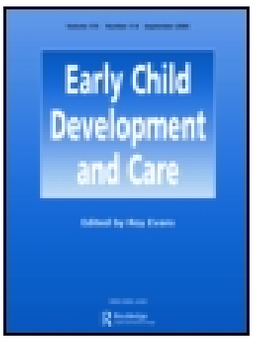

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Discrepancies in parent and teacher ratings of low-income preschooler's social skills

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ABSTRACT

Parent–teacher rating discrepancies in rating of children's social skills were examined in a low-income, ethnically diverse preschool sample, using the Social Skills Improvement System-Rating Scales [Gresham, F. M., & Elliott, S. N. (2008). *Social Skills Improvement System – Rating Scales*. Minneapolis, MN: Pearson Assessments]. Participants included 663 preschool children (326 male, 336 female, $M = 3.51$ years, $SD = 0.50$) rated in the Fall of their preschool year. Children were drawn from 68 classrooms in 13 preschool sites. The results indicated that mean parent ratings were significantly greater than mean teacher ratings for the Social Skills Scale. The mean parent–teacher ratings were not significantly different for the Problem Behaviours Scale. Follow-up analyses indicated that parent–teacher ratings differed across six of the seven Social Skills sub-scales. These differences were significantly associated with family income. Implications for parents, teachers, and educational policy are explored.

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Cross-informant; social skills; problem behaviours

The importance of gathering and interpreting multiple sources of information that contribute to an understanding of young children's development and behaviour has been documented in the extant literature (De Los Reyes & Kazdin, 2005). Early identification of socio-emotional difficulties is particularly important for children for the prevention of negative future outcomes (Sanner, Smith, Wentzel-Larsen, & Moe, 2016; Shonkoff, 2010). Although the current literature calls for assessments involving multiple informants as recommended practice in early intervention, the discrepancy among cross-informant (e.g. parent–teacher) ratings remains an issue that is largely unresolved, especially because the underlying factors creating informant discrepancies have not been systematically pursued in research. Explanations of parent–teacher discrepancies may be attributed to the different contextual demands which children face at home and at school, as well as differences in the demands and perceptions of parents and teachers based on ethnic background and social class (see Gresham, Elliott, Cook, Vance, & Kettler, 2010; Lareau, 1987; Ogbu, 1993). The present study investigates parent–teacher rating discrepancies of low-income preschool children's social skills and problem behaviours.

Conceptualisation of children's social skills and problem behaviours

Social skills and behaviour regulation are important for developing successful relationships with peers and teachers and studies have shown that the development of these skills is fundamental for school readiness (Sektnan, McClelland, Acock, & Morrison, 2010), emerging literacy (Allan & Lonigan, 2011), math skills (Clark, Pritchard, & Woodward, 2010) and academic success (Durlak,

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Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Gresham (1998) and McFall (1982) have distinguished between social skills and social competence. Social skills are viewed as a specific class of behaviours that an individual exhibits to successfully complete a social task such as making friends, playing with peers and participating in a conversation. These social tasks require several interrelated as well as isolated forms of social behaviours (Gresham & Elliot, 1987). Social competence is a complex construct that includes interpersonal behaviours that either facilitate or impede interactions with others (Gresham & Elliot, 1987). Social competence is viewed as an evaluative judgement (based on certain criteria) that a child has the ability to perform adequately or inadequately (exhibit competent or incompetent behaviour) on a certain social task in a given environment (i.e. home or school). Past research emphasises that in order to understand social competency, it is essential to examine both prosocial and problem behaviours in young children (Manz, Fantuzzo, & McDermott, 1999).

Additionally, earlier research has noted that both social skills and problem behaviour dimensions represent not only interrelated but also independent components of social competency. For example, Parkhurst and Asher (1992) showed that children with high social skills simultaneously exhibited both high and low levels of aggression and thus revealed that regardless of social skills, children with high levels of aggression were at greater risk for dysfunctional relationships. Behaviour problems in preschool children and the degree to which they are age appropriate (Campbell, Pierce, Moore, Marakovitz, & Newby, 1996; Wakschlag et al., 2007) or predictive of later behavioural difficulties and psychopathology (Kerr, Lunkenheimer, & Olson, 2007; Miner & Clarke-Stewart, 2008) have received a considerable amount of attention in the literature.

Research indicates that although most children develop social skills and show a decline in behavioural issues over time (Miner & Clarke-Stewart, 2008), some children who experience substantial difficulties in the preschool period are subsequently diagnosed with behavioural disorders (Campbell et al., 1996; Miller-Lewis et al., 2006; Shaw, Gilliom, Ingoldsby, & Nagin, 2003). Typical problematic behaviours observed in the preschool age group include hyperactivity/inattention, aggression and dysfunctional peer relationships (Bates, Pettit, Dodge, & Ridge, 1998; Campbell et al., 1996; Olson & Hoza, 1993).

