



Report on the Parent and Teacher Involvement Questionnaire (PTIQ)

September 2010

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Overview

The data summarized in this document were supplied to the external evaluation team by Providence Full Service Community Schools (PFSCS). The *Parent and Teacher Involvement Questionnaire* (PTIQ) was developed by the Conduct Problems Prevention Research Group and adapted for use by PFSCS¹. As part of PFSCS evaluation, the PTIQ will be given annually in the fall to assess parents' perceptions of their interactions within their child's school environment. The questionnaire contains a total of 15 questions using a Likert scale in which 0 indicates no involvement and 4 suggests high involvement. Surveys were completed in September 2009 by parents at Bailey (n=194), Lima (n=113), and Fortes (n=163). At that time, Bailey had been a Full Service Community School for one year, while Lima and Fortes were beginning formal implementation.

The survey was provided to all parents at all three schools (total population is approximately 1350 children), with an overall response rate of 35% (N=473). School level response rates were 55% at Bailey (194/350), 33% at Fortes (163/500), and 23% at Lima (113/500).

Descriptive Analysis

Overall and school-level (Bailey, Lima, and Fortes) response frequencies and percentages are reported in Table 1. Approximately 14% of parents reported that teachers called them on average about once a week. This compared to more than 35% of parents who reported never being called. A similar number of parents (14%) reported receiving written notes from the teacher on average about once a week and 40% of parents said that they were invited to their child's school almost every month. Approximately 12% of responding parents said that they were invited to school once a week or more. About 20% of parents said that they had visited the school once a month, with another 7% noting that they visited once a week or more. Almost 80% of the parents who responded to the survey said they felt "welcomed" or "very welcomed" at their child's school, while 7% said they felt welcomed only "a little" or "not at all." Similarly, 82% of the parents felt that the teacher cared about their child a lot or a great deal; whereas 3% of parents answered this question "a little" or "not at all."

About 80% of parents felt comfortable talking to their child's teacher about their child "a lot" or "a great deal". Only 3% of parents said "a little" or "not at all" when answering this question. Parents noted that teachers paid attention to their (i.e., parents') suggestions "a lot" or "a great deal" slightly more than 60% of the time, but also answered this question as "not at all" or "a little" 5% of the time. The majority of parents felt their child's school was safe (87%) and almost 90% of parents reported that the school is doing a good job of preparing children for the future. Although more than half of parents said that they are not able to volunteer at school at all (59%), almost 10% reported volunteering "a lot" or "a great deal." Finally, more than 75% of parents reported that they read to and help their child with homework "a lot" or "a great deal".

Table 2 presents the survey responses broken down by school: Bailey (n = 194), Lima (n = 113), and Fortes (n = 163). All questions were based on a 5-point Likert scale (the scale for each survey item is provided in the table). Note that for each survey question, the school's

¹ Fast Track. 2003 Parent-Teacher Involvement Questionnaire: Parent Version.
<http://www.fasttrackproject.org/techrept/p/ptp/>.

average score is reported in the table. For each item, these school-level averages can be compared with the *overall* average score across *all* surveys (these are reported in the right column). Results are reported in raw scores.

Statistical findings. Proportional analyses were used to examine the extent to which each individual question differed from the question's overall mean (i.e., for each survey question, the mean average for each specific school was compared to the overall average for all schools). However, none of the questions were found to differ significantly, at the school level, when compared to the overall mean for each question. Still, we encourage schools to examine their patterns of answers and use this information to decide where they are strong and places in which they might focus their efforts to improve.

