



Adaptation and Motivation of Greek Gifted Pupils: exploring some influences of primary schooling

AIKATERINI GARI, ANASTASIA KALANTZI-AZIZI
& KOSTAS MYLONAS

The main purpose of this study, on the theoretical framework proposed by Renzulli (1986) and by Van Boxtel and Mönks (1992) and Mönks, Van Boxtel, Roelefs and Saunders (1986), was to explore pupils' motivation and adaptation to school life in relation to the identification of giftedness. A pool of 1765 primary school pupils were initially tested for Visual-Motor Integration and Creative Thinking. Their teachers nominated 90 of them as gifted, who in turn were assessed in regard to their level of school adaptation and motivation by questionnaires based on Power and Cotterell (1979) and on Entwistle (1968). The comparison groups were five nominated pupils, verified as gifted, seven more non-nominated, but gifted (all 12 identified through psychometric and statistical criteria), and ten non-gifted but nominated pupils. The results indicated that the gifted pupils, depending on whether or not they are identified by their teachers, feel partially motivated and exhibit lower than the expected adaptation at school. The findings are discussed in the light of the current Greek school system.

Introduction

The fundamental concept of this study is giftedness, the understanding of which is derived from Renzulli's (Renzulli, Reis & Smith, 1981; Renzulli, 1986) tripartite model of giftedness. Renzulli claims that general intellectual capacity and creative thinking at exceptional levels as well as goal-oriented task commitment together make up the prevalent components of general giftedness. According to the same model, but augmented by Mönks (cf. Mönks, Van Boxtel, Roelefs & Sanders, 1986; Van Boxtel & Mönks, 1992), general giftedness is also directly related to the level of motivational standards and challenges within peer group, school and family settings. Thus, these three social settings and their dynamic interaction are necessarily linked to the prevalent components of general giftedness. Giftedness, after all, cannot emerge in social isolation.

Authors' addresses: Department of Psychology, School of Philosophy, Faculty of Philosophy, Pedagogy and Psychology, The University of Athens, Panepistimiopolis, Ilissa 157 84, Athens, Greece. Note that Aikaterini Gari is corresponding author.

Parental identification of a child's giftedness is often the first step in enhancing it. Parents' approval and, especially, their attitudes and behavior appear to be vital for the child to realize his or her potential (Freeman, 1991, 1993). In addition to the familial social setting, the influence of peer groups affects the development of giftedness. It is often argued that it might be necessary for gifted children to socially interact with other gifted, or even older, children (Mönks *et al.*, 1986). Gallagher (1979), for example, showed that gifted pupils are more popular at school than their non-gifted classmates. However, the "average" traits that classmates and peers often possess could negatively influence the social development and the social adaptation of gifted students (Van Boxtel & Mönks, 1992). Negative influences also relate to school performance. Mönks and his associates (1986) showed that underachieving gifted students tend to seek help from their classmates, but rarely offer help. In contrast, students of average performance, as well as high-performance gifted students, do not seek help as often as their underachieving gifted classmates do.

Teachers' contribution to the process of identifying general giftedness is also crucial, since teachers in many countries officially recognize gifted students as potential candidates to enroll in special enrichment programs (Gear, 1976; Delisle, Reis & Gubbin, 1981; Delisle, 1989, 1995; Hany & Heller, 1990; Hany, 1993, 1997). Teachers are therefore often key persons who provide a child with the necessary opportunities for his or her giftedness to unfold. However, several studies have indicated that teachers face serious problems when asked to identify gifted students. It is evident that teachers' judgements do not always coincide with the pupils' actual intellectual and/or creative thinking abilities (Hany, 1993).

Moreover, Greek primary school teachers usually find it difficult to identify gifted students for two reasons: (a) Most of them never had any formal training regarding the identification of giftedness and therefore often lack specific knowledge of the needs of the gifted. Also, (b) the Greek State has not yet recognized the school psychologist as a specialized profession in regular public schools. Thus, ability indices and other psychological assessment information are not available to teaching staff. Consequently, Greek teachers may not have the necessary support in efficiently identifying the gifted.

Identification of gifted students could be generally considered as a necessary, but not sufficient, condition for their satisfactory adaptation at school. The term adaptation refers, in general, to the degree to which all students cope with the complexity of classroom and school activities as well as with relating to teachers and other students (Power & Cotterell, 1979; Cotterell, 1982). If not identified by the teacher, the gifted student will be confronted with a school system mainly designed to cater to a normal population and their intellectual traits and performance levels. It could therefore be argued that the non-identified gifted student, at times, will have to make intellectual and emotional compromises and suffer discouragement and isolation in a regular classroom; for example by teachers' negative remarks (Freeman, 1991). The adaptation level of the gifted, especially, seems to be equivalent to their level of satisfaction with, for example, the school curriculum and activities, social relationships in the school, in the surrounding community and their own performance and self-worth at school. Students' self-worth in a school context is also

present study the VMI was administered to groups of students rather than individually.

The participating students were also assessed on creative thinking by responding to three verbal tasks from the Torrance Test of Creative Thinking (Torrance, 1966): “unusual uses” for two objects, “consequences” and “modification”, for two hypothetical conditions each. These three tasks aimed at assessing divergent thinking and were scored for Fluency. Fluency scores in divergent thinking assessment have also been shown to correlate with originality, flexibility and elaboration scores, with coefficients ranging from 0.68 to 0.85 (Hargreaves & Bolton, 1972; Hocevar, 1980, 1981). Similar correlations have been reported also for gifted students (Runco, 1986). Interrater reliability coefficients for the Torrance Tests of Creative Thinking have been reported (in the tests’ technical manual and in subsequent studies) as higher than 0.90 (Callahan, 1991).

Nomination Procedure

For the initial sample of 1765 students, their teachers ($N = 89$) were asked to nominate gifted students as if nominated pupils “were to participate in enrichment programs that the Greek Ministry of Education might have organized”. Prior to this given task, however, the researchers gave them a brief introduction based on Renzulli’s (1986) model of giftedness. Accordingly, the teachers nominated 90 students as gifted. Note that the nomination procedure always preceded test administration.

Out of the 90 students nominated as gifted by teachers, five were finally identified as gifted by applying specific criteria to the VMI outcomes and the Fluency scores. The remaining 85 nominees were not identified as gifted in accordance with the adopted criteria. These criteria were: (a) a cutoff score of 131 for the VMI outcome along with a cutoff point of 30 for the Total Fluency score; and (b) the detection of multivariate outliers (VMI and Total Fluency scores) within the cluster of cases scoring high in both tests. Criterion (b) involved the use of cluster analysis for all 1765 cases and the detection of multivariate outliers (Tabachnick & Fidell, 1989) via the computation of Mahalanobis’s Distance Index. This index is underlying Hotelling’s T^2 -test and the theory of discriminant analysis, as one of the most important distance indices in cluster analysis (Mardia, Kent & Bibby, 1989). The index represents a generalized measure of the “distance” between two populations (Kleinbaum, Kupper & Muller, 1988). For this study, criterion (b), in combination with both of the cutoff scores in criterion (a), should be satisfied for a student to be identified as gifted.

Using the same criteria, seven more pupils—although not nominated as gifted by their teachers—were identified from the remaining pool of students (i.e. 1765–90).

Due to the largely unequal sample sizes of the three different student groups it was necessary to also select, for the inferential analyses, a random sample of ten students out of the 85 non-gifted ones. Thus, the data that were finally used were derived from three groups of ten non-gifted (although nominated by teachers), five gifted