The Association between Child Temperament and Teacher-child Relationship: The Moderation Effect of Teacher Job Burnout

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Abstract. The purpose of the current study was to examine the moderation role of teacher job burnout in the association between child temperament and teacher-child relationship. The results indicated that teacher job burnout and child temperament had a statistically significant effect on teacher-child conflict. Teacher burnout and child temperament except negative affect had a statistically significant effect on teacher-child closeness. Moderation analysis indicated that teacher job burnout and child negative affect interact together to significantly affect teacher-child relationship.

Introduction

Teacher-child relationships are likely the result of multiple and interactive influences, and thus, adopting a broader and integrative view which includes attachment theory and developmental systems theory to examine the development and role of teacher-child relationships is more complex and is thus likely to provide a better conceptual model for understanding relationships [1]. The study of teacher-child relationship is helpful to reveal the essence of the interpersonal relationship between children and teachers, and to provide necessary theoretical support for the establishment of a good and appropriate teacher-child relationship. The systematic developmental theory puts forward that human development is a relational phenomenon, and children's development is rooted in an organized and dynamic environment. Teacher-child relationship is a product of the characteristics of teachers and children. The past relationship model of children affects their interaction with teachers. However, sensitive teachers will reconstruct the relationship model and behavior of children.

Children's characteristics affect the quality of teacher-child relationship, which include gender, age, academic ability, social skills, problem behavior and temperament. Child temperament characteristics affect the quality of teacher-child relationship. It is found that the reactivity, persistence and distraction of child temperament characteristics most affect the quality of teacher-child relationship [3, 4]. Activity intensity and level, persistence and behavior inhibition may also contribute to the formation of good teacher-student relationship [5]. Teacher behavior is related to the temperament of children they teach. Whether children have easy-going personality (submissiveness, sociality, persistence) or difficult-going personality (isolation or slow reaction) can be regarded as predictors of teacher-child relationship. Teachers tend to maintain more active communication with good-tempered children, and sometimes unconsciously reward children with positive characteristics, such as more active interaction with these children, more praise, less criticism and more instructive teaching (Keogh & Burstein, 1988) [6].

Rudasill and colleagues (2006) found that teachers' characteristics explain teacher-child relationships better than children's characteristics [7]. In-depth study of teachers’ characteristics, teachers’ educational level and years of work, the development suitability of teachers’ experience,
teachers’ sensitivity, work pressure (the relationship between parents and teachers, training level, organizational support), teachers' emotional state (depression level, self-efficacy, attachment history, etc.) all affect the relationship between teachers and children [8, 9, 10, 11]. Due to the special requirements of comprehensiveness, meticulousness, complexity and repetition of preschool education, preschool teachers have assumed high pressure, heavy load and long-term work, and have become a high incidence group of job burnout [12]. Job burnout, as an important indicator of mental health, refers to a comprehensive symptoms including emotional exhaustion, depersonalization and reduced personal accomplishment caused by employees' inability to effectively cope with the continuing pressure at work. The burnout of preschool teachers not only affects their physical and mental health, but also has a negative impact on their physical and mental development because of their lack of enthusiasm and enthusiasm for work. How to effectively alleviate and reduce the level of burnout of preschool teachers in order to ensure the overall quality and work effect of preschool teachers has become an urgent problem to be solved in the construction of preschool teachers. It is found that teacher job burnout can negatively predict the quality of teacher-student relationship (Hoglund, Klinge, Hosan, 2015) [13].

Previous studies have preliminarily explained the relationship between teacher job burnout, child temperament and teacher-child relationship. However, there are relatively few studies on the relationship between the three variables, and fewer studies focusing on preschool teachers’ professional groups. In this study, we aim to explore the impact of teacher job burnout and child temperament on teacher-child relationship, especially whether teacher job burnout moderates the influence of child temperament on teacher-child relationship, so as to provide the necessary basis for effective preschool teacher training in the future.

Methodology

Sample

114 teachers and 456 children from 6 kindergartens in Shanghai were randomly selected as subjects. Among them, there are 42 teachers and 168 children in large class, 36 teachers and 144 children in middle class, 36 teachers and 144 children in small class, 228 boys and 228 girls in all.

Measurement

**Job Burnout Scale.** Maslach et al. compiled the Teacher Job Burnout Questionnaire with 22 items. The items were scored by 0-6 grade 7 (0 represents never happened, 0 points, 6 represents daily occurrence, 6 points), including three dimensions: emotional exhaustion (9 subjects), depersonalization (5 subjects), and low sense of achievement (8 subjects). The higher the score, the stronger the sense of burnout [14]. In this study, the total score of job burnout (i.e. the total score of three dimensions) was used, and the consistency reliability coefficient of teacher job burnout was 0.83.

**Teacher-Child Relationship Scale.** The Student-Teacher Relationship Scale (STRS) was used to assess teacher-child relationship quality [15]. The closeness dimension (11 items) and conflict dimension (12 items) in the teacher-student relationship scale. Using the five-point scoring method (from 1-completely inconsistent to 5-completely coincident), a teacher in the class where the children are in evaluated their relationship with children. The higher the score, the closer the relationship between teachers and children or the stronger the conflict. The consistency reliability alpha coefficients of closeness and conflict were 0.67 and 0.93 respectively.

