Prevalence of domestic violence in an online household panel versus a random population sample: A comparison between LISS and CBS

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SUMMARY

This report is part of an overarching study on the prevalence of domestic violence. The aim of the overarching study is to estimate the nature and magnitude of victimization and perpetration of domestic violence in the Netherlands in a gender sensitive way, based on self-report research amongst the Dutch speaking population (18+). This report is a comparison between data collected among the LISS (Longitudinal Internet Studies for the Social sciences) online panel of CentERdata on the one hand and a random population sample carried out by the Central Bureau for Statistics (CBS) on the other hand. The WODC formulated the following research question for this report:
To what extent does the nature and magnitude of domestic violence as measured in the LISS panel deviate from the nature and the magnitude of domestic violence as measured in a random sample from the Dutch population in which there are no people who regularly participate in research through a panel? How can potential differences be explained?

The aim of this report is to compare the data on domestic violence, based on the LISS panel and the CBS sample. It concerns differences in the nature and magnitude of domestic violence and possible explanations for the observed differences. This report should provide an advice for future measurements of domestic violence.

This report compares the estimates of the nature and magnitude of domestic violence, between LISS and CBS respondents. Both samples differed in the prevalence of victimization and perpetration of domestic violence. The matched comparison (groups 3 and 4 in chapter 4) reveals that subjects from the LISS panel report a higher degree of victimization and perpetration of domestic violence in the past five years. This mainly concerns physical violence. The observed differences cannot be caused by differences in composition between LISS and CBS, because matching takes into account such differences. The higher prevalence among LISS panel members coincides with the expectation that conditioning occurs due to long-term participation of a panel, which results in panel members answering more honestly than subjects from a new CBS sample.

The comparison between the unmatched LISS and CBS groups (groups 1 and 2 in chapter four), also confirms the higher prevalence in LISS regarding victimization of domestic violence. This comparison however does not provide further insight into differences in selection between the two datasets, such as differences in non-response. Neither of the survey designs succeeded in reaching all demographic groups sufficiently in order to obtain a perfect representation of the population. It was difficult to recruit young adults as participants for the survey. This is problematic as the findings reveal that younger subjects experience domestic violence more often.

The applied corrections and the weighting (that is to say the weights used for matching) are based on several possible explanations to account for the initial (uncorrected) significant differences between the datasets. The datasets differ in their sample design and design
decisions. Although both surveys are based on random samples, they utilized a different unit of selection. Whereas the CBS used a sample on the level of the individual, the LISS panel consists of a sample of households. Given that the unit of analysis in this report is the individual, one individual per household was selected from the LISS dataset in order to correct this difference between the two datasets. It should be noted that this procedure caused the unclustered LISS dataset to consist of a relatively large group of people living in single-person households. This correction led to additional differences between the two datasets regarding sample composition. With regard to the LISS dataset, the prevalence of domestic violence is higher in the unclustered subset (7.1%) than in the deleted cases due to clustering (5.8%). Therefore, if the comparison between LISS and CBS would have concerned all the cases, the differences in prevalence between LISS and CBS would have been slightly smaller.

Furthermore, the data collection methods differed between LISS and CBS. The CBS utilized a sequential mixed mode design, by recruiting participants initially through an online questionnaire (CAWI) and subsequently offering the possibility of a paper-and-pencil questionnaire (CAPI). LISS panel members were only given the possibility of responding via an online questionnaire. To establish whether this difference in measurement methods can explain the differences in observed prevalence, a comparison is made within the CBS data between respondents who participated online and those who responded on paper. This comparison shows no significant differences in victimization. However, significant differences exist in perpetration; the participants who responded on paper revealed a higher prevalence. Therefore, if the comparison between LISS and CBS would only have comprised of the online questionnaires, the differences in prevalence between the two datasets would have been larger.

Ultimately, both datasets are valuable in researching domestic violence. Because the LISS panel contains multiple persons from one household, it offers the possibility to examine the relationships between victims and perpetrators. The application of the LISS panel also offers the possibility to relate the information about domestic violence to a vast range of other survey data, which has been collected previously in the panel. Hence, the LISS panel is particularly suitable for further analyses of the causes and effects of domestic violence.
The estimation of the prevalence based on the LISS panel seems to closer resemble the true prevalence of domestic violence in the Dutch population. However, due to the under-coverage, non-response and the taboo which lies on domestic violence, both the CBS and LISS prevalence rates will be an underestimation of the actual prevalence rates.

Nevertheless, it is recommended to base the research mainly on the CBS data. First, the unit of selection should be the individual and not the household in the sample design. Second, a weighting factor was provided by the CBS, which enables researchers to estimate the prevalence (and the corresponding error margins) for the population. The CBS sample therefore offers the best opportunities to generalize the results to the population.