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# Hans Eysenck in Latin America: His influence in the psychology, the study of personality and individual differences



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#### ABSTRACT

Hans Eysenck's works have had a substantial influence on the study of psychology in Latin America. His personality characteristics (sometimes dogmatic and incisive) and high intelligence (shrewd critic, a rigorous methodologist) were noted in the few visits that he made to the Latin America region (one of those visits called as "The Eysenck Affairs"). Considered as one of the most important scientists of psychology, Eysenck arrived into Latin American academic establishment in an epoch dominated by psychoanalysis, and showed us one of the strongest personality paradigms that the psychology has given to our times. The Latin-America psychology is returning to the investigation of personality traits from a psychometric approach. Certainly, underlying this returning, the Eysenck's PEN model is the principal driver. This tribute shows how the Eysenck's ideas arrived in the Latin American region and the potential of his influence in the future.

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# 1. Introduction

Hans Eysenck was considered one of the most famous psychologists of the 20th century (Haggbloom et al., 2002). There have been criticisms relating to lists of eminent psychologists (Black, 2003; Diener, Oishi, & Park, 2014); however, there is no doubt that Eysenck has secured a prominent place in the history of twentieth-century psychology. Even in Latin America there is a study in regards to the top one hundred books on psychology (Ardila, 1974, 2011), in which the writings of Eysenck (1967, 1973) are a part.

The ideas of Eysenck were known in Latin America since the end of the 1960s and the beginning of the 1970s. First, some of his books were translated into Spanish and distributed throughout Mexico, Argentina, and Spain; later, his books were translated into Portuguese and made available to Brazil (see list of books in Table 1). The *Scientific Study of Personality* was one of the first of Eysenck's book translated into Spanish by a Latin American publisher company (Editora Paidós — Argentina). Jaime Bernstein, who was one of the founders of the Editora Paidos and specialized in psychometric techniques and personality assessment, supervised the translation.

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Eysenck's critiques of psychoanalysis and dynamic psychotherapy as well as his studies in clinical psychology from the scientific perspective were admired (Ardila, 2011). However, during the 1970s and 1980s, his works were considered controversial and, thus, were not part of mainstream psychology, nor were they assimilated into Latin American psychology.

Eysenck visited the Latin America region on three occasions. The first visit happened on November 1981 in Buenos Aires, Argentina. He was invited to participate, along with Ruben Ardila (Colombia), as the first keynote speaker in the First Congress of Psychotherapies, organized by the University of Belgrano. Eysenck presented his research work on behavior therapy. He explained the conceptual and experimental bases, efficacy, follow-up, and the prevention of functional disorders. This multitudinous congress was widely covered by the Argentina mass media. Three factors were related to this enormous interest. First, psychoanalysis and psychology in most Latin American countries, especially Argentina, were considered virtually the same discipline (Dagfal, 2000; Gallegos, 2005; Klappenbach, 2000). Therefore, a different therapeutic approach, far away of psychoanalysis, would be presented for the first time. Secondly, the new therapeutic perspective arrived at the time a great effort was being made in Argentina to identify the specific roles for psychologists. According to Korman, Viotti and Garay (2010), the Ministry of Education of Argentina had regulated the activities of psychologists with "the three not": "not to psychoanalytic practice", "not to psychotherapy" and "not to the administration of psychotropic". Thirdly, for the first time, the name of a conference was not related to

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**Table 1**Translation to Spanish and Portuguese of Hans Eysenck's books.