The role of context in rating discrepancies among parents and teachers

While multiple informant data collection on young children's social development is important, informants do not always agree, particularly teachers and parents. Whereas teachers interact with children in the school context, parents interact with children in the home setting. The level of peer interaction that arises in a school environment, where the presence of multiple children in multiple scenarios calls for constant negotiation of differences, varies substantially from the home environment which is a more familiar and perhaps a more controlled setting. Within these parameters, certain social skills may be highly context specific and more applicable to one setting over the other. In addition, the social skills necessary to function successfully in the home may differ from those required in the school, and the problem behaviours that can be observed in the home environment may differ from those that are exhibited in the school. Where teachers compare a child to the other children in their current and past classrooms, parents may rely on the child's siblings, relatives or friends. As a result, teachers' judgements are heavily confounded with the school environments and the behaviours of children within these environments. The complexities of interpreting children's behaviours in different settings have been widely noted in the literature (DuPaul & Eckert, 1994; Gresham, 1998; Gresham, Elliot, & Kettler, 2010).

The role of child and family characteristics in parent and teacher ratings of children's social skills and problem behaviours

Several studies have investigated gender differences in preschoolers' social skills and behaviour problems (i.e. Graves, Blake, & Kim, 2012; Sterba, Prinstein, & Cox, 2007; Winsler & Wallace, 2002).

Evidence indicates gender differences, with boys having higher levels of many externalising behaviour problems, and lower levels of social skills (Graves et al., 2012; Winsler & Wallace, 2002). However, very little is known about whether differential levels of social skills and problem behaviours impact parent–teacher agreement.

In addition to gender, a family's income level could also be related to discrepancies between parents and teachers (Phillips & Lonigan, 2010). Children from low-income families have been reported to exhibit more behaviour problems, poorer social skills, and, consequently, more academic difficulties compared to their middle-income peers (Hauser-Cram, Sirin, & Stipek, 2003; Lee & Burkam, 2002). These children often exhibit low performance and school difficulties as they continue their way through the education system. Literature dating back to the 1950s has shown that children and youth having social competence deficits experience substantial difficulties when it comes to developing and maintaining positive interpersonal relationships, as well as exhibit higher risk for a variety of negative outcomes, including emotional, behavioural and academic difficulties (Gresham et al., 2010). What is even more troublesome is that parents' and teachers' assessments of children's behaviour consistently differ in the literature (De Los Reyes & Kazdin, 2005) at a time when current education reform calls for establishing more substantial links between the home and school as one important way to respond to the needs of this vulnerable population (Manz et al., 1999).

An explanation of the difference in cross-informant ratings might be partially driven by differences in values. Parents' beliefs and perspectives about raising their children may differ substantially from those held by teachers (Hauser-Cram et al., 2003; Harkness & Super, 2006). For example, differences in communication styles, language and patterns of social interaction between teachers and an increasingly diverse student population are factors that may impede the development of successful parent–teacher relationships (Ogbu, 1993). Social class has also been shown to matter when it comes to understanding differences between family and school contexts. Lareau (1987) has noted that parents from certain social classes may have unequal resources to comply with teachers' requests for parental participation. Characteristics of family life (e.g. social networks or lack thereof) also intervene with and mediate family–school relationships.

According to Hauser-Cram et al. (2003), teachers rated kindergarten children as less competent when they perceived value differences with parents, and there was a trend towards greater value discrepancy between teachers and African-American parents than between teachers and Latino or European American parents. These findings suggest that children from low-income families enter a path of dimished expectations, and that factors that are unrelated to children's actual skills, such as race or low socioeconomic status (SES), may affect teachers' judgements and, potentially, children's learning. Gill and Reynolds (2000) have shown that teacher expectations for elementary school students are lower for stigmatised groups such as African-Americans and that teacher expectations had a powerful direct influence on academic achievement, which suggests a cyclical process whereby the teacher's expectations may influence their child behavioural ratings and in turn influence child academic outcomes.

Importantly, very few studies have addressed parent–teacher discrepancies as they pertain to preschool children (Cai, Kaiser, & Hancock, 2004; Dinnebeil et al., 2013; Major, Seabra-Santos, & Martin, 2015; Phillips & Lonigan, 2010; Winsler & Wallace, 2002). Taken together, the findings indicate that parents rate children more highly on both social skills and problem behaviours (Cai et al., 2004; Major et al., 2015; Winsler & Wallace, 2002). However, to our knowledge, only one study has focused on low-income preschoolers (Cai et al., 2004). Cai and colleagues analysed parent–teacher agreement at the item level, using responses from the Child Behaviour Checklist/1½ –5 and the Caregiver-Teacher Report Form 1½ –5 (Achenbach, 1992; Achenbach & Rescorla, 2000). These authors found that parents generally reported more behaviour problems than teachers, and parent–teacher agreement was higher for externalising than for internalising problems (Cai et al., 2004). Social skill ratings were not explored.