**Children's Behavior Questionnaire.** Child temperament was measured by Children's Behavior Questionnaire, which included 36 subjects and was divided into three dimensions: extroversion, negative affect and effort control [16]. Each dimension has 12 items. The questionnaire was assessed by parents and scored at grade 7. One representative was completely inconsistent with the other seven. The higher the score, the more consistent the description of the topic was with the characteristics of the child. In this study, consistency reliability temperament surgency was 0.61; negative affect was 0.61; effort control was 0.78.
**Implementation Process.** Job Burnout Questionnaire and Teacher-Child Relationship Questionnaire were conducted in kindergartens as a unit. Every teacher completed 4 teacher-child relationship questionnaires. The questionnaire was sent out on the spot in the form of paper and pencil, and collected on the spot. The child temperament questionnaire was filled out by the father or mother of the child, and finally brought back to school by the researcher. Researchers scrutinized the questionnaires one by one and exclude invalid questionnaires.

**Results and Analysis**

Table 1. The Correlation of Children’s Temperature, Teacher Job Burnout and Teacher-child Relationship.

|                        | child gender | teacher job burnout | surgency | negative affect | effort control | closeness |
|------------------------|--------------|---------------------|----------|-----------------|----------------|-----------|
| teacher job burnout    | .030         |                     |          |                 |                |           |
| surgency               | -.091        | -.062               |          |                 |                |           |
| negative affect        | .033         | .175**              | -.097*   |                 |                |           |
| effort control         | .128**       | -.242**             | .050     | -.097*          |                |           |
| closeness              | .119*        | -.299**             | .186**   | -.086           | .320**         |           |
| conflict               | -.047        | .489**              | -.154**  | .203**          | -.277**        | -.389**   |

Sex 1 represents girls and 0 represents boys.

Child gender was significantly correlated with children’s effort control (r = 128, P < .01), and significantly correlated with teacher-child closeness (r = 119, P < .05). Teacher job burnout was significantly negative related to teacher-child closeness (r = -.299, P < .01), and significantly positive related to teacher-child conflict (r = 489, P < .01). Surgency was positively correlated with teacher-child closeness (r =186, P < .01), negatively correlated with teacher-child conflict (r = -.154, P < .01), positively correlated with teacher-child conflict (r = .203, P < .01), children effort control was positively correlated with teacher-child closeness (r = 320, P < .01), and negatively correlated with teacher-child conflict (r = 320, P < .01). Correlation (r = -.277, P < .01).

Table 2. Predicting Closeness from Children’s Temperature and Teacher’s Job Burnout.

|                            | B       | Std. Error | β      | ΔR²     |
|---------------------------|---------|------------|--------|---------|
| Block 1                   |         |            |        |         |
| (constant)                | 3.433   | .035       |        | 0.192***|
| Child gender              | .123    | .048       | .110   |         |
| teacher burnout           | -.157   | .029       | -.246  |         |
| surgency                  | .156    | .038       | .177   |         |
| negative affect           | -.027   | .037       | -.031  |         |
| effort control            | .159    | .030       | .232   |         |
| teacher job burnout       | .000    | .047       | .000   | 0.022** |
| *surgency                 |         |            |        |         |
| teacher job burnout *surgency| -.124   | .042       | -.124  |         |
| teacher job burnout *negative affect | -.055 | .031 | -.077 |         |
| teacher job burnout *effort control |         |            |        |         |

Table 2 showed that teacher job burnout had a significant predictive effect on teacher-child closeness (β = -.246, P < .001), surgery of children had a significant predictive effect on...
teacher-child closeness ($\beta = .177$, $P < .001$), negative affect of children had no significant predictive effect on teacher-child closeness ($\beta = -.031$, $P > .05$), and children effort control had a significant predictive effect on teacher-child closeness ($\beta = 0.232$, $P < .001$). Teacher job burnout played a moderating role between children temperament and teacher-child closeness ($R^2 = 0.022$, $P < .05$). The moderating effect of teacher burnout on surgery and teacher-child closeness was not significant ($\beta = 0.000$, $P > 0.5$); the moderation effect of teacher job burnout on negative affect and teacher-child closeness was significant ($\beta = -.124$, $P < .01$); the moderation effect of teacher job burnout on children’s effort control and teacher-child closeness was not significant ($\beta = -.077$, $P > .05$).

