## Investigating stress in commuting university students

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Commuting can be considered as a chronic stressor, since it is often experienced as an unpleasant condition which negatively impacts on the individual psychological, physical and social well-being. Stress becomes dysfunctional and pathological when the individual negatively appraise specific situations. According to the National Institute for Statistics (ISTAT) commuters are people daily travelling out of their residence town for working or studying purposes irrespectively of the distance covered or the mean travel duration.

To date, the most studies have been focused on stress among commuting workers; however, it is noteworthy that students represent a wide proportion of commuting population in Italy (about the 23%, conforming to a survey carried out by CENSIS, *Centro Studi Investimenti Sociali*). In consideration of these data, it is important to cast light on the consequences of commuting on students' skills and psycho-physical well-being. Present study was aimed at investigating stress among commuting university students, in order to provide answers for some important questions: does commuting affect students' performance? Does commuting affect daily psychological and physical well-being? What are the commuting characteristics mainly involved in affecting student's performance and well-being?

Three-thousand three-hundred and fifteen commuting students attending the University of Palermo enrolled the study. Non valid data (inconsistent answers) were excluded from the analyses and the final sample consisted of 2949 participants: 60.1% (N = 1773) were females and 39.9% (N = 1176) were males. All students provided socio-anagraphic data and completed an *ad hoc* self-report

questionnaire comprising 20 items. A section of the questionnaire was aimed at collecting information concerning daily commuting, such as place of study (inside or outside the town of residence), estimated daily covered distance, etc. The other section was developed to investigate how commuting students appraise their commuting condition; it investigates three areas: perception of commuting, psychophysical well-being and disease associated with commuting stressors.

The main finding of present study highlights the existence of important differences between commuting students on the basis of means of transportation. It emerged that those using public transports (train, bus, metro) reported a more negative evaluation of their commuting and lower psycho-physical well-being levels than those travelling by private transports. In particular, students travelling by motorcycle described their daily commuting as positive and reported good psycho-physical conditions when arriving at university. This result is in line with previous literature indicating that control and predictability are important subjective factors which mediate the relationship between commuting and stress. People using public transports usually face with uncontrollable events (for example delays or crowding) which facilitate a negative appraisal of commuting. When this is chronically experienced, it may lead to stress and thus lack of energy, irritability, negative mood and difficulties in concentration. All these factors can negatively impact on student' performance.

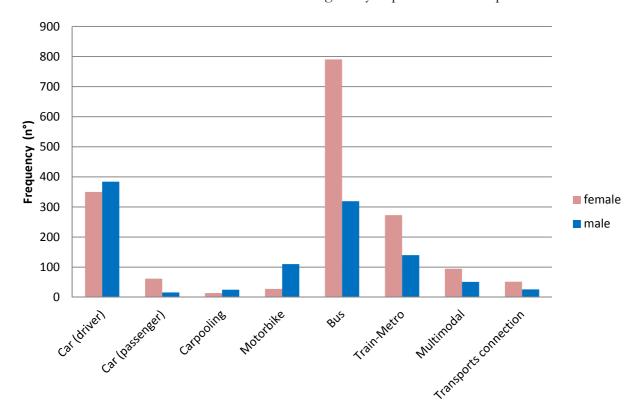


Figure 1 – Modal distribution by gender