Purpose of the present study

The purpose of the present study was to systematically explore patterns of discrepancy among parents and teachers in domains of social skills and problem behaviours in a low-income preschool sample. This investigation used the revised Social Skills Rating System (SSRS) (Gresham & Elliot, 1990), now known as the Social Skills Improvement System – Rating Scales (SSIS-RS; Gresham & Elliot, 2008). This study had two goals: (a) to examine the differences between parent and teacher ratings in a low-income preschool sample and (b) to investigate whether the parent–teacher ratings differ with regard to child race/ethnicity, child gender, or family income, marital status and parent education. We hypothesised that parents would rate children more highly than teachers on both problem behaviours and social skills. Our investigation pertaining to child and family characteristics as predictors of difference was exploratory.

The present study is part of a four-year longitudinal study testing the effectiveness of a curriculum designed to improve the executive functioning and socio-emotional skills of preschoolers enrolled in community child care and Head Start classrooms. Institutional review board approval was obtained for all study participants and measures.

Methods

Participants

Participants included 663 preschool children (326 male, 336 female) with a mean age of 3.51 years (SD = 0.50) and their parents and teachers. Children were drawn from 68 classrooms in 13 preschool sites (6 Head Start sites and 7 community childcare sites). This was a convenience sample of the largest Head Start and childcare programs in the local county serving at-risk children. The children were 41.2% White, 38.9% Hispanic and 20.1% Black. The families were predominantly low-income, with almost 60% having an income below $20,000, and only 12.5% having an income of $40,000 or above (Table 1).

The teachers were primarily female (133 female, 2 male) and 80.6% were White. Teachers' age ranged from 20 to 66 years ($M = 39.84$, SD = 12.40). With regard to education, 11.6% had completed

Table 1. Child and parent demographics.

Variable		*N* (%)
Child/family characteristics		
Maternal education	Below 12th grade	85 (13.0)
	12th grade	222 (34.0)
	More than 12th grade	346 (51.5)
	No report/missing	10 (1.5)
Child gender	Male	326 (49.2)
	Female	336 (50.8)
Child race	White	273 (41.2)
	African-American	133 (20.1)
	Hispanic	258 (38.9)
Marital status	Married	171 (25.8)
	Not married	481 (72.6)
	No report/missing	11 (1.7)
Income	Less than 10,000	204 (30.8)
	10,000–19,999	175 (26.4)
	20,000–29,999	120 (18.1)
	30,000–39,999	63 (9.5)
	40,000–49,999	27 (4.1)
	50,000–59,999	16 (2.4)
	60,000–69,999	12 (1.8)
	70,000–79,999	8 (1.2)
	80,000 or above	17 (2.6)
	No report/missing	21 (3.2)

High School, 34.8% had an Associate's degree, 45.7% had a college degree and 7.2% had a Master's degree. Years of teaching/child care experience ranged from 0 to 42 years ($M = 14.25$, SD = 9.33).

Procedure

All children in participating classrooms were eligible and included in the study if parents provided consent ($N = 1184$). Parents provided demographic information and reported on their children's social skills and problem behaviours by completing the SSIS in the Fall of the school year (Gresham & Elliot, 2008). Parents either completed the SSIS scales at the time of enrolment or mailed them back to study staff in stamped addressed envelopes. Parents received a $15 gift card for completing and returning the form. Teachers also completed an informed consent process, provided demographic information, and were told to fill out the SSIS on all participating children in their classroom. Most classrooms had more than one teacher so the teaching team was instructed to have the teacher who knows the child best fill out the form. However, researchers did not know which teacher completed each child's form, so teacher demographic information could not be linked to SSIS scores. Teachers received a $50 gift card for classroom supplies for completing SSIS forms on all participating children in their classrooms. The current study sample is based only on those children from whom both parent and teacher SSIS data were available ($N = 693$).

Measures

Child and family demographic information

In the Fall of their children's preschool year, parents provided demographic information about their children and family. This information included the child's gender, the child's race, parental education level, parents' marital status and family income.

