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The Quality Of Teachers' Educational Practices: Internal Validity And Applications Of A New Self-Evaluation Questionnaire

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Abstract

This research investigates teachers' educational practices in kindergarten and primary schools. Teachers should be able to ensure effective teaching-learning processes, but also to support a positive school climate thanks to a good classroom management. Self-evaluation instruments can help teachers to reflect on their own educational practices and to improve professional skills. The aims of this study are (1) to analyse the internal validity of a new self-evaluation instrument, named *Teachers' Educational Practices Questionnaire* (TEP-Q) and (2) to examine the possible use of this instrument in pre-service teacher training. The sample consists of 307 in-service teachers of Northern, Central and Southern Italy. The results of three distinct *Principal Axis Factor Analysis* with *Promax Rotation* revealed two-factor structure for Communication and Classroom Organization areas and one-factor structure for Relationship. Significant differences emerged for type of school, type of teacher and years of teaching. As to the second aim, the TEP-Q was used for different groups of pre-service and in-service teachers training resulting effective for the improvement of professional skills' range through shared reflection on educational practices.

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1. Introduction

Decades of research on children's socio-emotional development can be used to promote teachers' awareness and educational practices to improve in the development of these competencies [1]. Effectively, there is a growing recognition that teachers make a crucial contribution to the social and emotional development of their students

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return it was distributed after filling it out.

3. Results

To assess the psychometric properties of TEP-Q scales, items were subjected to three distinct *Principal Axis Factor Analysis with Promax Rotation* [23]. A first series of factor analyses was conducted on 60 items developed for the original version of TEP-Q. Items that presented a loading less than .30 or loaded on more than one factor were deleted. A second series of factor analysis was performed on the remaining 36 items. The results revealed one-factor structure for *Relationship* and two-factor structure for *Communication* and *Organization*.

Relationship Area: the scree test of eigenvalues [24] reveals one factor that accounted for 32.6% of the variance, corresponding to a domain named *Attention on Relationships*; the actual item loadings in the factor ranged from .43 to .69 (see Table 1). *Attention on Relationships* refers to teacher’s skill to promote emotions expression, to manage the teaching of Personal, Social and Health Education (PHSE), to show comfort, to reinforce pupils’ prosocial behaviour. The Cronbach’s Alpha coefficient for the scale was .68.

Table 1. Factor structure and descriptive data of *Relationship Area*

Item	Factor 1 Attention on Relationships
I show attention and involvement when children express their mood	.694
I encourage children to express their feelings and emotions	.683
I talk about classroom relationships	.632
I recognize when a child needs comfort, even when it’s not explicit	.554
During the year, I teach PSHE	.550
I search for individual interaction moments with each child	.503
Children tell me about their personal stuff spontaneously	.462
I praise helpful behaviour	.433
<i>Cronbach’s Alpha</i>	.68
<i>Eigenvalue</i>	2,61
<i>% of Variance</i>	32,6
<i>Mean</i>	4,05
<i>Standard Deviation</i>	.469

Communication Area: the scree test of eigenvalues reveals two principal factors that accounted for 30% of the variance, corresponding to two domains named *Effectiveness* and *Self-Regulation*; the actual item loadings in the factors ranged from .31 to .59 (see Table 2). *Effectiveness* refers to teacher’s skill to give contents, to keep attention in the class and to promote involvement of all the pupils. *Self-Regulation* indicates the teacher’s skill to manage and regulate one’s own communicative processes, controlling emotional states which could prevent an effective communication. The scales are not correlated ($r = .12$), highlighting two independent aspects of Communication. The Cronbach’s Alpha coefficient for *Effectiveness* scale was .66, while for *Self-Regulation* scale was .65.

Organization Area: the scree test of eigenvalues reveals two principal factors that accounted for 39% of the variance, corresponding to two domains named *Active Methodologies* and *Care on Activities*; the actual item loadings in the factors ranged from .41 to .59 (see Table 3). *Active Methodologies* describe the use of methodologies involving the pupils’ participation (e.g. cooperative learning, role playing, peer tutoring). *Care on Activities* indicates teacher’s skill to present, to achieve and to supervise activities in the classroom. The scales measuring two different aspects of Organization result in a substantial correlation ($r = .38$). The Cronbach’s Alpha coefficient for *Active Methodologies* scale was .72, while for *Care on Activities* scale was .60.

Overall, mean values of the five scales emerged from factor analysis were resulted medium-high, ranging from 3.39 (s.d. = .71) in *Active Methodologies* to 4.14 (s.d. = .54) in *Care on Activities*. As it should be expected, teachers gave to themselves a good evaluation.

Table 2. Factor structure and descriptive data of *Communication Area*

Item	Factor 1 Effectiveness	Factor 2 Self- Regulation
When a child behaves well, I give praise	.582	-.144
I repeat children's idea/answer to the class	.461	-.030
I praise children for their achievements	.434	-.048
I help children to reformulate their thinking when it's unclear	.426	.088
I deliberately use gestures to aid communication	.411	-.054
Before each activity, I provide detailed instructions to the class	.410	.122
I show attention and involvement when children express their mood	.399	-.002
During a discussion, I summarize what has emerged	.340	-.003
During the lesson, I modulate my voice tone to catch the children's attention	.325	.140
When a child comes near me, I look at them	.307	.079
I appear calm and relaxed to the class	.092	.590
When I'm angry, I shout at the class (<i>reversed</i>)	-.135	.582
I interrupt children while they are expressing their opinions (<i>reversed</i>)	-.045	.486
I complain in front of children when I'm tired (<i>reversed</i>)	-.043	.418
I address children kindly	.141	.396
I tend to answer to children's questions before they are finished (<i>reversed</i>)	.074	.360
<i>Cronbach's Alpha</i>	.66	.65
<i>Eigenvalue</i>	2,70	2,08
<i>% of Variance</i>	16,9	13
<i>Mean</i>	4,12	3,91
<i>Standard Deviation</i>	.647	.559

Table 3. Factor structure and descriptive data of *Organization Area*

Item	Factor 1 Active Methodologies	Factor 2 Care on Activities
I make use of role-play or simulation activities for the class	.888	-.219
During break times, I suggest group games to the class	.737	-.145
During activities, I organize group work	.674	.054
During the activities I encourage children to help each other	.540	.216
During the day, I give some free-choice activities.	.419	.197
During activities I stimulate the exchange of ideas among children.	.409	.260
During an activity I walk around the tables to help children who need it.	-.018	.612
I provide different activities for children in need.	.079	.609
During break times, I observe the children's relationships.	-.065	.607
Early in the lesson, I explain what we are doing.	.043	.561
I consider the ideas of children for some activities (posters, homework, etc.).	-.138	.548
During group work, I monitor how children work.	.166	.451
<i>Cronbach's Alpha</i>	.72	.60
<i>Eigenvalue</i>	3,29	1,40

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