Subscales within Survey

Next, to examine the extent to which there are potential subscales within the survey, a factor analysis was conducted. Factor analysis is a process through which underlying components in a survey are analyzed for their degree of internal coherence. Our results suggested that the questions best clustered into four groups (see appendix A for specific output related to the factor analysis.) These clusters suggest that the questions can be grouped together to represent four underlying constructs:

- (1) **Parent Comfort** with the school, staff, and academics in general (COMFORT; items Q7-Q11; Cronbach's alpha=.81)
- (2) **Parent Activity** at the school (ACTIVITY; items Q3-6 and Q12; Cronbach's alpha=.75)
- (3) Parents' overall perception of the **Reputation** of the school (REPUTATION; items 13-15; Cronbach's alpha=.87), and
- (4) **Parent Communication** with their child's teacher (COMMUNICATION; items Q1 and 2; Cronbach's alpha=.77).

These four factors are similar to the findings of the Conduct Problems Prevention Research Group. In that study, which used some of the same questions, the researchers also found four underlying factors: quality of relationship between parent and teacher (called **Parent Comfort (PC)** here), parent's involvement and volunteering at school (called **Parent Activity (PA)** here), parent's endorsement of child's school (called **Reputation (REP)** here), and frequency of parent and teacher contact (called **Communication (PC)** here)².

NOTE: When computing subscale scores, missing values were substituted with the average response for that question. Subscale scores for respondents was calculated by taking the respondent's average score for the questions within the subscale. (For example, Q1 and Q2 / 2 for the COMMUNICATION subscale.)

² Walters, Eban and Laura Griner Hill. 2000 Fast Track Project Technical Report. <http://sanford.duke.edu/centers/child/fasttrack/techrept/p/ptp/ptp6tech.pdf>

Statistical findings. Again, proportional analyses were used to examine the extent to which the mean for the school differed from the construct's overall mean (i.e., means for specific schools were compared to the mean for all schools for each construct). Findings indicated that only one construct for one school appeared to reach statistical significance. Specifically, parents at Fortes reported higher levels of involvement (**Parent Activity**) as compared to the average for all three schools. Beyond this single statistically significant finding, we reiterate the importance of schools using data to drive all decision making. One way schools can do this is to study answer patterns to better understand where they are strong and where they should focus their efforts to improve.

Limitations

These findings can be used to spur discussion among school faculty, staff, parents, and students in terms of improving relationships between home and school. That said, we remind the reader to use these findings with caution. The response rates within each school were low and we do not have sufficient information to determine the extent to which results are representative of the entire school population. Low response rates warrant caution because the opinions of the parents who did not respond may differ greatly from those parents who chose to respond.

Discussion

In spite of these limitations, the findings from this study do indicate a number of areas to which the three PFSCS sites might attend:

- Two-thirds of parents reported that teachers initiated communication with them only once or twice a year, if at all.
- In general, parents reported positive opinions of the schools as measured by the **Parent Comfort** and **Reputation** scales, but limited personal participation in the schools, whether attending school events or volunteering within the school.
- While about 50% of parents reported being asked to special events at their child's school at least once a month, only 25% reported attending.
- About 60% of parents reported that they never volunteer at their child's school. Interestingly, qualitative data indicate that families do not feel welcome within schools; however, respondents for this questionnaire tended to report feeling comfortable and welcomed at the school. Indeed, on this survey, the majority of parents self report being comfortable with the school and teachers with a subscale average of 3.28, falling between the descriptors of feeling comfortable "a lot" and "a great deal". Over three-quarters of parents reported feeling welcome "a lot" or "a great deal". This potentially conflicting information should be interpreted with caution. As suggested by the low response rate, survey respondents might not have included the parents who are the least comfortable with the school for a variety of reasons.
- By average score, the lowest ranking question in the COMFORT subscale was Q10 "You feel your child's teacher pays attention to your suggestions" with an average score of 3.17.; 18% of parents reported that they felt that their child's teacher pays attention to

their suggestions some, a little, or not at all. However, this question also had the highest percentage of missing responses (10.4%).

In general, these findings support the need for greater parent engagement. Additionally, administration of a similar survey with school faculty and staff might provide insight into school-parent communication and comfort (there is a teacher version of the PTIQ which is also free).