Year	Title	Spanish			Portuguese		
		Country	Publishing	Year	Country	Publishing	Year
1953	Uses and abuses of psychology	Spain	Biblioteca Nueva	1957	Brazil	Ibrasa	1964
1952	The scientific study of personality	Argentina	Paidós	1959			
1954	The psychology of politics	Spain	Ariel	1964			
1956	Sense and nonsense in psychology	Spain	Morata	1962	Brazil	Ibrasa	1974
1960	Handbook of abnormal psychology	Mexico	El Manual Moderno	1983			
1962	Know your own I.Q.	Argentina	Paidós	1968	Brazil	Mestre Jou	1973
1964	Crime and personality	Spain	Marova	1976			
1964	Experiments in behavior therapy	Spain	Fundamentos	1979			
1965	Fact and fiction in psychology	Spain	Alianza	1977	Brazil	Ibrasa	1968
1966	Check your own I.Q	Spain	Ibérico Europea	1969	Brazil	Mestre Jou	1973
1967	The biological basis of personality	Spain	Fontanella	1970			
1971	Race, intelligence and education	Spain	Aura	1973	Brazil	Eldorado	1971
1972	Lexicon de psychologie	Spain	Rioduero	1979	Brazil	Loyola	1981
1972	Psychology is about people	Spain	Alianza	1979	Brazil	Ibrasa	1976
1973	The inequality of man	Spain	Alianza	1981	Brazil	Zahar	1976
1973	The experimental study of freudian theories	Spain	Alianza	1980			
1976	A textbook of human psychology	Mexico	El Manual Moderno	1980			
1976	Sex and personality	Spain	Cátedra	1982			
1977	You and neurosis	Argentina	Huemul	1978	Brazil	Zahar	1979
1979	The psychology of sex	Spain	Herder	1981			
1979	The structure and measurement of intelligence	Spain	Herder	1983			
1981	Intelligence: the battle for the mind	Spain	Pirámide	1983	Brazil	UnB	1982
1981	Mindwatching	Spain	Anaya	1982	Brazil	Círculo do livro	1981
1982	Explaining the unexplained	Spain	Sudamericana/Planeta	1984			
1985	Personality and individual Differences: a natural science approach	Spain	Pirámide	1987	Brazil	Record	1993
1985	Decline and fall of the freudian empire	Spain	Nuevo Arte Thor	1988			
1991	Smoking, personality and stress	Spain	Herder	1994			
1975	Know your own personality				Brazil	Nova Época	1979

"psychoanalysis". It was related to "psychotherapies". With these three factors surrounding the conference, the audience witnessed the strong confrontation between Eysenck and the local psychoanalytical *intelligentsia*. According to Fernandez-Alvares, a clinical Argentinian psychologist, for Eysenck "lie seemed to be in a place where people, supposedly under the protection of science, were ignorant of those things which could be effective in improving the health of people" while for psychoanalysts "(...) it did not matter behavioral therapy as Eysenck defended, because all those proposals sounded like 'Clockwork Orange'..." (Korman, Viotti, & Garay, 2010, pp.146).

The impact of Eysenck's visit was felt in Argentinian psychology for years. Along with Michael Mahoney, Aaron Beck, and Vittorio Guidano, Eysenck was important to the consolidation of cognitive psychotherapy. While it is true that his excessive confrontation with psychoanalysis may have limited his role in the Argentina psychology, it is also true that Eysenck inspired a generation of therapists to search for better treatments for their patients (Korman, 2011). According to Ruben Ardila (one of the authors of this article), who was present at this conference, Eysenck's participation was extremely meaningful.

His next visit was Mexico, where he participated as one of the main speakers at the XXIII International Congress of Psychology (Acapulco, September 2–7, 1984). His discussions regarding arousal-oriented personality dimensions were subsequently mentioned in the Eysenck's book Personality Dimensions and Arousal (Strelau & Eysenck, 1987).

The third visit was to Colombia. Invited by Ruben Ardila, Eysenck was the principal speaker in the *VI Colombian Congress of Psychology* (April 30–May 3, 1993). On this occasion, more than 1500 participants gathered at the conference. By this time, there was already a critical mass of researchers, clinical psychologists, psychiatrists, and experts in personality measurement, who were well acquainted with the Eysenck's work. Eysenck delivered lectures about intelligence, psychology of health, cancer, genius and creativity.