Social skills and problem behaviours

The SSIS (Gresham & Elliot, 2008) is a revision of the SSRS (Gresham & Elliot, 1990), extensively used in educational research. Behaviour is rated on a 4-point scale from never to almost always in three domains: Social Skills, Problem Behaviour and Academic Competence (measured only in school-aged children and not assessed at this time point). Each domain has several sub-scales which are calculated from norms and reported on a three-point scale of below average, average or above average. The Social Skills domain includes seven sub-scales (Cooperation, Communication, Assertion, Responsibility, Empathy, Engagement and Self-Control). The Cooperation sub-scale includes items such as, 'follows your directions,' and 'completes tasks well without bothering others.' The Communication sub-scale includes items such as, 'responds well when others start a conversation or activity' and 'says please.' The Assertion sub-scale includes items such as, 'asks for help from adults' and 'expresses feelings when wronged.' The Responsibility sub-scale includes items such as 'is well-behaved when unsupervised' and 'takes responsibility for his/her own mistakes.' The Empathy sub-scale includes items such as 'tries to comfort others' and 'forgives others.' The Engagement sub-scale includes items such as 'joins activities' and 'introduces oneself to others.' The Self-Control sub-scale includes items such as, 'stays calm when teased' and 'takes criticism without getting upset.' The Problem Behaviours domain includes five sub-scales (Externalising, Bullying, Hyperactivity-Inattention, Internalising and Autism Spectrum). The autism spectrum sub-scale was not used in the current study. The Externalising scale includes items such as, 'acts without thinking' and 'has temper tantrums.' The Bullying sub-scale includes items such as, 'bullies others' and 'does things to make others feel scared.' The Hyperactivity/Inattention sub-scale includes items such as 'has difficulty waiting for turn' and 'fidgets or moves around too much.' The Internalising sub-scale includes items such as, 'withdraws from others' and 'gets embarrassed easily.' Some items are identical across the teacher and parent versions; other items differ across the two versions (i.e. 'works well with family members;' 'participates

appropriately in class'). The internal consistency for our sample was high: The Cronbach's alpha for teachers' total Social Skills summary score was 0.97 and the total Problem Behaviour summary score was 0.94. The Cronbach's alpha for parents' total Social Skills summary score was .95 and the total Problem Behaviour summary score was .92. In addition to rating the frequency with which behaviours occurred, respondents are also asked to rate the importance of the behaviour. However, for the purposes of this study, only responses for frequency were utilised, which are derived into standard scores for total scores (social skills and problem behaviours) and raw scores for sub-scales.

Analytic approach

Chi-square tests were first conducted to determine if parents who returned ratings differed from parents who did not return ratings. Then, paired samples *t* tests were conducted on the standard scores of the SSIS Social Skills and Problem Behaviours domains, and on the raw scores of the sub-scales, to evaluate differences between parent and teacher ratings. Finally, regression analyses were conducted with child and family characteristics predicting the magnitude of parent–teacher differences. Difference scores were created for total and sub-scale scores by subtracting the teacher rating from the parent rating and obtaining the absolute value. Child and family characteristics were entered in regression analyses as predictors of difference.

Results

Descriptive statistics

Table 1 displays child and parent characteristics. A total of 693 parents returned questionnaires. Analyses of the characteristics of those who returned the SSIS questionnaires and those who did not found no significant differences by child gender, family income or parent marital status. Differences by ethnicity were statistically significant, with more missing questionnaires among Black parents χ^2 (1, $N = 1147$) = 4.42, $p = .04$. Education χ^2 (6, $N = 1126$) = 15.79, $p = .02$ was also significant. Parents who were more educated were more likely to return the questionnaire.

Independent sample *t* tests were conducted to determine whether teacher SSIS ratings differed according to parent group (whether or not the parents returned the questionnaire). There were no significant differences for the Social Skills scale ($t(1139) = 1.02$, $p =$ n.s.) or the Problem Behaviour Scale ($t(1140) = -1.49$, $p =$ n.s.).

Overall social skills and problem behaviour scales

Tables 2 and 3 display the correlations between parent and teacher ratings of social skills (Table 2) and problem behaviours (Table 3). From Table 2, the correlation between parent and teacher ratings of social skills total scores is small-to-moderate ($r = 0.20$, $p < .01$). As shown in Table 3, the correlation between parent and teacher ratings of total problem behaviours is similar to that of social skills ($r = 0.22$, $p < .01$).

In light of the small-to-moderate correlations between parent and teacher reports, paired sample *t* tests were used to identify significant differences (Table 4). Results from these analyses indicated that the mean for parent ratings for the Social Skills scale ($M = 101.97$, SD = 14.64) was significantly greater than the mean for teacher ratings ($M = 90.77$, SD = 15.35), $t(643) = -14.93$, $p < .01$. For the Problem Behaviour scale, the difference between parents and teachers on the total score was not significant ($t(633) = 1.66$, $p =$ n.s.). Since the Problem Behaviour scale did not show significant differences between mean parent and teacher ratings, the Problem Behaviour sub-scales are not explored further.

Table 2. Correlations between parent and teacher ratings: social skills.

