Understanding intimate partner violence in context: social and community correlates of special and general victimization

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ABSTRACT
In prior research, intimate partner violence (IPV) victimization has been predominantly studied as distinct from other forms of violent victimization. As a result, relatively little is known about IPV victimization in relation to other violent victimization and the extent to which same people tend to be both IPV and other violent victims. In this study, the combined data from five sweeps of the Finnish National Crime Victim Survey (N = 25,927) is used to examine violent poly-victimization among IPV victims and to compare social and community correlates of IPV victimization and other violent victimization. The results indicate that IPV victims are significantly more likely to be victims of other violent actions than those who have not been victimized by an intimate partner. Moreover, IPV victimization shares similar correlates with other violent victimization. However, more research is needed on the causal mechanisms behind the associations between IPV and general violence.

Introduction
Intimate partner violence (IPV) is known to have serious consequences. It inflicts physical and emotional injuries and places economic burdens on society (e.g. Logan et al., 2012; Rivara et al., 2007). While all this has been shown by research, relatively little is known on how IPV is related to other forms of violent victimization that may also have equally serious consequences. The tendency to study IPV separately from other violence may even lead to overlooking the full ramifications of victimization.

Although the prominent thinking in the research field has been that IPV is somehow distinct from other forms of violence and crime, the question on whether IPV is a special form of violence or a subtype of general violence (e.g. Felson & Lane, 2010; Moffitt et al., 2000) is truly an empirical one. In practice, the continuum between generality vs. specificity of IPV concerns both the outcome generality (are people involved in IPV also involved in other types of crime?) and the predictor generality (is IPV associated with the same correlates as other violence?) (Liem et al., 2018). The association between IPV and general violence perpetration is somewhat established in terms of both the outcome and the predictor generality, as several studies have suggested that there are similarities...
in the correlates of IPV and general violence perpetration (e.g. Bates et al., 2017; Felson & Lane, 2010), as well as an overlap between populations engaging in both (e.g. Hilton & Eke, 2016; Piquero et al., 2014). Yet, few studies have explored if, how, and to what extent IPV victimization is associated with other violent victimization. There are, however, emerging findings on shared risk factors for IPV and other violent victimization (e.g. Murphy, 2011; Salmi & Danielsson, 2014) as well as findings of high rates of other types of violent victimization among IPV victims (e.g. Rodriguez-Menés et al., 2014). Clearly, victimization should be taken into account to allow a full understanding of the generality of IPV.

Generally, existing victimization theories tend to focus on typological explanations of certain types of victimization and their special aetiologies (Schreck et al., 2012), and thus the interconnectedness of different forms of criminal victimization has been a comparatively neglected research topic. There is also a general lack of criminological research on poly-victimization, in other words the co-occurrence of different types of victimization, in adult populations (e.g. Hamby & Grych, 2013). Findings indicating that some individuals have an elevated risk of becoming victims of several different types of crime (e.g. Hope et al., 2001; Schreck et al., 2012) have both theoretical and practical implications, and scholarly consideration is needed to assess the extent to which IPV victims tend to be victims of other crimes as well.

The purpose of the current study is to contribute to research on generality vs. specificity of IPV victimization. We add to prior research by using a large-scale community sample with register-based controls for neighbourhood composition. In the concluding part, we discuss the theoretical as well as policy implications in the context of crime prevention.

**Theoretical perspectives**

Despite being theoretically diverse, the field of IPV research can be roughly divided into IPV-specific and general theoretical approaches. The IPV-specific approach suggests that IPV is essentially different from other crime and victimization types, with distinct motives and ‘specialized’ offenders, whereas the general approach sees IPV as a subtype of general violence (e.g. Felson & Lane, 2010). Consequently, the IPV-specific approach does not suggest that IPV victims would have an above-average risk of other violent victimization, whereas the general approach suggests that different victimization types are likely to be correlated.

Most IPV-specific explanatory frameworks discuss specialization as a perpetrator characteristic and do not directly address specialization in IPV victimization. However, theories of offender specialization, if found empirically sound, can be relevant also from the victimization perspective as potential victims may have different proximity to motivated IPV offenders (Cohen & Felson, 1979). For instance, people do not mate randomly (e.g. Krueger et al., 1998; Vanyukov et al., 1996), and assortative mating may explain high rates of IPV victimization among, e.g. incarcerated women (e.g. Carbone-Lopez & Kruttschnitt, 2010).