These visits to Latin America permitted Eysenck to spread his ideas in the region. Some students even went to Great Britain to study with him. Notable among them was Eva Mikusinski, who for years was the most knowledgeable and fervent advocate of Eysenck's work in

Argentina. There were additional Latin American students who pursued doctoral studies or short residencies at Maudsley Hospital, under Eysenck's guidance.

The majority of writings by Eysenck was translated in Spain, the country to which Eysenck visited several times, where his ideas were more widespread than in the countries of Latin America (Caballo, 1997; López, Bañúls, & Sanchis, 1991; Pinillos, 1997). Some of his papers were published in Spanish in journals as *Psicología Conductual* [Behavioral Psychology] (Eysenck, 1994), *Anuario de Psicología* [Journal of Psychology] (Eysenck, 1989) or *Revista Latinoamericana de Psicología* [Latin American Journal of Psychology] (Eysenck, 1977). The journal *Revista de Psicología General y Aplicada* [Journal of General and Applied Psychology], one of the more ancient journal founded in 1946 in Spain, and main source of information for Latin American psychologists, dedicated posthumous special edition to Eysenck (Pinillos, 1997).

Additionally, several of Eysenck's personality questionnaires were used in some Latin-American countries. Unfortunately, few versions were appropriately standardized. The Eysenck's questionnaires were thought to be an alternative to projective tests and were accepted heartedly by the majority of psychologists with scientific orientation. The first translations and adaptions of personality questionnaires of Eysenck were conducted in Spain by TEA (Técnicos Especialistas Asociados), a company specialized in psychological test and marketed in the Latin American region (Aguilar, Tous, & Pueyo, 1990). Subsequently, local adaptations were conducted, especially in Argentina (Omar, 1988; Schmidt, Costa, Firpo, Vion, & Casella, 2008; Squillace, Picón, & Schmidt, 2013), México (Eysenck & Lara Cantú, 1989, 1992), Brazil (Santos & Flores-Mendoza, 2012; Tarrier, Eysenck, & Eysenck, 1980), Chile (Gempp & Cuesta, 2007; Domínguez, 2014), Peru (Arias, 2012; Merino Soto, 2013; Romero & León, 1989), Puerto Rico (Eysenck & Porrata, 1984), and Colombia (Ardila, 1997).

The several adaptations and reviews of the Eysenck personality instruments in the different countries of Latin America are a representation of the impact of his theory. Of course, the wide dissemination of his work around the world is not an arbitrary result of the simple recognition of the Eysenck work, but also, a goal that the author imposed

upon himself when he became interested in extending the validity of his theory (Barrett & Eysenck, 1984; Eysenck, 1978; Ortet, Ibáñez, Moro, Silva, & Boyle, 1999; Zambrano, 2011).

The Eysenck's ideas have bridged the gap of time and have laid the groundwork for the research of personality traits in Latin America. Currently, Brazilian researchers are one of the most active groups in the region.

## 2. Eysenck and his influence in Brazil

Unlikely of psychologists from countries where Spanish is spoken, Brazilian psychologists had not the opportunity to attend any seminar or conference in which Eysenck was a guest speaker. To our knowledge, Eysenck was never in Brazil as an invited academic researcher. Nonetheless, Brazilian psychologists knew his ideas, of his arguments, and his reasoning and concepts. From approximately 70 books, written by Eysenck (2001), 15 of these books have been translated into the Portuguese language. Perhaps, *Decadencia e Queda do Imperio Freudiano* (Eysenck, 1985) was one of the book most widely read in the 1980s, due to its contribution to the battle between psychoanalysis and behaviorism, which, at that time, was being waged in the Latin American academia.

Unfortunately, despite Brazilian knowledge of Eysenck's impressive and brilliant works, systematic research regarding temperament and personality traits in Brazil only began in the beginning of 21st century; a delay of 50 years compared to European and North American academic production. Effectively, after a search in Latin American bibliographic databases (e.g., Scielo, Bireme), for the period between 1970 and 1990, using key words such as "Eysenck", "EPQ-A", or "EPQ-J"; just one Brazilian paper appeared (Novaes, 1983) related to personality traits of violent criminals. In this study, no personality mean traits differences between inmates and no-inmates people were found. However, note the EPQ-A still is no adapted to the Brazilian context.