	Parent								Teacher							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Parent																
Total (1)	–	0.84**	0.83**	0.71**	0.84**	0.81**	0.72**	0.78**	0.20**	0.18**	0.17**	0.13**	0.15**	0.13**	0.15**	0.22**
Communication (2)	–	–	0.73**	0.58**	0.68**	0.66**	0.62**	0.60**	0.20**	0.23**	0.20**	0.17**	0.19**	0.14**	0.19**	0.26**
Cooperation (3)	–	–	–	0.50**	0.81**	0.64**	0.45**	0.69**	0.16**	0.17**	0.23**	0.08	0.22**	0.13**	0.12**	0.25**
Assertion (4)	–	–	–	–	0.53**	0.63**	0.53**	0.49**	0.09*	0.13**	0.12**	0.11**	0.10*	0.05	0.10**	0.11**
Responsibility (5)	–	–	–	–	–	0.66**	0.47**	0.74**	0.14**	0.17**	0.20**	0.08*	0.18**	0.14**	0.11**	0.23**
Empathy (6)	–	–	–	–	–	–	0.60**	0.58**	0.13**	0.16**	0.18**	0.08*	0.17**	0.14**	0.11**	0.21**
Engagement (7)	–	–	–	–	–	–	–	0.46**	0.13**	0.15**	0.06	0.17**	0.07	0.11**	0.18**	0.14**
Self-control (8)	–	–	–	–	–	–	–	–	0.13**	0.17**	0.18**	0.08*	0.16**	0.12**	0.14**	0.22**
Teacher																
Total (9)	–	–	–	–	–	–	–	–	–	0.87**	0.77**	0.72**	0.79**	0.78**	0.82**	0.80**
Communication (10)	–	–	–	–	–	–	–	–	–	–	0.71**	0.67**	0.71**	0.70**	0.79**	0.70**
Cooperation (11)	–	–	–	–	–	–	–	–	–	–	–	0.36**	0.87**	0.57**	0.54**	0.75**
Assertion (12)	–	–	–	–	–	–	–	–	–	–	–	–	0.40**	0.62**	0.72**	0.45**
Responsibility (13)	–	–	–	–	–	–	–	–	–	–	–	–	–	0.62**	0.59**	0.79**
Empathy (14)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.71**	0.63**
Engagement (15)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.60**
Self-control (16)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

*$p < 0.05$.
**$p < 0.01$.

Table 3. Correlations between parent and teacher ratings: problem behaviours.

	Parent					Teacher				
	1	2	3	4	5	6	7	8	9	10
Parent										
Total (1)	–	0.90**	0.75**	0.86**	0.81**	0.22**	0.23**	0.21**	0.22*	0.11**
Externalising (2)	–	–	0.76**	0.88*	0.65**	0.26**	0.32**	0.28**	0.31**	0.09*
Bullying (3)	–	–	–	0.62**	0.56**	0.20**	0.25**	0.25**	0.22**	0.07
Hyperactivity (4)		–	–	–	0.62**	0.26**	0.31**	0.25**	0.32**	0.10*
Internalising (5)	–	–	–	–	–	0.14**	0.12**	0.12**	0.12**	0.12**
Teacher										
Total (6)	–	–	–	–	–	–	0.88**	0.76**	0.85**	0.58**
Externalising (7)	–	–	–	–	–	–	–	0.86**	0.90**	0.30**
Bullying (8)	–	–	–	–	–	–	–	–	0.67**	0.27**
Hyperactivity (9)	–	–	–	–	–	–	–	–	–	0.31**
Internalising (10)	–	–	–	–	–	–	–	–	–	–

*$p < 0.05$.
**$p < 0.01$.

Table 4. Differences between parent and teacher ratings (total sample, child's gender, child's race, and family income level).

	Parents		Teachers			
SSIS score	*M*	SD	*M*	SD	*t*	*p*
Social skills total score ($n = 651$)	101.98	14.64	90.79	15.33	15.04**	<.01
Cooperation	12.14	3.36	11.26	3.64	5.23**	<.01
Assertion	14.36	3.76	10.88	3.86	17.32**	<.01
Empathy	13.47	3.36	10.44	3.57	17.26**	<.01
Engagement	15.74	3.91	13.21	3.90	13.07**	<.01
Responsibility	11.51	3.56	11.18	3.58	1.86	.06
Self-control	10.54	4.26	11.51	4.29	−4.63**	<.01
Communication	16.00	3.34	13.58	3.75	14.17**	<.01
Boys ($n = 322$)						
Social skills total score	102.25	14.25	92.70	13.54	10.06**	<.01
Girls ($n = 328$)						
Social skills total score	101.71	15.04	88.90	16.74	11.25**	<.01
Family income <$10,000 ($n = 203$)						
Social skills total score	101.61	15.88	88.00	15.67	9.98**	<.01
Family income >$50,000 ($n = 139$)						
Social skills total score	100.95	13.62	93.60	14.60	5.00**	<.01
Black children ($n = 131$)						
Social skills total score	105.84	14.20	91.21	15.23	9.63**	<.01
White children ($n = 269$)						
Social skills total score	101.16	13.87	91.99	15.37	8.35**	<.01
Hispanic children ($n = 251$)						
Social skills total score	102.29	15.16	90.21	15.22	9.81**	<.01

*$p < 0.05$.
**$p < 0.01$.