Theories that could explain distinctiveness of IPV in comparison to other crime range from differential levels of IPV-supportive attitudes to the evolutionary perspective and the gender power framework. The focus on male-to-female IPV represents the common ground for many of these explanations, and in this framework, female gender of the victim is often conceptualized as a central risk factor that distinguishes IPV victims from victims of other crime. For instance, IPV-supportive attitudes, such as misogynistic values (e.g. Senkans et al.,
could explain men’s specialization in IPV and prevent both perpetration and victimization from ‘spreading’ to other crime types. The evolutionary perspective, on the other hand, sees male-perpetrated IPV as a form of mate guarding (e.g. Graham-Kevan & Archer, 2009), and thus differently motivated than violence in other contexts. Alternatively, the gender power framework suggests that IPV is caused by the patriarchal gender structure that grants men dominance over women (e.g. Dobash & Dobash, 1979). Overall, evidence supporting gender asymmetry in IPV prevalence and seriousness (e.g. Caldwell et al., 2012; Melton & Belknap, 2003) have been interpreted to reflect the gender-specific nature of IPV.

In contrast, the general approach, partially inspired by Gottfredson and Hirschi’s (1990) general theory of crime, predicts both predictor and outcome generality across different subtypes of violence. In this framework, IPV and other violence are thought to have essentially similar aetiologies (e.g. Felson & Lane, 2010). Like the IPV-specific framework, the general approach has multiple forms and appearances in terms of causal pathways generating the similarity of different types of violence. As such, it is compatible with several general criminological theories, such as self-control and strain perspectives, as well as with theories exploring links from aggressive personality features to heterotypic expressions of such underlying traits.

Some prior findings link IPV victimization to general criminological theories and known correlates of general criminal victimization. This can be interpreted in support of the generality of IPV victimization although most of the findings are correlational in nature. For instance, the lifestyle/routine activities approach (e.g. Miethe et al., 1987) has generally been used to investigate street crime, but studies examining dating violence among adolescents report an association between a risky lifestyle and dating violence victimization (e.g. Gover, 2004; Policastro & Daigle, 2019). On the other hand, there are studies that link IPV victimization to ecological-level theories of crime, such as the social disorganization theory (Shaw & McKay, 1942). Community-level characteristics, such as neighbourhood disorder, collective efficacy and economic disadvantage, have been found to be associated with IPV victimization (e.g. Benson et al., 2003; Browning, 2002; Gracia et al., 2018; Voith & Brondino, 2017). In addition to community-level disadvantage, low individual-level socio-economic status, which is a commonly found predictor of criminal victimization (e.g. Nilsson & Estrada, 2006), is associated with IPV victimization according to several studies (e.g. Benson et al., 2003; Capaldi et al., 2012; Salmi & Danielsson, 2014).

**Poly-victimization and IPV**

The general approach into IPV suggests that there is a general proneness to victimization that generates vulnerability to IPV as well as other crime. This is likely to result in correlations of different types of victimization experiences (e.g. Hope et al., 2001; Outlaw et al., 2002) in the form of poly-victimization. Specifically, if this assumption holds true, IPV victims should be overrepresented among victims of other crimes.

Poly-victimization refers to exposure to multiple forms of crime, and it differs both conceptually and aetologically from repeat victimization which refers to several experiences of a specific type of victimizations during a shorter time period (e.g. Outlaw et al., 2002). Notably, poly-victimization implies a higher risk of victimization that is carried across different contexts and places (e.g. Tanksley et al., 2020). As poly-victimization is likely to lead to more serious negative outcomes compared to single-type victimization.
(e.g. Farrell & Zimmerman, 2017; Radatz & Wright, 2017), research is needed to establish tools to identify people at high risk of poly-victimization.

Poly-victimization, in general, is a somewhat understudied research area. Notably, the majority of empirical research thus far concerns child victimization (e.g. Finkelhor et al., 2007; Turner et al., 2010) and there is a comparative lack of systematic investigation into poly-victimization in IPV research. Prior research mainly concerns the co-occurrence of different forms of IPV (e.g. Krebs et al., 2011; Sabina & Straus, 2008), co-occurrence of different types of family violence (e.g. Chan et al., 2021) and the life-time accumulation of those (e.g. Abajobir et al., 2016; Bensley et al., 2003). While important as such, these studies do not address the generality of IPV victimization in relation to other violence and crime in a broader context. However, a relatively recent small sample study reported a comparatively high prevalence of poly-victimization among female IPV victims (Rodriguez-Menés et al., 2014), but the study was based on victimization reports of 30 women only, and it excluded male victims of IPV. Clearly, more research on poly-victimization among IPV victims is needed.