Table 3. Predicting Conflict from Children’s’ Temperature and Teacher Job Burnout.

| Block 1 | B      | Std. Error | $\beta$ | $\Delta R^2$ |
|---------|--------|------------|---------|-------------|
| (constant) | 2.019  | .048       |         | .294***     |
| Child gender | -.087  | .065       | -.053   |             |
| teacher job burnout | .409   | .039       | .438    |             |
| surgency | -.156  | .052       | -.122   |             |
| negative affect | .152   | .051       | .121    |             |
| effort control | -.148  | .041       | -.149   |             |
| Block 2 | B      | Std. Error | $\beta$ | $\Delta R^2$ |
| teacher job burnout | .005   | .063       | .003    | .017*       |
| *surgency    |        |            |         |             |
| teacher job burnout | .165   | .058       | .114    |             |
| *negative affect |        |            |         |             |
| teacher job burnout | .063   | .042       | .061    |             |
| *effort control |        |            |         |             |

Teacher job burnout had significant predictive effect on teacher-child conflict ($\beta = 438$, $P < .001$), surgency of children had significant predictive effect on teacher-child conflict ($\beta = -.122$, $P < .01$), negative affect of children had significant predictive effect on teacher-child conflict ($\beta = 121$, $P < .01$), and children’s effort control had significant effect on teacher-child conflict ($\beta = -.149$, $P < .01$). Teacher job burnout played a moderating role between children temperament and teacher-child conflict ($R^2 = 0.017$, $P < .01$). The moderating effect of teacher job burnout on children’s surgery and teacher-child conflict was not significant ($\beta = 0.003$, $P > 0.5$). The moderation effect of teacher burnout on children's negative affect and teacher-child conflict was significant ($\beta = 114$, $P < .01$). Teacher job burnout did not play a significant moderation role between children's effort control and teacher-child conflict ($\beta = 0.061$, $P > .05$).

Figure 1. The Effect of Negative Affect on Teacher-Child Closeness—The Moderation Effect of Teacher Job Burnout.
Figure 2. The Effect of Negative Affect on Teacher-Child Conflict—The Moderation Effect of Teacher Job Burnout.

Discussion

The Predictive Role of Teacher Job Burnout and Children's Temperament on Teacher-child Relationship

Teacher job burnout had a significant negative predictive effect on teacher-child closeness and a significant positive predictive effect on teacher-child conflict, which was consistent with the results of Hoglund (2015) [13]. Their research found that children's explicit behavior and teacher job burnout were the risk sources of poor teacher-child relationship quality. Teacher job burnout would lead to teachers' lack of professional ethics and dedication in their work, lack of innovation in teaching methods, reduce their sense of self-efficacy, and produce boredom in their work, which ultimately affects the quality of teacher-child relationship.

Child temperament significantly predicts teacher-child relationship, among which children's surgency and effort control had significant positive predictive effect on teacher-child closeness, children's negative affects had no significant predictive effect on teacher-child closeness, children's surgency and effort control had significant negative predictive effect on teacher-child conflict, and children's negative affects had significant negative predictive effect on teacher-child conflict. Children's temperament was an important factor affecting the quality of teacher-child relationship, which is consistent with previous research results. Rudasill & Rimm-Kaufman (2009) found that children's temperament characteristics have an impact on the quality of teacher-student relationship. Children's shyness, effort control and gender directly contribute to the contradiction and closeness of teacher-child relationship. Children's surgency and hard control may have a positive impact on teacher-student relationship, while emotional characteristics such as anger, in turn, hinder teacher-student relationship [17]. Children's low level of control was related to externalization, while high level of control is related to children's social ability and positive peer relationship. In other words, children with a high degree of control are less likely to disrupt the classroom, requiring teacher behavioral intervention. Easy control, then, seems to help children interact successfully with their teachers and form positive relationships with them (Blair, Denham, Kochanoff, & Whipple, 2004) [18]. However, children's irritable temperament may induce conflicts between teachers and children, leading to more conflicts.

The Moderation Role of Teacher Job Burnout

Teacher job burnout plays a moderation role between child negative affect and teacher-child relationship. The influence of child negative affect on teacher-child closeness depended on the level of teacher's job burnout. At a higher level of teacher burnout, the teacher-child closeness decreased rapidly with the increase of children's negative affect scores; at a lower level of teacher burnout, the closeness score did not change significantly with the increase of children's negative affect scores. The influence of children's negative affect on the conflict of teacher-child relationship depended on
the level of teacher's job burnout. At a higher level of teacher job burnout, with the increase of children's negative affect scores, the conflict of teacher-child relationship also increased; at a lower level of teacher job burnout, with the increase of children's negative affect scores, the conflict scores wound not increase. Higher negative affect of preschool children and higher job burnout of teachers were double dangerous sources affecting the quality of teacher-child relationship. When dealing with children's negative affect, teachers with high job burnout are easily frustrated and difficult to control their anger or inefficiency. These teachers may also lose patience, do not care about and respect children's behavior, and impair their ability to develop positive relationships with children (Yoon, 2002) [19]. In supportive classrooms, teachers with low job burnout were sensitive to children's emotional and learning needs, gave high-quality feedback and coordinated efforts, which would improve the quality of teacher-child relationship [13].

Educational Suggestions

Hosan et al. (2013) asked graduate students of school psychology to act as mental health counselors to train kindergarten to third grade teachers' abilities to manage job-related stressors and improve their ability to identify and support children with mental health and peer relationship problems [20]. Providing psychological counseling and career planning guidance for teachers in kindergartens can help teachers identify and manage job-related burnout, help teachers eliminate negative affect, identify career development paths, maintain healthy and upward mental state, and get rid of the sense of footsteps and confusion; at the same time, it can identify and support children's psychology. To manage health needs and support active cooperation between teachers and parents.

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