For the Social Skills scale, the finding that parents rated children significantly higher than teachers was consistent across all subsamples, including boys ($t(321) = 10.06$, $p < .01$), girls ($t(327) = 11.25$, $p < .01$), children whose family income was less than $10,000 ($t(202) = 9.98$, $p < .01$), children whose family income was greater than $40,000 ($t(80) = -3.18$, $p < .01$), black children ($t(130) = 9.63$, $p < .01$), white children ($t(272) = 8.55$, $p < .01$) and Hispanic children ($t(250) = 9.81$, $p < .01$).

Regression analyses on the Social Skills scale (Table 5) indicated that family income and gender are significant predictors of the magnitude of the difference, such that lower family income is associated with larger difference ($\beta = -0.13$, $p < .01$) and differences are larger for females than for males ($\beta = 0.14$, $p < .01$). There were no significant differences according to parental education level or marital status. Follow-up analyses demonstrated that the larger disagreement for children from lower income families is primarily driven by the fact that *teachers* provided lower ratings for lower

Table 5. Regression analyses predicting discrepancies between parents and teachers.

Outcome	Significant terms	*B*	SE(*B*)	*β*	*p*
Social skills total score (difference)	Constant	14.44**	1.92		<.01
	Family income	−0.91	0.28	−0.13**	<.01
	Gender	3.62	1.03	0.14**	<.01
Communication (difference)	Constant	4.25**	0.45		<.01
	Family income	−0.15	0.07	−0.09*	.03
Cooperation (difference)	Constant	3.92**	0.39		<.01
	Family income	−0.11	0.06	−0.08*	.049
	Hispanic	0.52	0.23	0.09*	.03
Assertion (difference)	Constant	5.36**	0.57		<.01
	Family income	−0.18	0.08	−0.09*	.03
Responsibility (difference)	Constant	4.06**	0.41		<.01
Empathy (difference)	Constant	4.93**	0.46		<.01
	Family income	−0.16	0.07	−0.09*	.04
Engagement (difference)	Constant	5.34**	0.47		<.01
	Family income	−0.15	0.07	−0.09*	.04
Self-control (difference)	Constant	4.28	0.50		<.01

Notes: Family income, gender, and variables representing the child's race were included in all analyses, but only significant variables are presented. Parents' level of education and marital status were initially included but ultimately excluded due to the consistent lack of significant relationships. There are no significant predictors for self-control and responsibility difference scores.
*$p < .05$.
**$p < .01$.

income children (children whose families earned less than $20,000 per year) than for children whose families had higher incomes ($t(608) = -3.81$, $p \leq .01$). In contrast, ratings by lower income parents did not differ significantly from ratings by parents who received higher incomes ($t(652) = 0.81$, $p \leq$ n.s.). Similarly, teacher reports account for the gender difference in disagreement. Parents did not rate boys significantly differently than girls ($t(651) = 0.48$, $p =$ n.s.), but teachers rated boys more highly than girls ($t(648) = 3.19$, $p < .01$).

Patterns for the social skills sub-scales

Cooperation

Parent ratings were significantly higher than teacher ratings on cooperation ($t(685) = 5.42$, $p \leq .01$). Subsequent regression analysis found that income is a significant predictor of difference, with higher income relating to smaller difference scores ($\beta = -0.08$, $p < .05$). Differences were also larger for Hispanic children than for white children ($\beta = 0.09$, $p < .05$).

Communication

Parent ratings were significantly higher than teacher ratings on communication ($t(684) = 14.43$, $p \leq .01$). Family income was the only significant predictor of the magnitude of the difference; higher income was related to smaller discrepancies between parents and teachers ($\beta = -0.09$, $p < .05$).

Assertion

Parent ratings were significantly higher than teacher ratings on assertion ($t(678) = 17.59$, $p \leq .01$). Subsequent analyses indicated that family income is a significant predictor of the difference between parent and teacher ratings, with higher income once again associated with smaller difference ($\beta = -0.09$, $p < .05$).

Responsibility

Parents rated children more highly than teachers on the responsibility sub-scale; however, this difference was not significant ($t(678) = 1.86$, $p = .06$). None of the family or child characteristics was a significant predictor of the magnitude of the difference, indicating that the extent of disagreement might be relatively consistent across socio-economic and racial groups.