As we extended our search to include key words such as 'personality traits', 'personality questionnaire', 'personality scale', and 'personality dimensions', the situation changed very little. For example, the survey conducted by Flores-Mendoza (2006), in four traditional and important Brazilian journals of psychology, showed that from 1341 papers, published between 1970s and 1980s, just 98 studies (i.e., 7.31%) were related to personality. The majority of these studies (~80%) used projective tests: the dominant psychological tool in Latin America until few years ago. Even using projective or psychodynamic techniques, these personality studies were devoid of scientific rigor (Curty-Rembowski, 1985).

However, in this new millennium, the Brazilian investigation of personality was changing from psychoanalytic and radical behavioral perspectives to the dimensional/psychometric perspective. Three reasons promoted and strengthened the Brazilian investigation of personality traits, which are: (a) the creation in 2000 of a Brazilian national electronic library consortium for science and technology (called Portal CAPES), which permits faculty members and researchers to have free access to the full-text of leading journals covering all areas of academic activity (http://www.periodicos.capes.gov.br/); (b) the recognition of advances in biology and genetics and its implications to applied psychology (Dal-Farra & Prates, 2004); and (c) the regulation, made in 2003 by the *Brazilian Federal Psychological Association*, for use of psychological tests with validity, reliability and norms appropriate to the Brazilian population (http://satepsi.cfp.org.br/).

Effectively, after the year 2000, there has been a considerable increase in papers published in the principal Brazilian journals dedicated to the empirical investigation and not just theoretical studies. Specifically, we found 12 Brazilian studies that used EPQ-J or EPQ-A (Pacheco & Sisto, 2003; Sisto, 2004; Sisto, Oliveira, Oliveira, Bartholomeu, Oliveira, & Costa, 2004; Lopes, Nardi, Nascimento, Valença, Mezzasalma, Freire, & Zin, 2005; Junior, de Miranda, Perez, Maia, Neiva, & Barrocal, 2008; Mansur-Alves & Flores-Mendoza, 2009;

Mansur-Alves, Flores-Mendoza, & Abad, 2010; Flores-Mendoza, Jardim, Abad, & Rodrigues, 2010; Santos & Flores-Mendoza, 2012; Afonseca, Martins, & Pires, 2012; Flores-Mendoza, Widaman, Mansur-Alves, Bacelar, & Saldanha, 2013; Perez, Rabelo, & Rubio, 2013).

In addition to free access to international scientific information and arrival of psychometrics in the production of psychological tests, attending international meetings become more frequent to the national academy in the new millennium. For some of us, the meetings of International Society of the Study of Individual Differences (ISSID) were (and still are) very important in our academic development. For instance, there we gained an understanding of the great importance of the academic legacy of Eysenck, as well as the advances of competing theoretical alternative (the Big-5 model) in the personality field. In addition, we could know the important work of Ian Deary with his longitudinal project "Lothian Birth Cohort studies" in the intelligence field (Whalley & Deary, 2001). As consequence, it was created, in 2002, the Laboratory of Individual Differences Assessment in the Department of Psychology of Universidade Federal de Minas Gerais. The main goal was, and still is, to map out the cognitive and personality profiles of the population, specifically the profiles of the population of the state of Minas Gerais. In order to achieve this goal we needed psychometric measures comparable to those used in international studies. Among the personality measures, we decided to use the Eysenck Personality Questionnaire Junior — EPO-J (Eysenck & Eysenck, 1964), the Big Five Questionnaire Children — BFC (Barbaranelli, Caprara, & Rabasca, 1998), and the NEO-PI-R (Costa & McCrae, 2007).

Following the procedure of back translation, the personality questionnaires mentioned previously and intelligence measures were administered to larger samples of several projects conducted by our laboratory: (a) Longitudinal Study of Intelligence and Personality; (b) school achievement and cognitive situation of rural children; and (c) Brazilian standardization of EPQ-J.