Future use of the Parent Teacher Involvement Questionnaire in PFSCS evaluation

According to the federal grant, PFSCS proposed the following performance measure:

- Within 3 years of FSCS implementation, participant parents' scores on the Parent Involvement Questionnaire will improve by 20%

Since there is no standardized method for scoring the PTIQ, there are a few aspects from the survey that FSCS stakeholders might want to consider for future evaluation efforts.

Do we want to look at changes in:

- specific questions over time?
- subscale scores over time?
- specific schools over time?

Note that a variety of additional analyses can be conducted using these data. The tables provided herein are based on requests and suggestions of Full Service Community Schools stakeholders and, as always, additional substantiation is recommended prior to making substantive decisions based on this information.

Table 1. Percentage and Frequency of Responses by Question Parent and Teacher Involvement Questionnaire (N=473)

Please check the box that best completes each statement:

	Never	Once or Twice a Year	Almost Every Month	Almost Every Week	More than Once a Week	Missing
1) In the past year, your child's teacher has called you . . .(TC)	37% (177)	29% (136)	15% (69)	7% (31)	7% (34)	6% (26)
2) In the past year, your child's teacher has written you . . . (TC)	34% (161)	33% (154)	12% (57)	6% (29)	9% (40)	7% (32)
3) In the past year, you have been invited to your child's school for a special event (such as a book fair, math night, or other) . . . PA	12% (55)	31% (147)	40% (188)	5% (23)	7% (32)	6% (28)
4) In the past year, you have visited your child's school for a special event (such as a book fair, math night, or other) . . PA.	21% (98)	46% (217)	19% (89)	3% (14)	4% (21)	7% (34)
5) In the past year, you have attended a parent-teacher conference . . .PA	23% (107)	49% (233)	16% (76)	2% (7)	3% (15)	7% (35)
6) In the past year, you have attended PTA, PTO, PAC, other parent meetings . . .PA	44% (207)	33% (157)	11% (51)	1% (4)	2% (11)	9% (43)

Each survey question is part of one of the following four constructed factors

TC = Teacher Communication with parents

PA = Parent Activity at school

REP = Reputation of school as perceived by parent respondents

TC = Teacher Communication with parents

Table 1 Continued.

Please check the box that best completes each statement:

	Not at All	A Little	Some	A Lot	A Great Deal	Missing
7) You feel welcome to visit your child's school . . .PC	1% (5)	6% (29)	9% (42)	32% (149)	47% (222)	6% (26)
8) You feel your child's teacher cares about your child . . .PC	1% (4)	2% (11)	8% (38)	33% (157)	49% (232)	7% (31)
9) You feel comfortable talking to your child's teacher about your child . . .PC	1% (5)	3% (13)	9% (43)	33% (155)	48% (227)	6% (30)
10) You feel your child's teacher pays attention to your suggestions . . . PC	1% (6)	4% (18)	13% (59)	33% (154)	40% (187)	10% (49)
11) You read with your child and help with his/her schoolwork . . .PC	1% (5)	4% (18)	12% (57)	27% (126)	49% (233)	7% (34)
12) You volunteer at your child's school . . .PA	59% (279)	15% (72)	11% (50)	2% (11)	6% (28)	7% (33)

Please indicate how strongly you agree or disagree with the following statements:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree	Missing
13) Your child's school is a good and safe place for your child to be. REP	2% (7)	0% (1)	7% (33)	46% (215)	41% (194)	5% (23)
14) The staff at your child's school is doing good things for your child. REP	1% (4)	0% (2)	8% (36)	48% (229)	37% (177)	5% (25)
15) Your child's school is doing a good job of preparing children for their futures. REP	1% (3)	0%	5% (24)	42% (200)	47% (221)	5% (25)