Empathy

Parent ratings were significantly higher than teacher ratings on empathy ($t(684) = 17.61$, $p < .01$). Similar to the patterns found for cooperation and communication, family income was a significant predictor of difference, with higher income relating to lower difference ($\beta = -0.09$, $p < .05$).

Engagement

Parent ratings were significantly higher than teacher ratings on engagement ($t(684) = 13.26$, $p < .01$). Family income emerged again as a significant predictor of difference, with higher income relating to smaller differences between parent and teacher reports ($\beta = -0.09$, $p < .05$).

Self-control

For this sub-scale, teacher ratings were significantly higher than parent ratings ($t(674) = -4.50$, $p < .01$). Therefore, this sub-scale yielded results that are distinct from the overall pattern of results; while parents tended to rate children higher than teachers on social skills generally, teachers rated children higher on self-control in particular. There were no significant predictors of the difference, indicating that the extent of differences is relatively consistent regardless of child race, gender or level of family income.

Discussion

In order build upon prior research on discrepancies between parent and teacher ratings of children's' social skills and problem behaviours, the first objective of this study was to examine whether there were differences between parent and teacher ratings in a low-income preschool sample. The second objective of this study was to investigate whether parent–teacher rating differences were related to socio-demographic factors such as child gender, child race/ethnicity, parent education, marital status and family income.

Our results indicated that the mean for parent ratings for the Social Skills scale was significantly greater than the mean for teacher ratings. The difference was not significant for the Problem Behaviour scale. When examining potential socio-demographic drivers of parent–teacher differences, the present findings revealed a consistent pattern across the Social Skills sub-scales: disagreement is larger for children from lower income families, and this is true across five of the seven social skills sub-scales. Income is more predictive than parental education, which did not account for any difference between parents and teachers. The impact of income appears to be driven by the fact that teachers report lower levels of social skills for lower income children than for their higher income peers. Parent ratings do not differ according to their income.

In our low-income sample, the results pertaining to social skills are consistent with findings from Winsler and Wallace (2002) and Major et al. (2015) who found a tendency for parents to rate children more highly than teachers. The lack of significant difference between parent and teacher ratings on the problem behaviour scale is surprising, since other studies have found that parents rate children more highly, that is, they report more behaviour problems in this domain as well (Cai et al., 2004; Major et al., 2015; Winsler & Wallace, 2002).

Our study was unique in its focus on a low-income sample, and it is possible that characteristics of the sample contributed to congruence in the problem behaviour domain. Cadima, Gamelas, McClelland, and Peixoto (2015) demonstrated links between family risk, which includes having low income, and poor behavioural regulation during the preschool period, with behavioural regulation measured via a direct assessment administered by research assistants. Since lack of behavioural regulation can underlie many problematic behaviours, issues with behavioural regulation can result in problem behaviours that are especially consistent across contexts. This consistency across contexts (i.e. home and school) could in turn increase congruence between parents and teachers.

Three additional findings add nuance to the observed discrepancies between parents and teachers. First, for social skills total scores, the observed discrepancy was larger for girls than for boys. This contrasts with previous findings which did not examine social skills but which found no gender difference pertaining to parent–teacher agreement on problem behaviours (Cai et al., 2004). While parents did not rate boys and girls differently, teachers rated girls more poorly than boys, indicating that perhaps they have higher expectations of girls. However, additional research will need to uncover the processes underlying this difference. Second, for the cooperation subscale, the observed discrepancy was larger for Hispanic children than for white children. Language barriers could contribute to this discrepancy (e.g. Hispanic children with more limited English language skills might have difficulty following directions in the classroom), although future research should determine if language impacts cooperation more saliently than the other outcomes. And finally, while parents rated children more highly than teachers on six of the seven social skills subscales, teachers rated children more highly on self-control. It is possible that the structured school environment elicits higher levels of self-control than the home environment; future research should explore this and other possibilities.

Contextual differences and parent–teacher ratings of social skills

Our findings showed that there were significant differences between parents and teachers in ratings of low-income preschoolers' social skills. There are several mechanisms through which differences between the home and school environments may influence parent and teacher ratings of social skills. One perspective on context suggests that children's behaviour may differ based on different opportunities, values, beliefs, and expectations between home and school (Hauser-Cram et al., 2003). This perspective emphasises the actual differences in the child's behaviour across home and school. These differences are important to document and understand, since *consistently* positive social skills, or social skills that transfer across contexts, are important for overall well-being (Dinnebeil et al., 2013).

Another context-driven variable may be perception of the rater. Teachers compare children to their classmates, while parents compare children to their siblings, neighbours, and perhaps other family and community members. Also, recent literature shows that teachers who rate their school environment more favourably report lower disruptive behaviour, concentration problems and internalising symptoms, and higher prosocial behaviours (Pas & Bradshaw, 2014). Given the potential for teacher perceptions to become self-fulfilling prophecies, it is important to deepen our understanding of how teacher, school and classroom characteristics may fuel these perceptions (Hauser-Cram et al., 2003).

