

Violence against women in Italy: how to estimate the risk?

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Riassunto: Negli ultimi anni, gli studi su molestie e violenze sessuali contro le donne sono aumentati per l'interesse di ricercatori di diversa formazione, delle forze politiche e delle istituzioni. In Italia, nonostante gli sforzi compiuti, la conoscenza delle diverse forme che essa assume e le dimensioni sono ancora incerte. In questo lavoro, ricostruiamo lo scenario a livello nazionale ed individuiamo gli elementi che costituiscono le principali forme di abuso. L'obiettivo è di proporre un modello per misurare l'intensità della violenza contro le donne ed i principali fattori di rischio.

Keywords: Rasch model, risk index, violence against women.

1. Introduction

In the last years, verbal, physical and psychological violence against women has received growing attention and has been the focus of interdisciplinary research. In Italy, since 1997 the National Institute of Statistics (ISTAT) has collected data on the safety of citizens by means of a multi-aim survey with five-yearly frequency; the Ministry of Justice places in judicial files minutes taken by Police Force; shelters for abused women collect direct information and individual biographies; since 1994, the Economic and Social Research Centre (EU.R.E.S.) has built a DB on homicides with a special attention to marital homicides.

Despite the increased attention to women's rights, there has been only little progress in reducing violence against women. International studies suggest that between 13% and 25% of women experience sexual assault at some time in their lives (Levendosky *et al.* 2004; Kilpatrick, 2004, Steen & Hunskaar, 2004). In Italy, 2.6% of female population, age-ranged from 14 to 59, experience an episode of an attempted rape, 0.6 % rape, and about 25% some type of abuse during their lives (ISTAT, 2004). Authors of crimes are mainly close relatives especially for rape, 60% imputed to partners or ex-partners or friends.

According to the growing need of more sensitive assessment instruments, we have developed indices that evaluate male violence against women. Our method identifies a measure of risk of being a victim of sexual assault or abuse.

2. Data and method

We analyse the multi-aim survey on "Safety of citizens" conducted by the ISTAT, which collects data on Italian criminality. Data was collected in 2002 through Computer Assisted Telephone Interviews (CATI) on a sample of 60.000 people. The next survey on this topic will be in 2007. We analysed section n. 16 about "harassment and sexual assault" based on questionnaire filled in by 22.759 women age ranged between 14-59.

In the first step, we selected the following set of 9 items: verbal and sexual harassment, indecent exposure, shadowing, obscene phone call, letter and e-mail attempted rape and rape. The possible answers are: "no" or "yes". Not all the items are adequate to build a unidimensional scale ($\alpha = 0.611$ and α Based on Standardized

Items = 0.582). Let $\mathbf{X} = [x_{ij}]$ dichotomous matrix of items, where x_{ij} is the answer to j^{th} item of i^{th} woman ($i=1, \dots, n$ and $j=1, \dots, p$). We apply a non metric multidimensional scaling (NMDS) on $\mathbf{X}$ to explore measurement of similarity among pairs of items as distances between points of a low-dimensional multidimensional space (Borg and Groenen, 2005). NMDS helps us to see structure in the data. After detecting main dimensions of violence, we divide $\mathbf{X}$ in sub-matrices $\mathbf{X}_1, \dots, \mathbf{X}_k$ ($k=1, \dots, K$), with $k \leq p$. We apply dichotomous Rasch model (Smith & Smith, 2004) on each sub-matrix ($\mathbf{X}_1, \dots, \mathbf{X}_k$) in order to obtain a measure for understanding levels of violence and describe profiles of victims. Each item of violence against women and victimisation of persons is estimated on a logit scale, and a degree of error is associated to each. Rasch analysis determines the internal consistency of scale by assessing whether each item meets the criteria for unidimensionality. Goodness of fit statistics (infit and outfit) are reported as mean square (MnSq). MnSq represents the observed variance divided by expected variance; therefore, the desired value of MnSq is 1. A range of MnSq fit values between 0.8 and 1.4 are considered acceptable.

3. Discussion

NMDS (PROXSCAL algorithm) detected 2 latent dimensions: 1) sexual harassment (SH); 2) sexual violence (SV). The SH is composed of the following types of threats: verbal, physical harassment and shadowing; the SV by attempted rape and rape. Obscene phone call, letter and e-mail items have been removed from analysis after recalibration of Rasch Model. The SH and SV measure latent dimensions of violence against women and together contribute to estimate victimisation risk with more sensitive instruments. The General Linear Multivariate procedure provided regression analysis for SH and SV by more factor variables (size of place of residence, geographical regions, Education level) and covariate (age). The SH and SV presented a measure significantly different from age ($p < 0.01$), but not from size of place of residence, geographical regions or Education level. Violence against women is a cross-sectional phenomenon including not only low-income classes but also more affluent ones.

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