Table 2. Average Survey Responses, by School Site and Overall

PTIQ Questions	School Site			Overall
	Bailey (n= 194)	Lima (n=113)	Fortes (n=163)	Item Average (n=473)
<i>The following were the answer choices for Q1-6: Never (0), Once or twice a year (1), Almost every month (2), Almost every week (3) or More than once a week (4)</i>				
1. In the past year, your child’s teacher has called you...TC	0.91	1.18	1.34	1.13
2. In the past year, your child’s teacher has written you...TC	1.20	0.99	1.25	1.17
3. In the past year, you have been invited to your child’s school for a special event (such as a book fair, math night, or other)...PA	1.54	1.63	1.71	1.62
4. In the past year, you have visited your child’s school for a special event (such as a book fair, math night, or other)...PA	1.07	1.13	1.37	1.19
5. In the past year, you have attended a parent-teacher conference. PA	0.88	1.13	1.24	1.06
6. In the past year, you have attended PTA, PTO, other parent meetings...PA	0.57	0.74	0.93	0.73
<i>The following were the answer choices for Q7-12: Not at all (0), A Little (1), Some (2), A Lot (3), or A Great Deal (4)</i>				
7. You feel welcome to visit your child’s school...PC	3.21	3.30	3.23	3.24
8. You feel your child’s teacher cares about your child...PC	3.34	3.35	3.39	3.36
9. You feel comfortable talking to your child’s teacher about your child...PC	3.36	3.24	3.33	3.32
10. You feel your child’s teacher pays attention to your suggestions...PC	3.18	3.13	3.21	3.17

	Bailey (n= 194)	Lima (n=113)	Fortes (n=163)	Item Average (n=473)
11. You read with your child and help with his/her schoolwork...PC	3.32	3.21	3.29	3.28
12. You volunteer at your child's school...PA	0.72	0.59	0.81	0.72
<i>The following were the answer choices for Q13-15: Strongly Disagree (-2), Disagree (-1), Not Sure (0), Agree (1) or Strongly Agree (2)</i>				
13. Your child's school is a good and safe place for your child to be. REP	1.41	1.16	1.27	1.31
14. The staff at your child's school is doing god things for your child. REP	1.38	1.20	1.21	1.28
15. Your child's school is doing a good job of preparing children for their futures. REP	1.47	1.38	1.38	1.42

Table 3. Average Survey Responses, by School Site and Overall

Created Subscale from Factor Analysis	Bailey (n= 194)	Lima (n=113)	Fortes (n=163)	Overall Average (n=473)
PC: Parent Comfort (Q7,8,9,10, and 11)	3.28	3.25	3.28	3.28
PA: Parent Activity (Q3,4,5,6, and 12)	0.96	1.05	1.20*	1.06
REP: Reputation (Q13, 14, and 15)	1.42	1.26	1.29	1.34
TC: Teacher Communication (Q1 and 2)	1.06	1.09	1.29	1.15

* $p < .05$: suggests that 1.20 is statistically larger than the overall mean for this item