**The current study**

The aim of the current study is to assess the extent to which IPV victims experience violent poly-victimization and to investigate whether the social and structural correlates of IPV and other violent victimization are different or similar. The research interest stems from the discussion on the generality vs. specificity of IPV. We add to prior research by using a large-scale community sample with both female and male victims of IPV. As prior research has shown the relevance of community-level characteristics in IPV victimization (e.g. Browning, 2002), we use robust register-based measures of the community composition to assess their associations with special and general victimization. For this purpose, we take a multilevel, mixed-effect regression approach in the analysis to allow for a distinction between individual and area-level effects.

Although the analysis is cross-sectional in nature and does not allow drawing conclusions on causal mechanisms affecting the risk of victimization, the findings have implications regarding the specific or general nature of IPV. Results indicating that IPV victims also face a higher risk of being subjected to non-IPV violence compared to those who are not IPV victims would support the claim that IPV is one form of general violence. On the other hand, findings indicating that IPV victimization is statistically unrelated to other experiences of victimization would favour the IPV-specific approach. Furthermore, results suggesting similar correlates for IPV- and non-IPV-related violent victimization would support the framework of general violence whereas significant differences in correlates would favour the idea of IPV as a distinct form of violence.

**Methods**

**Data**

The Finnish National Crime Victim Survey (FNCVS) is based on an annually collected, nationally representative stratified random sample of the Finnish population aged 15 to 74 (Danielsson & Nasi, 2018). Participants provide informed consent by completing the
survey that is conducted as a postal survey with an option to answer online. According to Finnish law, this type of study does not need approval from an official research ethics committee. For the purpose of the current study, the data collected in five sweeps (2013–2017) of the FNCVS were combined. Complementing the FNCVS data, open data by postal-code area supplied by Statistics Finland (Statistics Finland, 2019) was merged with the data set in order to examine possible area effects on victimization. The full combined data set, excluding cases with unknown postal-code information, consists of information from 32,538 respondents in 2,495 postal-code areas.

Postal-code areas with less than ten respondents were excluded from the final data to avoid biased random-effect parameters in the multilevel analyses (e.g. Snijders & Bosker, 1993). In addition, only respondents with no missing data were analysed. All in all, the sample used for the analysis consisted of 25,927 respondents in 866 postal-code areas. Given that the exclusion of postal-code areas with less than ten respondents decreased the total number of areas in the data set by 65%, it is likely to affect the representativeness of the data particularly regarding less densely populated rural areas. Analyses of the original data including all postal-code areas (N = 32,538) showed that 68.9% of the respondents lived in urban municipalities, compared to 75.6% of those in the data restricted to postal-code areas with ten or more respondents (N = 25,927). This should be taken into account when the generalizability of the results is assessed.

The analysis sample was not restricted based on the respondents’ relationship status, as the IPV measure included also violence by former partners. In all the analyses, the data was weighted in terms of gender, age and geographical area to enhance the representativeness of the results. The descriptive statistics of the analysis data are reported in Appendix A.

**Measures**

**Individual-level variables**

**IPV victimization.** IPV victimization was operationalized as having been subjected to physical or sexual violence by a former or current spouse, or a co-habiting or dating partner during the previous 12 months. The respondents were not asked to specify the gender of the partner, and the IPV measure is likely to include violence regardless of the sexual orientation of the respondent.

The FNCVS survey included 11 acts of violence ranging from minor physical pressure (grabbing or preventing from moving; pushing or shoving; slapping; pulling hair) to severe physical assault (punching; hitting with a hard object; kicking or strangling; using a weapon of some sort), and also included ‘other physical violence’ defined by the respondent and sexual violence (forced sexual intercourse or other sexual acts and attempts at such). The outcome variable used in the analysis was dichotomized to indicate whether or not the respondent had been subjected to any act of physical or sexual IPV during the previous 12 months.