In general, our results (Table 1) were in accordance with studies conducted in other parts of the world regarding the Eysenck's Big Three model, or the PEN personality model (Psychoticism, Extraversion and Neuroticism). For example, regarding Neuroticism (N), our results (Mansur-Alves & Flores-Mendoza, 2009; Mansur-Alves, Flores-Mendoza, & Abad, 2010) indicated a negative correlation between N and school achievement, even after controlling intelligence correlation. Children with higher scores on N tended to present, according to their parents, unsatisfactory adaptive behavior at home (e.g., loneliness, negative feelings, fearfulness/anxiety and nightmares). Therefore, and unsurprisingly, our results were in conformity with the arguments of Eysenck (1998) according to which typical individuals who reach a higher N score tend to be anxious, worried, temperamental, often depressed, sleep poorly, suffer psychosomatic disorders, and their strong emotional reactions also tend to interfere with their adaptation. Furthermore, we verified sex differences in N. We found sex differences in N: females having higher score. This result was found in schoolchildren as well as in school adolescents. Note that significant statistically sex differences were also found in adult samples during the Brazilian adaptation of NEO-PI-R (Costa & McCrae, 2007). After controlling for sex, the negative association between N and school performance of children disappeared, but the negative association between N and adaptive behavior remained statistically significant. Moreover, after 6 and 36 months, our re-tests studies indicated reasonable stability of N.

Regarding extraversion (E), we observed that specific items such as sensation seeking and friendships seeking, assessed by parents were positively correlated with E in samples of schoolchildren. No other consistent result was obtained with this dimension. In this respect, it should note that several stereotypes about Brazilian inhabitants include adjectives typical of extravert people (e.g., sociable, like parties, have many friends and need people to talk). Thus, high scores in extraversion are expected for Brazilian people as the study of Terracciano et al. (2005) regarding "National Character Perceived" has pointed out. However,

extraversion has been the most problematic dimension in Brazilian psychometric investigations. This limitation was observed also with adults using the NEO-Pl-R. We return to this issue below.

Psychoticism (P) is perhaps the most solid dimension found in all of our investigations, regardless of age, SES, or type of assessment (self-report, parents or teachers), and similar results were found in independent studies. In several path analyses, P was a significant predictor of school performance, independently of intelligence, and the strongest predictor. This result was found in schoolchildren attending 3rd to 5th grade using a Brazilian school achievement test and in schoolchildren attending 6th to 9th grade using an international school test such as PISA test (Flores-Mendoza, Widaman, Mansur-Alves, Bacelar, & Saldanha, 2013). Another study conducted in 2006 also indicated that children with high P scores were less informed regarding important news in Brazil (e.g., 'What is the big political event that will happen at the end of 2006?') and in the world (e.g., 'What is the Pope's name who was appointed in 2005?') than children with low P scores (Flores-Mendoza, Jardim, Abad, & Rodrigues, 2010).

Additionally, significant positive correlations were found between P and components of ADHD scale (teacher assessment), such as Attention Deficits, Hyperactivity, Learning Difficulties, and Antisocial Behavior (Table 2). All these results encouraged us to develop an adapted version of EPQ for parents of children aged between 4 and 6 years (Santos & Flores-Mendoza, 2012). As suspected, P was the only dimension with significant correlation with Antisocial Behavior, and Hyperactivity/Impulsivity as measured by a scale of ADHD also adapted to parents by our laboratory (Andrade & Flores-Mendoza, 2010).

Our results with P were in accordance with the arguments of Eysenck (1992), to whom individuals with a high score in P seek their own benefit (self-centeredness), they like strong sensations, take risks, tend to break rules and regulations, impulsive to some extent,

fundamentally reckless, and show lack of concern for the feelings of others. Our results obtained in young children and schoolchildren are evidences of continuity of personality as defended by Eysenck (Eysenck et al., 1970).