APPENDIX A

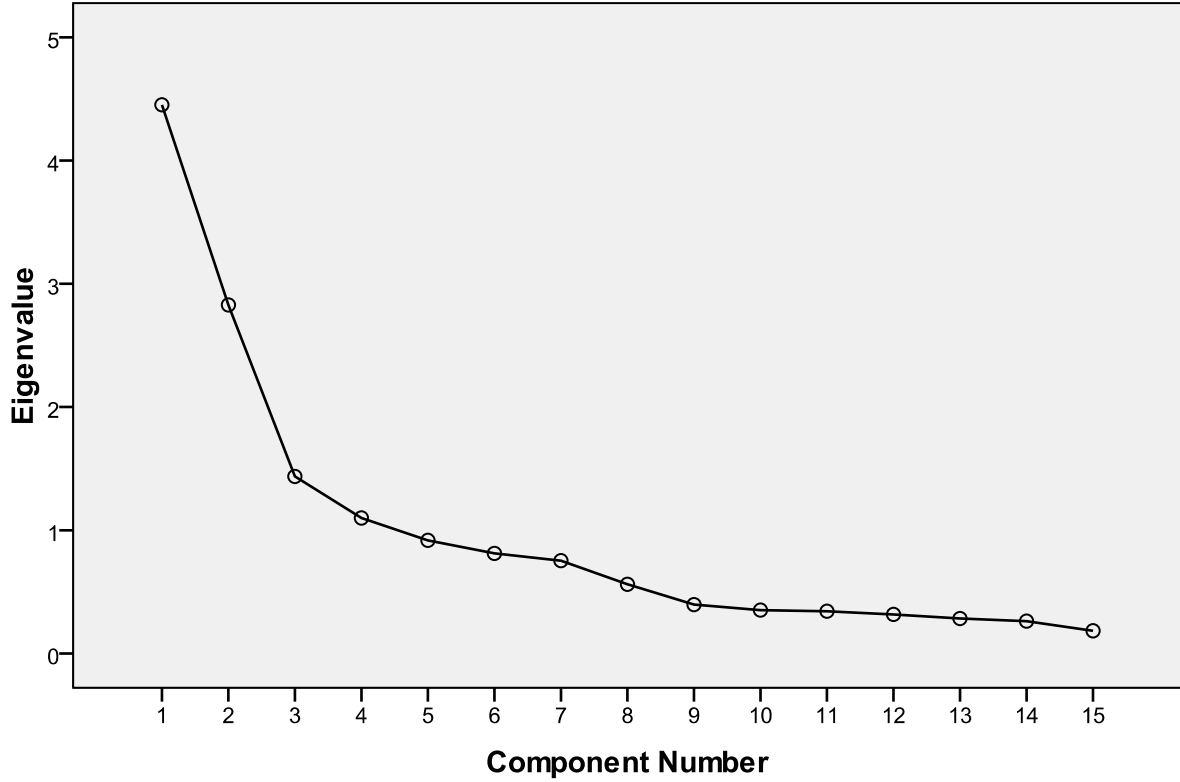
Appendix A. Factor Analysis

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.453	29.686	29.686	4.453	29.686	29.686	2.936	19.575	19.575
2	2.829	18.859	48.546	2.829	18.859	48.546	2.562	17.080	36.655
3	1.437	9.578	58.124	1.437	9.578	58.124	2.461	16.409	53.064
4	1.099	7.329	65.453	1.099	7.329	65.453	1.858	12.389	65.453
5	.918	6.120	71.573						
6	.812	5.413	76.986						
7	.753	5.019	82.005						
8	.562	3.744	85.749						
9	.397	2.646	88.394						
10	.352	2.345	90.739						
11	.343	2.284	93.023						
12	.316	2.110	95.133						
13	.284	1.892	97.025						
14	.262	1.748	98.773						
15	.184	1.227	100.000						

Extraction Method: Principal Component Analysis.

Scree Plot



Rotated Component Matrix^a

	Component			
	1	2	3	4
Q1. Teacher Called	.062	.290	-.036	.823
Q2. Teacher Written	.027	.164	.089	.843
Q3. Invited	.269	.501	-.056	.353
Q4. Visited	.040	.749	.064	.299
Q5. Attended P-T Conf	.018	.757	.013	.344
Q6. Attended parent meeting	.019	.802	.087	.184
Q7. Feel welcome	.721	.031	.210	.056
Q8. Teacher cares	.783	.024	.215	.193