Low SES, ethnicity and rating discrepancies

With regard to income, the adversity inherent in limited resources may be viewed as a significant risk factor that is associated with poor social skills and problem behaviours in early childhood. Studies have shown that SES may disproportionately influence child behaviour (Koblinsky, Kuvalanka, & Randolph, 2006). The processes leading to parent–teacher discrepancy might have been exaggerated in our sample, which includes many families who are very low income (i.e. under $20,000 per year), and not only marginally low income. On the other hand, parents use a different contextual framework of home and neighbourhood, and may feel that their children have better skills than the children are able to display in a structured classroom setting.

With regard to ethnicity, a number of studies report that Black children are rated as having more behavioural problems on teacher-report scales (Pigott & Cowen, 2000; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). One explanation is that in the presence of an ethnic and social class mismatch between teachers and families, teacher expectations are lower and thus become a self-fulfilling prophecy in terms of children's actual performance (Hauser-Cram et al., 2003). In the present study, most

teachers were White, while a substantial proportion of the children were Black or Hispanic. It is therefore promising that child ethnicity was not a consistent predictor of disagreement between parents and teachers. However, white parents were more likely than black parents to return the questionnaire, and this differential participation may have influenced the results. More research is needed in order to understand the factors that contribute to teachers' perceptions of students, especially students who are thought to be at risk. For example, while existing literature has addressed potential negative consequences of a mismatch of teacher and child race/ethnicity and social class (Alexander, Entwisle, & Thompson, 1987; Delpit, 2006; Ogbu, 1993), this literature focuses on children's experience of cultural differences at school, and how these influence children's outcomes. In contrast, teachers' underlying assumptions of the values, contexts or demands inherent in cultural and socioeconomic differences and the effects of these assumptions on their judgements of children have not been studied.

Limitations and directions for future research

Our findings add to the understanding of parent–teacher discrepancies of low-income preschoolers' social skills and behavioural outcomes. However, this study has several limitations. The sample was not random and consisted of families who were involved or interested enough in the research study or their children's education that they returned the parent RS. We do not know if the patterns would be the same for the 40% of parents who did not respond; however, given that parents who reported lower levels of education responded significantly less, it is possible the pattern of association of differences with family income would have been even stronger. We also did not examine any objective measures of children's school readiness, such as independent assessments, to see how these might associate with parent and teacher ratings of social skills, or examine if the views of parents and teacher change over time. Finally, because we did not know which teacher completed the SSIS for each individual child, we did not examine how teacher characteristics (i.e. years of experience) related to teacher ratings or parent–teacher discrepancies. Despite these limitations, the present study extends prior work on the topic of cross-informant discrepancies by suggesting that factors other than children's actual behaviour, such as family income, may be influencing parent–teacher ratings of children's competencies.

To our knowledge, this is one of few studies that investigates low-income preschoolers' parent–teacher rating discrepancies and identifies child and family characteristics that account for parent–teacher rating discrepancies. While race did not emerge as a significant predictor of parent–teacher disagreement, it will be important to uncover underlying reasons why teachers perceive children from the lowest income level families to be less socially competent and what factors contribute to variation in teachers' ratings of children from low-income families. Similarly, it will be important to explore why parent–teacher discrepancies are greater for girls than for boys.

Implications

The present study has several educational and parenting implications for policy and interventions aimed at increasing social skills among low-income and ethnic minority preschoolers. In terms of educational policy, teacher education programmes should explore ways to accommodate variations in home and school expectations for social behaviours and skills. In addition, because expectations and demands vary with regard to contexts (i.e. home or school), collaborations that encourage effective and open communication about those differences can maximise the child's potential.

Finally, the results of this study provide support for the call for assessments involving multiple informants in early education and intervention (De Los Reyes, Henry, Tolan, & Wakschlag, 2009). The observed discrepancies suggest that children display different levels of social skills in different contexts, and one informant might not be able to provide information that is holistic enough to justify a decision about appropriate intervention. In one study, parent and teacher reports of

behavioural regulation were found to be differentially predictive of later academic outcomes; parent report of behavioural regulation in preschool predicted first-grade reading, while teacher report of behavioural regulation in kindergarten predicted first-grade vocabulary (Sektnan et al., 2010). Parent report did not predict later vocabulary, and teacher report did not predict later reading. This points to the fact that observed discrepancies should not be viewed as an indicator that one party is incorrect while the other is correct. Rather, both parents and teachers can provide information that is informative, and perhaps critical, for making decisions regarding education and intervention. Through partnerships and collaboration, both parents and teachers hold different but equally important levels of responsibility for optimising the development of children's social skills.

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