.931	3.517
5	3.808	4.571	3.048	3.931		4.608
6	4.312	3.749	3.698	3.517	4.608	

A model (see Figure 1) representing these six types of learning partnerships demonstrates that Clusters 1, 2 and 3 may be conceptualised as primary dyad plus a third party, while Cluster 4 is represented as two primary dyads connected by one common member. Cluster 5 is characterised by very little communication between any two of the three individuals, while Cluster 6 is characterised by reciprocity amongst all three participants.

Comparison of the clusters

Parental support amongst the clusters

Analyses of variance were calculated in order to compare the ‘interaction clusters’ on the basis of parent behavioural, cognitive/intellectual and personal support, as well

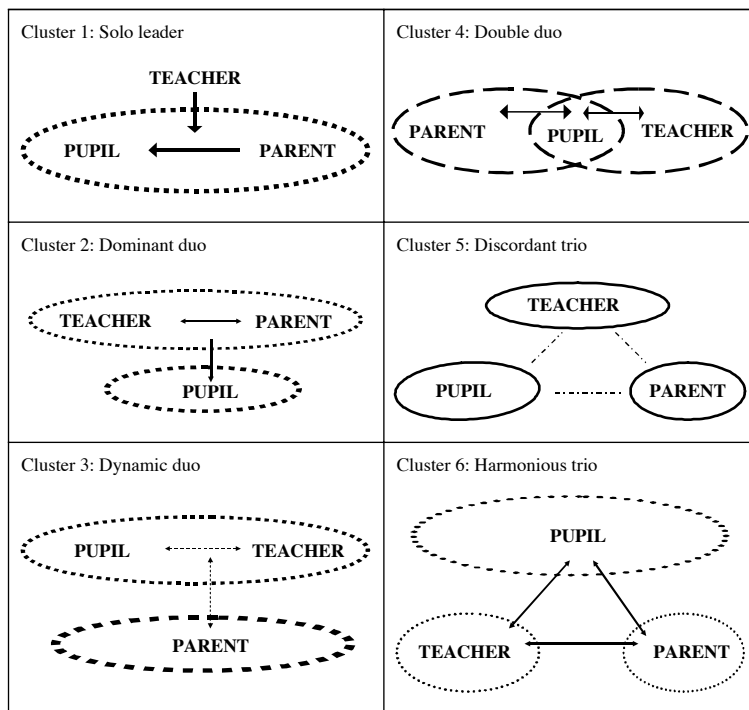


Figure 1. Parent–pupil–teacher interaction types.

Table 7. Mean scores^a and standard deviations for parent support, amongst the six clusters (SD in brackets).

Cluster	Behavioural support	Cognitive/intellectual support	Personal support
Solo leader	3.91 (0.75)	3.91 (0.75)	4.03 (0.34)
Dominant duo	3.87 (0.62)	4.00 (0.47)	3.90 (0.49)
Dynamic duo	3.30 (0.84)	3.45 (0.69)	3.62 (0.44)
Double duo	3.50 (0.87)	3.61 (0.79)	3.90 (0.51)
Discordant trio	3.35 (0.70)	3.38 (0.78)	3.63 (0.49)
Harmonious trio	3.62 (0.71)	3.74 (0.72)	4.02 (0.41)

^aMinimum = 1; maximum = 5.

as pupil learning outcomes. Significant differences were found between the parents of each cluster, with respect to the extent to which they engaged in behavioural support ($F=5.85_{(5)}$, $p < 0.0001$), cognitive/intellectual support ($F=6.15_{(5)}$, $p < 0.0001$) and personal support ($F=9.44_{(5)}$, $p < 0.0001$) they were most likely to engage in. Parents in Clusters 3 and 5, characterised by a distant and powerless parent–teacher relation, offered the least amount of support, overall. Those occupying Cluster 1, where the parent takes responsibility for ensuring that parent and pupil together follow the directive teacher, were found to offer the most behavioural and personal support. The highest levels of cognitive/intellectual support were offered by parents occupying Cluster 2, characterised by a parent who adopts a predominant and controlling role in relation to both pupil and teacher. Cluster 6 parents engaged in higher levels of personal support than either behavioural or cognitive/intellectual support (Table 7).

Pupil outcomes amongst the clusters

Analysis of variance revealed statistically significant differences ($p < 0.01$) between clusters with respect to all of the pupil outcomes (for a detailed discussion of each pupil outcome please see Creech 2006), including enjoyment of music ($F=8.33_{(5)}$, $p < 0.0001$), personal satisfaction ($F=5.77_{(5)}$, $p < 0.0001$), motivation ($F=5.42_{(5)}$, $p < 0.0001$), self-efficacy ($F=6.13_{(5)}$, $p < 0.0001$) and self-esteem ($F=8.02_{(5)}$, $p < 0.0001$). Overall Cluster 5 produced the least positive outcomes while Cluster 6 produced the most consistently positive outcomes for pupils (Table 8).

