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Qualitative-quantitative synergy

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The present work aims to relate the impact of the value of the adverbs in a continuous scale to persons with more than 17 years old that speaks Portuguese but live in several countries. It is a primary approach to the results obtained by a questionnaire applied using Google Forms. Here we present mainly descriptive statistics, also identifying the outliers (moderate and severe) and justifying why they appeared, considering the diverse factors such age, level of education, between others.

Keywords: The value of adverbs, Statistical analysis, Interval scales, Qualitative and quantitative synergy

One of the areas of our research, since 2003 [2] and [3], has been to study the numerical value of quantity and frequency adverbs, with the aim of replacing ordinal scales by interval scales [4].

The present investigation continues these studies, using an adverb scale to measure the impact of the use of power on the use of information, in situations of analysis and problem solving. We chose to apply the scale to concrete research because in previous studies we found that a considerable number of participants had difficulty in understanding the numerical value of each adverb as a scale value.

In this research, respondents assessed five power situations - from first situation extreme use of power to the fifth situation no use of power - with the adverbs scale, and then assigned a numerical value to the adverbs used in the scale (Figure 1). A first analysis of the results highlighted some interesting points: even with the adverbs of quantity forming a scale, a certain number of respondents assigned them a numerical value detached from their scale position. This was visible in the numerical evaluation of the adverb extremely and expressions nothing and none in which 10.5% of respondents (in the first case) and 11% (in the second case) assigned numerical values visibly associated with their daily experiences and not with the adverb's scale position on the used scale. This behavior was extended to other adverbs, although in a smaller percentage: 9.68% in the adverb much; 5.99% in the adverb averagely; 8.75% in the adverb little (Figure 2). This behavior of respondents corresponds to the attraction of responses to the central values of the scale, a phenomenon well referenced in behavioral sciences [1]. Still within the scope of this study, we will continue to find a better solution to eliminate this problem, increasing respondents' awareness of the scale condition of the used adverbs.

		Extremely	Much	Averagely	Few	Little
N	Valid	216	216	216	216	216
	Missing	0	0	0	0	0
Mean		8,72	7,42	5,35	3,61	1,34
Median		10,00	8,00	5,00	3,00	,00
Mode		10	8,0	5	3,00	0
Standard error		2,480	1,464	1,346	1,725	2,544
Minimum		0	,0	0	,00	0
Maximum		10	10,0	10	10,00	10
Percentiles	25	9,00	7,00	5,00	3,00	,00
	50	10,00	8,00	5,00	3,00	,00
	75	10,00	8,00	6,00	4,00	1,00

Figure 1: Descriptive Statistics of the numerical value of the adverbs

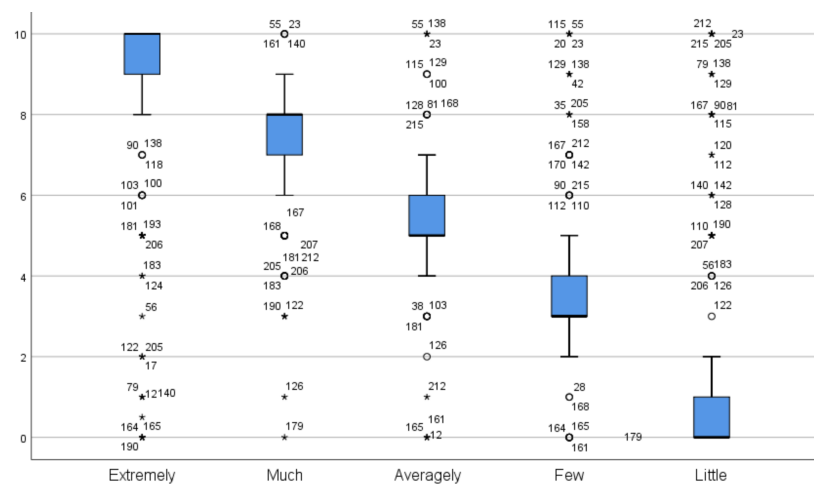


Figure 2: Outliers of the numerical value of the adverbs

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