It is also important to note that among the first psychological tests, approved by the *Brazilian Federal Psychological Association*, was the Personality Traits Questionnaire for Children (*Escala de Traços de Personalidade para Crianças* in Portuguese language), based on the EPQ-J (Sisto, 2004). This psychological tool was oriented to assess children from 5 to 10 years old. Studies involving this questionnaire indicated that boys had higher scores in N compared to girls (Sisto, 2004); sadness and fearful correlated positively with N (Sisto, Oliveira, Oliveira, Bartholomeu, Oliveira, & Costa, 2004), and courage and sadness correlated with P (Sisto, 2004).

In 2013, after seven years of studies conducted in the Laboratory of Individual Differences Assessment of the Universidade Federal de Minas Gerais, the EPQ-J adapted to the Brazilian context for assessing children from 10 to 16 years old was published (Eysenck & Eysenck, 2013). The overall findings demonstrated that the main postulates of the Big Three Model (Eysenck, 1970, 1998; Eysenck & Eysenck, 1968, 1969, 1973) were replicated in our studies.

However, some inconsistencies have been found compared to the results observed in the literature published. For instance, in our studies significant race differences were not found in schoolchildren or school adolescents. Number of kids (size of family), birth position, kind of religion, political orientation (only adolescents), SES family or religiosity level (only adolescents) had not any correlation with none personality dimension, at least in the school age.

Previously, we mentioned some problems with E in our studies. Despite three very careful studies (including forward and back translations and panels with children and adolescents), only 58% of original items of

**Table 2**Studies conducted in Brazilian schoolchildren using the EPQ-J.

Study	Criterion	EPQ-J*		
		P	Е	N
Eysenck & Eysenck (Brazilian standardi-	Stability of EPQ-I (test-retest 2.5 years later in 244 children/adolescent)	.400	.319	.464
zation of EPQ-I; $N = 1012$ ; 2013).	Gf (Standard Progressive Matrices of Raven in 544 students)	257	Ns	Ns
	Gc (Verbal Scale of WISC III in 160 students)	Ns	Ns	Ns
	ADHD — Attention Deficits (157 students; teacher as observer)	.379	Ns	Ns
	ADHD — Hyperactivity (157 students; teacher as observer)	.292	.220	Ns
	ADHD – Learning Difficulties (157 students; teacher as observer)	.324	Ns	Ns
	ADHD — Antisocial Behavior (157 students; teacher as observer)	.362	Ns	Ns
	School Achievement - PISA (270 students)	300	Ns	Ns
	Sex differences (1 = female, 2 = male)	.321	Ns	253
Flores-Mendoza, Jardim, Abad, & Rodrigues ( <i>N</i> = 215; 2010)	General and current information; controlling intelligence correlation	180	Ns	Ns
Flores-Mendoza, Widaman, Mansur-Alves, Bacelar, & Saldanha (first sample <i>N</i> = 374; 2013)	School Achievement (TDE test); controlling intelligence correlation	13	Ns	Ns
Flores-Mendoza, Widaman, Mansur-Alves, Bacelar, & Saldanha (second sample <i>N</i> = 160; 2013)	School Achievement (PISA test); controlling intelligence correlation	14	Ns	Ns
Mansur-Alves & Flores-Mendoza (N =	Overweight	_	_	.141
368; 2009)	Adaptive functioning in home environment (assessed by parents)	_	_	320
,	N → School achievement; controlling intelligence	_	_	172
	Stability of N (test-retest after 6 month in 157 children)	_	_	.638
Mansur-Alves, Flores-Mendoza, & Abad	Self-report and observer report (parents) in N	-	-	.400
(N = 68; 2010)	Self-report and observer report (teachers) in N	-	-	.396
	Self-report and professional behavior observation	-	-	Ns
Longitudinal study of intelligence and	Loneliness, negative feelings (parents' observation)	.189	109	.166
personality ( $N = 398$ ; ongoing	Fearful, anxious (parents' observation)	Ns	Ns	.120
project)	Impulsivity (parents' observation)	.121	Ns	Ns
	Sensation seeker (parents' observation)	.145	.156	Ns
	Friendships seeker (parents' observation)	Ns	.143	Ns
	Nightmares (parents' observation)	Ns	Ns	.152
	Spatial reasoning (BPR-5; 162 students)	163	Ns	182
	Verbal reasoning (BPR-5; 162 students)	153	Ns	Ns
	Numerical reasoning (BPR-5; 162 students)	181	Ns	Ns

Ns = No significant results.