Differences in parental support amongst age groups, within clusters

Few differences in parental support amongst pupil age groups were found. Analysis of variance revealed that in the solo leader cluster there was a significantly higher level of behavioural support amongst the 9–11 years age group than amongst the group aged eight and under ($F=4.13_{(4)}$, $p = 0.007$). In the discordant trio cluster significantly higher personal support was found amongst the 16–18 years age group than amongst those aged 12–15 ($F=4.05_{(3)}$, $p = 0.01$).

Table 8. Standardised mean scores and standard deviations for learning outcomes, according to cluster (SD in brackets).

	Interaction cluster					
	1	2	3	4	5	6
Outcome for pupils	Solo leader	Dominant duo	Dynamic duo	Double duo	Discordant trio	Harmonious trio
Enjoyment of music	-0.26 (1.08)	0.21 (0.87)	-0.26 (0.93)	0.27 (0.96)	-0.55 (1.20)	0.47 (0.69)
Personal satisfaction	-0.23 (1.05)	0.10 (0.93)	-0.19 (0.93)	0.27 (1.06)	-0.50 (0.97)	0.43 (0.82)
Motivation	-0.17 (0.85)	0.03 (1.08)	-0.28 (0.93)	0.31 (1.01)	-0.31 (0.98)	0.43 (0.90)
Self-efficacy	-0.30 (0.96)	0.26 (0.83)	-0.27 (0.96)	0.23 (0.98)	-0.38 (0.91)	0.41 (1.09)
Self-esteem	0.02 (0.86)	-0.001 (1.00)	-0.48 (0.91)	0.39 (1.06)	-0.18 (0.95)	0.44 (0.80)

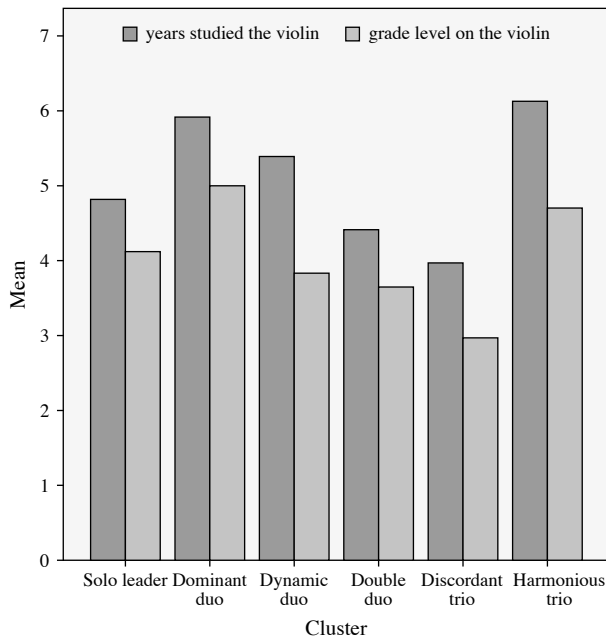


Figure 2. Pupil violin grades and years studied, according to clusters.

Persistence with learning and musical attainment

In order to investigate whether or not parental support and interaction type might be associated with persistence with learning the clusters were compared according to years of learning and musical grade level attained.

The highest mean grade level was found in Clusters 2 (*dominant duo*) and 6 (*harmonious trio*), while the lowest was found in Cluster 5, the *discordant trio* (Figure 2). Pupils in the dominant duo and harmonious trio clusters, as well as the dynamic duo cluster, were found to have the highest mean number of years studied.

Parents occupying these former two clusters were similar in that they offered relatively high levels of support in all three areas of parental support (see Table 7). However, the findings in respect of the dynamic duo (Cluster 3) challenge the view that parental support is a prerequisite of musical attainment; the evidence suggests that a substantial minority of pupils persevered with learning and attained a relatively high level of musical expertise without the benefit of particularly intense levels of parental support.

Discussion

The parents in this sample of 337 parent–pupil–teacher trios engaged in the business of learning the violin were generally found to offer high levels of behavioural, cognitive/intellectual and personal support. Pupils in all age groups benefited from parental support, although there was some evidence that for some behavioural support was at its height when children were approaching adolescence at age 9–11, while for others cognitive/intellectual support was the greatest for the oldest group of pupils.

There was only moderate agreement overall related to whether or not parental support was broadened to include facilitating activities such as attending summer courses, attending professional concerts and organising regular rehearsals with accompanists. Thus parents in this sample may not have placed a high priority on allocating resources to musical activities that were not directly related to violin lessons and practice. Furthermore, while there was evidence of some ambivalence about offering material rewards in return for musical achievement the responses indicated that most parents agreed wholeheartedly that they would reward musical success with praise. Six types of parent–pupil–teacher interaction were identified, determined by the participants' scores for facets of the interpersonal dimensions of control and responsiveness. These interaction types were found to differ significantly according to the extent to which parents engaged in the three types of parental support.

