1056-Z1-1605

Larry Wayne Lewis^{*} (llewis@spalding.edu), Spalding University, 845 South Third Street, Louisville, KY 40203. An Action Research Proposal: Does the Ability to Purchase a Week's Worth of Groceries for under One Dollar Influence the Chance that a Student will make an "Innumeracy Type" Statistical Error? Preliminary report.

Many students in certain quantitative research courses are unable to compare, with surety, the magnitude of decimal numbers as evidenced by their hesitance or inability to quickly and correctly identify whether or not a p-value is less than a given significance level, thereby producing an otherwise obvious "Innumeracy Type" error. Such an error is prompted by student innumeracy that involves making a correct or incorrect null hypothesis rejection (or non-rejection) decision by comparing a correct p-value to the fixed significance level incorrectly. The probability of an "Innumeracy Type" error is perhaps conditioned upon the student's mathematical background and level of acceptance of the prevalent incorrect societal usage of decimal expressions. In an attempt to call attention to a common improper use of the decimal point in the familiar context of American commerce and currency and its potential influence on students, the author proposes a primarily qualitative action research study that will lead to a possible intervention and a future action plan that might improve the andragogical methodology for the teaching and learning of computationally underprepared graduate students enrolled in certain applied quantitative statistical research courses. (Received September 22, 2009)