**Non-IPV violent victimization and poly-victimization.** The same acts were included in non-IPV violent victimization as in the IPV measure, in a dichotomous variable indicating whether or not the respondent had experienced any form of physical or sexual non-IPV violence during the previous 12 months. Victimization was regarded as non-IPV when the
perpetrator was described as someone other than an intimate partner, such as a relative, an acquaintance or a stranger.

For the purpose of the analysis, poly-victimization was conceptualized as an overlap of two different types of violent victimization: IPV and non-IPV. Although the measures of these two types of violence concern the same types of violent acts, it seems reasonable to classify their co-occurrence as poly-victimization given the multiple perpetrators with whom the respondent has qualitatively different relationships.

**Property-crime victimization.** For the sake of analytical simplicity, property-crime was not used to further categorize poly-victimization, as this would have doubled the number of different victimization outcomes: instead, we used it as an independent variable in the regression analyses to assess correlations of victimization experiences on a broader scale. A dichotomous variable indicating property-crime victimization during the previous 12 months was created, including the following acts: theft of personal property outside the home; fraud concerning buying goods or services; payment fraud; phishing and the misuse of personal information.

**Household financial difficulties.** Previous studies have shown an association between financial difficulties and IPV victimization (e.g. Capaldi et al., 2012; Salmi & Danielsson, 2014). In the current survey, the respondents were asked to evaluate how easy it was to cover their costs considering their household’s total income. The responses were given on a six-step scale ranging from ‘very difficult’ (one) to ‘very easy’ (six). For the purpose of the analysis, the answer options were coded inversely so that the higher scores reflect household financial difficulties.

**Other individual-level variables.** Several individual-level variables in addition to those mentioned above were included in the analysis to assess and control for their effects. Self-reported gender and age were included as basic sociodemographic variables, as was an immigrant background determined by one or both parents having been born outside Finland. Educational level (classified as primary or less, secondary, or tertiary) as well as marital status in five classes (unmarried, married, co-habiting, divorced or separated, or widowed) were also included in the analysis.

**Area-level variables**

**Neighbourhood disorder.** A series of questions adapted to the FNCVS from the British Crime Survey (e.g. Taylor et al., 2010) was used to operationalize neighbourhood disorder as a potential risk factor of victimization. Respondents to the FNCVS questionnaire were asked whether they considered the following six elements of disorder to be a problem in their neighbourhood: people being drunk or rowdy in public places; teenagers hanging around on the streets; rubbish or litter lying around; vandalism, graffiti and other deliberate damage to property; people using or dealing drugs; noisy neighbours or loud parties. The responses were given on a scale ranging from one (indicating no problem at all) to four (indicating a big problem), and the six variables showed good internal consistency (Cronbach’s α = 0.864). Instead of examining the effect of neighbourhood disorder on the individual level, we used an aggregated variable indicating disorder as a mean of the six variables among
respondents in the same postal-code area. We did this to reduce the possibility of reporting bias causing flawed associations between neighbourhood disorder and individual-level outcomes (e.g. Elo et al., 2009; Geis & Ross, 1998), and because this type of variable is more likely to reflect the reality of disorder in a given area.

**The proportion of rental accommodation.** Residential instability is one of the three core elements accounting for social disorganization, according to the social disorganization theory (Shaw & McKay, 1942). In this study, therefore, we used the proportion of households living in rental accommodation as a proxy variable for residential instability in a postal-code area, on the assumption that a high percentage of rental housing in an area is likely to be associated with a higher level of residential turnover. The percentage of households living in rental accommodation in each postal-code area in the FNCVS data derives from independent register source, and is thus free from any response style biases or similar error sources. It was computed based on statistics from the year 2015 in the open data, by postal-code area, compiled by Statistics Finland (Statistics Finland, 2019).

**The proportion of low-income residents.** The proportion of low-income residents in a postal-code area was also based on an independent register source, and is thus free from social desirability effects or other response style biases. We use it to measure low economic status in the area. The percentage of residents belonging to the lowest national-level income quintile in each postal-code area in the FNCVS data was computed based on statistics from the year 2015 in the open data, by postal-code area, compiled by Statistics Finland (Statistics Finland, 2019).