<sup>\*</sup> All values mentioned were significant statistically at  $p \le .005$ .

the EPO-I loaded in their theoretical factors. While N of the EPO-I correlated positively with N of the BFC (r = .59; p = .001); E of the EPO-I correlated lower with E of the BFC (r = .33; p = .005). In addition, our children understood many items of E as representing other dimensions, and we had to re-phrase them. Thus, instead 81 items as the original version, our Brazilian version of EPQ-J presents 60 items (47 original and 13 new items). Some problems with the facets of E were noted also during the Brazilian adaptation of NEO-PI-R (Costa & McCrae, 2007). After factor analysis, it was observed that the facet E4 (Activity) divided in two factors; and E5 (Excitement-Seeking) loaded in E2 (Gregariousness) and E6 (Positive Emotions). Additionally only 67% of items of E had factor loading above .30. Implications of this difficulty with E in psychometric personality questionnaires deserve more studies.

#### 3. Final considerations

Jensen (1997) wrote in his tribute to Eysenck, that one criterion to measure the eminence of a scientist is the extent to his/her influence goes beyond the narrow confines of specific research areas — and, indeed, beyond their geographical confines. Our studies of personality traits in Brazilian children demonstrate the academic authority that Eysenck represented for us.

There are countless theoretical models of personality traits, and several instruments for measure them. However, we agree with Eysenck (1998) when we wrote: "still there is an equal number of theoretical systems, positing between 3 and 16 major dimensions of personality" (p. xii). Thus, we decided for a parsimonious model, the "Big Three", on which there is strong empirical approach. We were conscious that to adapt international test such as the EPQ-J would permit us to compare our data to international existing data. Additionally, we would achieve greater cross-cultural generalization regarding dimensions of personality. Nonetheless, we were conscious that, as Lonner (1985) recommended, more studies at the level of functional, conceptual, metrics, and linguistic equivalence are necessary.

In general, Latin American researchers increasingly incorporate quantitative methods in their research, leaving aside mere theoretical studies. For instance our recent survey in eight important Brazilian journals of Psychology (PAIDEA, Reflexao & Critica, Arquivos Brasileiros de Psicologia, Psico-USF, Psicologia: Teoria & Pesquisa, Revista Psychology & Neuroscience, Estudos de Psicologia da PUCCAMP, Estudos de Psicologia de Natal), has indicated that 65% of articles published between 2000 and 2015 were empirical studies, against 35% of theoretical studies. Personality traits investigation represent 4% due to personality tests are currently being adapted according to the rules of Brazilian Federal Psychological Association. On the other hand, a survey in Latin America databases also indicated that trait personality investigation surprisingly is being attractive to researchers from other areas of knowledge (e.g. biology, neuroscience) beyond psychology. It is good news, to the extent that the research of personality traits needs to go to the roots of its nature.

We learnt and followed the advice of Eysenck regarding how to study the human personality. Maybe three factors are not enough to catch up the human personality structure (indeed, the BFC test, with five factors, is used in parallel with the EPQ-I in our studies in order to get more information). It is possible too that some traits are more depending than other of cultural environment. It is our hope that the coming data of our longitudinal study will offer us precise answers in a soon future. We feel that Eysenck's scientific approach is still coming to our

It is true that Eysenck was hard on his opponents; resistant with what seemed to him absurd. However, we know that revolutionary thoughts always tend to be irritable for the opponents. Personality traits of the revolutionary scientist seem to be different from those of normal science practitioner (Ko & Kim, 2008). Maybe we should understand that Eysenck behaved the way he did because he was a revolutionary scientist!

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