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A Longitudinal Study of Academic Success and Failure in Compulsory Secondary Education and Baccalaureate Students through the Millon Adolescent Clinical Inventory (MACI)

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Abstract

Aretrospective longitudinal study of a final sample of 311 Spanish students in compulsory secondary education (CSE) and baccalaureate (BAC) between 1 and 6 years after administration of MACI was conducted by analyzing “a posteriori” if they were able to graduate or not in CSE, as well as some form of baccalaureate. The effects of factors such as grade, sex and graduate/undergraduate were studied over measured variables by MACI, related with personality traits, the concerns expressed and clinical syndromes. Looking retrospectively if emerging patterns of certain personality variables characterizing students as a function of previous factors, statistically significant variables ($p < 0.05$) that clearly differentiate these types of students are detected based on sex, in fourteen scales scores are higher for women, with predominance of internalizing trend and with a large effect size in variables as body disapproval (0.81) and eating disorders (0.87), and in six scales boys with externalizing trend and a large effect of sex factor on the variable predisposition to delinquency (0.81) as well as between different types of academic performance, especially undergraduate students in scales 2A, 6B, 9, B, G and H. Finally, references to clinical intervention techniques and educational community services, in Spain, are proposed.

Keywords

Compulsory Secondary Education/Baccalaureate, Academic Success and Failure, Adolescents, MACI, Millon

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1. Introduction

Theodore Millon's contributions to psychopathology, clinical psychology and mental health are well known (Millon, 1986b, 1988, 1990; Millon & Davis, 1996; Millon & Grossman, 2006; Millon, Grossman, Meagher, Millon, & Ramnath, 2004), and although its contribution has focused on the clinical setting, and has enjoyed an international acceptance and validity, his biopsychosocial model has not been excessively exploited in Spain, and we have found few empirical studies analyzing its feasibility and usefulness of this clinical model in educational contexts and students potentially at risk, and their relation to variables such as school performance, academic success and failure, emotional intelligence and others. Our intention is to delve and try to check the usefulness of the model in the educational context, to see if there are personality variables, expressed preoccupations or clinical syndromes that constitute a model or a constellation of associated patterns that characterize certain students in the failure continuum versus academic success, and to see if it can be used for the detection, assessment, intervention or guidance for youngsters in risk of mismatch but have not been detected in the school year or educational stage in which they are enrolled.

In a similar way, Vinet, Salvo & Forns (2005) conducted a study with non-consulting Chilean adolescents but at risk, using MACI, finding that these are not a homogenous group, and where a subset of risk was detected, reaching about 27% of subjects, noting that adolescent women showed a level of mental health slightly lower than that of men.

Meanwhile, Vinet & Forns (2006) conducted a research to determine the ability of MACI to discriminate difference between general population and clinical, obtaining affirmative results to detect cases at risk, and they gave cultural arguments to explain some response tendencies in certain scales by Chilean individuals who took part in that study. These authors reported that the differentiation according to the age group considered (13 - 15 and 16 - 19), and the present in the original study rules of Millon was less clear in non consultants.

Moreover, the use of MACI in community population has allowed the description of troublesome personality styles (Meeker, 2002), has helped to clarify adolescents requiring professional help from those who did not (Casullo, Gongora & Castro, 1998), has been used with adolescents without mental health problems, in adolescents with clinical syndromes, social adjustment problems and no young consultants (Vinet & Alarcón, 2003) and for psychological disorders (Vinet & Santacana, 2008). Perez, Diaz and Vinet (2005) report differences found in many of the scales on the basis of gender, and in a study with Argentine individuals, Casullo and Castro (2002) found differences in 23 of the 27 scales between men and women. It has also been used with "normal" young people involved in sexual offenses (Wasserman, 2001), even to find relationships between certain personality styles and constructs as attachment (Meeker, 2002), or social maladjustment in adolescence (Alarcón, Vinet & Salvo, 2005).

The design used in this research is of the "*ex post facto*" type because the independent and dependent variables are related to the subjects, that is, they are already given and have occurred, and therefore, the "pre-existing" variables are studied in individuals or its determinants. Within this typology the present study would be part of what is called retrospective design of only a group. In this sense, Broc & Gil (2008) found that the scales of family discord, social insensitivity, limit trend, self-punitive, and unruly were MACI variables entering the equation for predicting academic performance in adolescent men of the 4th year of obligatory secondary education (tenth grade), while the Identity Diffusion and Body Disapproval were typical of adolescent women. In high school stage (eleventh and twelfth stage), the best predicting variable was *Oppositional* in males and *Dramatizing* in adolescent girls.

Although the theoretical model of Millon and his measure instruments are aimed at people with a specific psychopathology, clinical disorders "*per se*", would not be possible to extend this instrument samples, allegedly without risk, in order to detect cases, although at one point in their evolutionary process it does not present an exacerbation of their problems: could it be said that they are in a line or clear trend towards mismatch?

The assumptions are detailed below: 1) Due to the difference between the genders, statistically significant differences in MACI subscales, depending on the age and school year will be found; 2) There is a certain parallelism in adolescents between a biopsychosocial mismatch level and academic achievement, so it expects to find a constellation of MACI's variables associated with school failure, and other partners associated to success. In other words, the variables associated with academic failure would go in the direction of the mismatch on the model, while the variables associated with success would head towards the opposite direction, which is adapta-

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