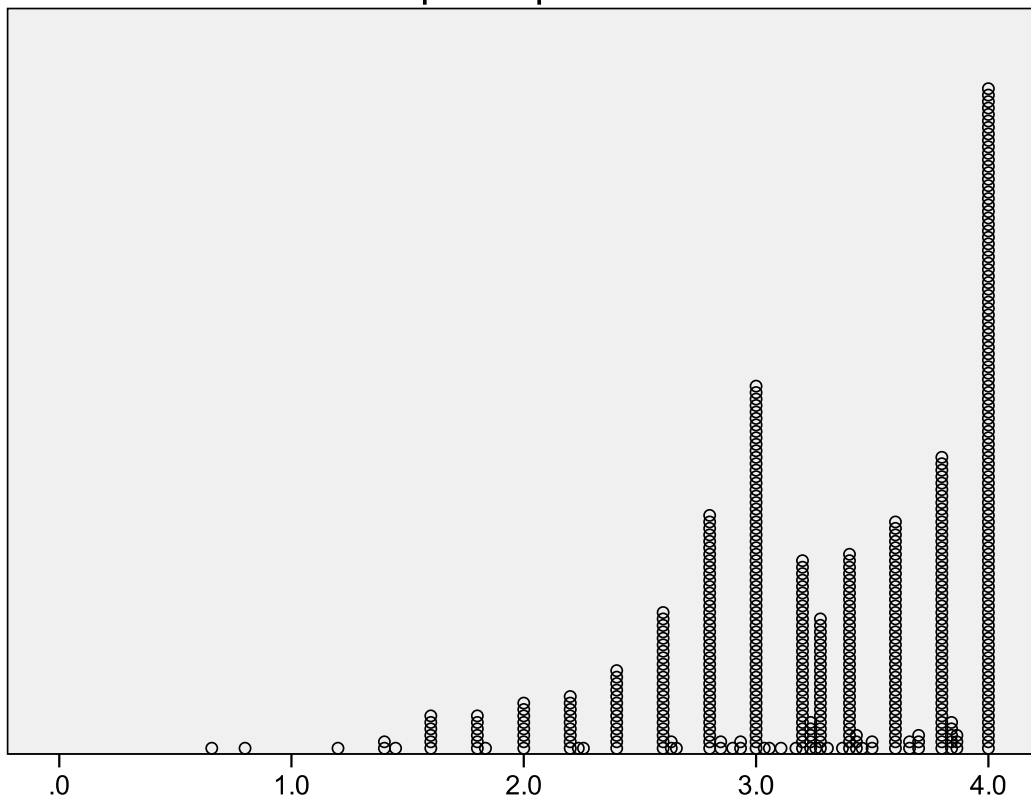
Q9. Comfortable talking to teacher	.841	.041	.181	-.032
Q10. Teacher attends to suggestions	.807	.091	.218	.059
Q11. Read/help with schoolwork	.430	.227	-.001	-.070
Q12. Volunteer at school	.190	.591	.062	-.224
Q13. School good and safe	.190	.036	.840	.070
Q14. Staff helps child	.230	.052	.878	-.002
Q15. School prep	.237	.071	.887	-.019

Extraction Method: Principal Component Analysis.

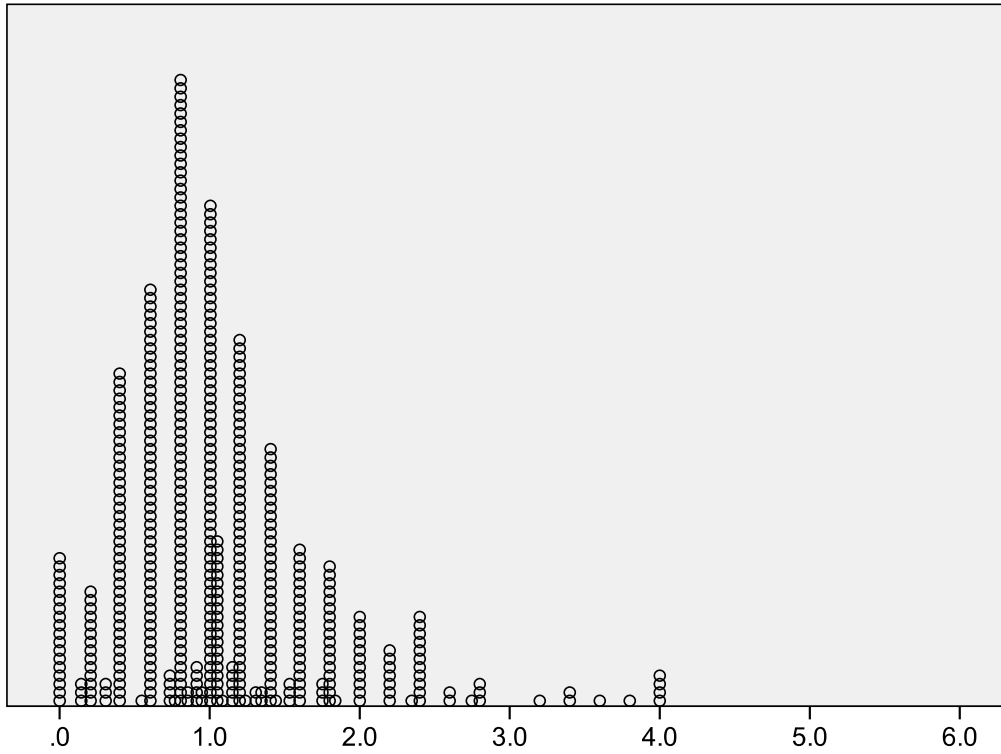
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