**Analytical strategy**

The analyses proceeded in two steps. Firstly, we conducted a multivariate descriptive analysis of IPV, non-IPV violent victimization and poly-victimization to examine the extent to which IPV and other violent victimization were associated, and if so, whether such an association applied to both genders. Secondly, we examined the correlates of single-type non-IPV violent victimization, single-type IPV victimization and poly-victimization using a generalized linear mixed model approach that allows for both fixed and random effects (e.g. Wolfinger & O’Connell, 1993). A two-level approach was taken in the analysis to examine the effects of both area-level and individual-level characteristics on victimization as well as to take into account the hierarchical structure of the data. Given the small average size of an area-level cluster (30 respondents) the structure of the data remained sparse on this level even after the exclusion of postal-code areas with fewer than ten respondents. Despite the sparsity, the two-level modelling is likely to lead to more reliable estimates than the more traditional single-level modelling (e.g. Clarke, 2008).

Having adapted Begg and Gray (1984) suggested method, we devised three different multilevel logistic regression models in three different subsamples. Each subsample consisted exclusively of the reference group (those who had not experienced any violence during the previous 12 months) and a group comprising one class of the three victimization outcomes: single-type non-IPV violent victimization (N of the subsample = 25,006), single-type IPV victimization (N = 23,407) and poly-victimization (N = 22,828). This analytical strategy allowed comparison of correlates of IPV and non-IPV violence while
also accounting for the effect of those with experience of both. We assessed the statistically significant differences in the correlates of non-IPV violent victimization and the IPV-inclusive victimization types by fitting two additional regression models into the two subsamples containing exclusively non-IPV violent victims, and one of each of the IPV-inclusive groups. For the sake of simplicity, only the statistical significances of these analyses are reported in the results.

**Results**

*Prevalence of violent victimization and the association between IPV and other violence*

We began by examining the distributions of IPV and other forms of violent victimization taking place over the previous 12 months by gender. Table 1 shows the results of these descriptive analyses. Comparisons of the prevalence of victimization across gender indicate that women were almost twice as likely to have experienced IPV during the previous 12 months compared to men (5.2% vs. 2.7%, \( \chi^2 = 102.23 \) \( p < 0.001 \)). Interestingly, women were also more likely to have been subjected to other violence, although the difference in prevalence between genders was modest in magnitude (12.4% vs. 10.8%, \( \chi^2 = 17.47 \) \( p < 0.001 \)). This result is at odds with the more common finding of a higher rate of violent victimization among men compared to women (e.g. Lauritsen & Carbone-Lopez, 2011), and exclusion of sexual violence from the violence measure did not significantly change this result (see 3.3 Sensitivity analysis). A probable reason for the gender difference in non-IPV violence in the FNCVS data is women reporting less serious violence more often than men do (Danielsson & Nasi, 2018).

Notably, the results indicate a significant association between IPV and other violent victimization in the full sample (\( \chi^2 = 69.89 \), \( p < 0.001 \)), and for both genders (females \( \chi^2 = 54.40 \), \( p < 0.001 \); males \( \chi^2 = 11.41 \), \( p < 0.001 \)). In other words, IPV victims have an elevated likelihood of being poly-victims of violence, and this applies to both women and men.

**Table 1.** The prevalence of IPV and other violent victimization by gender, and the overlap of IPV and other violent victimization (=poly-victimization) in the full data and by gender (percentages are weighted).

|               | Males | Females | 11.41*** | 102.23*** | 17.47*** |
|---------------|-------|---------|----------|-----------|----------|
| IPV victimization, % | 2.7%  | 5.2%    |          |           |          |
| Other violent victimization, % | 10.8% | 12.4%   |          |           |          |
| N              | 11,664| 14,263  |          |           |          |
| IPV victimization | No    | Yes     | Pearson's \( \chi^2 \) |          |          |
| Full data      |       |         |          |           |          |
| Other violent victimization, % | 11.3% | 19.8%   |          |           |          |
| N              | 25,006| 921     |          |           |          |
| Females        |       |         |          |           |          |
| Other violent victimization, % | 11.9% | 21.6%   |          |           |          |
| N              | 13,620| 643     |          |           |          |
| Males          |       |         |          |           |          |
| Other violent victimization, % | 10.6% | 16.4%   |          |           |          |
| N              | 11,386| 278     |          |           |          |

*** \( p < 0.001 \), ** \( p < 0.01 \), *\( p < 0.05 \).
Correlates of the different victimization types

Table 2 shows the results of the three multilevel logistic regression models that were used to examine and compare the correlates of IPV victimization, other violent victimization and poly-victimization as non-overlapping victimization profiles. The results show the majority of the individual-level independent variables to be associated with all three forms of victimization. The only variable showing no association with any of them was immigrant background. These results indicate the following individual-level characteristics to be associated with an elevated risk of single-type non-IPV victimization, single-type IPV victimization and poly-victimization: female gender, young age, being divorced or separated, household financial difficulties and property-crime victimization.