Where parents were remote from the teacher and relatively impotent in terms of having any influence over the teacher (the dynamic duos and discordant trio clusters), relatively low levels of parental support were in evidence. In contrast, the clusters where the highest levels of behavioural and cognitive/intellectual support existed were those (solo leader and dominant duo) where parents had high perceived teacher leadership, took an active role in the learning partnership and occupied a predominant role in relation to either pupil or teacher. Parents within the cluster characterised by parental ambition together with sensitivity and responsiveness in relation to both teacher and pupil (the harmonious trio cluster) were more likely to offer personal support than either behavioural or cognitive/intellectual support.

Relatively, high mean scores for all three types of parental support were found amongst parents in both the solo leader and the harmonious trio clusters, yet the pupils amongst the latter cluster evidently experienced greatly enhanced outcomes. The evidence here suggests that the interpersonal context in which parental support is manifested may constitute a key factor in understanding the contrasting outcomes between the two clusters. While parental support may facilitate positive outcomes for pupils this is not deterministic; it appears that relatively poor outcomes for pupils are possible within a context where intense parental support is offered.

Pupil outcomes, defined as enjoyment of music, satisfaction with lessons, motivation, self-efficacy and self-esteem were found to be diminished amongst those pupils occupying the discordant trio cluster, where the least amount of parental support was in evidence. This finding adds to earlier research that suggests where parents place a low value on the subject matter, have low expectations of success, do not have the wherewithal to help their children at home and/or are intimidated by teachers the result can be a downward spiral of mutual distrust, lack of communication and absence of shared purpose amongst parents, teachers and pupils alike (Bandura 1997; Hurley 1995). In contrast, the findings in respect of Clusters 4 and 6, where the most consistently positive outcomes for pupils were found, elucidate earlier research that has proposed a model of parent–professional–child partnership whereby parents lie at the heart of a system which advances the child's development while professionals take primary responsibility for advancement of knowledge and skills (Henry 1996). Furthermore, these findings support the view that pupils function best when they perceive the adults as both caring and supportive of autonomy and when they are able to engage in on-going mutual interaction with

adults who continue to have a stake in their development and to act as their advocate (Manturzevska 1990; Noack 1998).

Some evidence was found that children who occupied interaction types characterised by relatively high levels of parental support across the three areas were more likely to persevere with learning and attain higher levels of expertise on their instruments than those amongst other clusters. However, the findings in respect of the dynamic duo (Cluster 3) suggest that a substantial minority of pupils amongst this cluster persevered with learning and attained more than a modicum of musical expertise without the benefit of a great deal of parental support. This could reflect the importance of the development of autonomous learning or alternatively may suggest that a dynamic teacher–pupil relationship may compensate for parental support; either interpretation warrants further investigation. Furthermore, there could have been migration amongst the interaction types; pupils who had started off their studies in one type of relationship with parents and teachers may have migrated to the ‘dynamic duo’ (Cluster 3), with the benefit of a history of behavioural and cognitive/intellectual support that has been found to be so important in the formative years of young musicians. Again, the model merits further investigation, in this case within a developmental framework.

Conclusions: the versatile parent

The message that parents may take from this paper is that effective and supportive parental involvement in instrumental learning requires parents to be versatile, adept at moving between the close and distant positions on the responsiveness axis and between directive and acquiescent positions on the control axis on the model for interpersonal dimensions. This may involve providing much practical assistance and personal support during the early years of learning yet seeking and following the teacher’s advice in musical matters and allowing the child and teacher the space to develop an autonomous relationship. It also may involve remaining resilient in the face of reluctant practising while remaining as the child’s interested and supportive advocate long after practical help has ceased to be appropriate or welcomed by the teacher and pupil. Most importantly, parents should neither become uninvolved in their children’s learning in the name of agency, nor disempower their children in the name of communion. Specifically, positive outcomes may be achieved when parents: (1) elicit their children’s views regarding appropriate parental involvement, (2) negotiate with their children over practising issues, within parameters set by the teacher, (3) provide a structured home environment for practice, (4) take an interest in promoting good teacher–pupil rapport, (5) communicate with the teacher in relation to the child’s progress and (6) remain as a supremely interested audience.

Notes on contributor

Andrea Creech has extensive experience as a professional musician, music teacher and researcher. She currently is lecturer in education at the Institute of Education, University of London and associate lecturer (psychology) for the Open University. Previously she has held principal positions in orchestras in the UK and Canada and subsequently was founder and director of a Community Music School in the Republic of Ireland. Andrea has been project manager for a number of funded research projects in the areas of music education, behaviour and attendance and disaffection. Her special research interests are musical development across

the lifespan and the impact of interpersonal relationships on learning and teaching outcomes. Andrea has presented her work at international conferences and published widely.

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