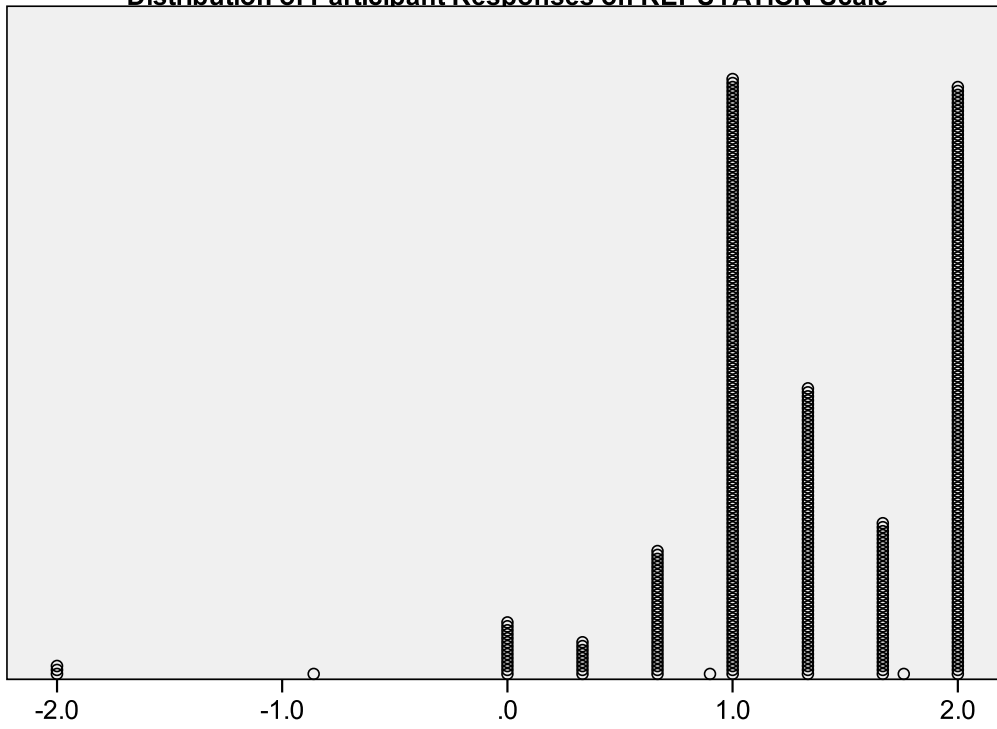
Distribution of Participant Responses on COMFORT Scale



Distribution of Participant Responses on ACTIVITY Scale



Distribution of Participant Responses on REPUTATION Scale



Distribution of Participant Responses on TEACHER COMMUNICATION Scale