With regard to educational level, the results show an association with single-type non-IPV victimization but not with IPV and poly-victimization. Although violent victimization is typically thought to be more common among those with a lower social status, the results indicate an association between higher educational levels and non-IPV victimization. Marital status was also differentially associated with different victimization types. While being divorced or separated, compared to being married, was positively associated with all the victimization types, being unmarried (vs. married) was negatively associated with IPV victimization, but positively with non-IPV violent victimization. Co-habiting, on the other hand, was positively associated with single-type IPV victimization when compared to those who reported their marital status as married.

The results show, overall, that the postal-code-area variables have less significant associations with the risk of victimization than the individual-level variables. None of the area-level variables showed statistically significant associations with poly-victimization. Observed neighbourhood disorder was positively associated with both single-type non-IPV and IPV victimization. The register-based variables were associated with single-type non-IPV violent victimization only: the association of the proportion of rental accommodation with victimization was positive, whereas the association of the proportion of low-income residents with victimization was, somewhat unexpectedly, negative.

Concerning the variability between postal-code areas indicated by the random-effect statistics in the models, we note more variability in single-type IPV victimization (VAR = 0.21, SD = 0.46) than in single-type non-IPV violent victimization (VAR = 0.13, SD = 0.35), and more variation by postal-code area in poly-victimization (VAR = 1.46, SD = 1.21) than in the two single-type victimization outcomes. It is likely that these differences in variance were mainly attributable to the fact that the number of victimization incidents in the data varies by victimization type, and even if it is assumed to be randomly distributed, the variance is greater among the less common types.

Comparison of the correlates of victimization between non-IPV and the two IPV-inclusive victimization types revealed that while there are statistically significant differences, they concern mostly the magnitude rather than the direction of the association when compared to non-victims. The exceptions concern the marital status as unmarried, the education level as tertiary education and the proportion of low-income residents. Compared to non-victims, being unmarried was negatively associated with single-type IPV victimization, and positively with single-type non-IPV victimization, and the difference between the coefficients was statistically significant. Similarly, tertiary education was positively associated with single-type non-IPV victimization, but negatively although
Table 2. Multilevel logistic regression analyses of the risk of violent victimization for three non-overlapping victimization outcomes.

| Fixed effects | Single-type non-IPV violent victimization | Single-type IPV victimization | Difference from single-type non-IPV violent victimization | Poly-victimization | Difference from single-type non-IPV violent victimization |
|---------------|------------------------------------------|-------------------------------|----------------------------------------------------------|-------------------|-------------------------------------------------------------|
|               | B  | SE  | B  | SE  | Sig. (P-value) | B  | SE  | Sig. (P-value) | B  | SE  | Sig. (P-value) |
| Intercept     | −4.29*** | 0.26 | −5.59*** | 0.42 | * | −10.10*** | 1.00 | *** |
| Individual level |                |                |                |                |                |                |                |                |                |
| Gender        |                |                |                |                |                |                |                |                |                |
| Female (vs. male) | 0.19*** | 0.04 | 0.58*** | 0.08 | *** | 1.04*** | 0.17 | *** |
| Age           |                |                |                |                | −0.04*** | <0.01 | −0.03*** | <0.01 | ** | −0.05*** | <0.01 |
| Immigrant background |                |                |                |                | Yes (vs. no) | −0.10 | 0.08 | −0.23 | 0.15 |                | 0.03 | 0.27 |                |
| Education level |                |                |                |                | Secondary education (vs. primary education or less) | 0.33*** | 0.07 | 0.06 | 0.12 | ** | −0.10 | 0.22 |                |
|                |                |                |                |                | Tertiary education (vs. primary education or less) | 0.24** | 0.08 | 0.18 | 0.13 |                | −0.43 | 0.25 | * |
| Marital status |                |                |                |                | Unmarried (vs. married) | 0.39*** | 0.06 | −0.42*** | 0.11 | *** | 0.33 | 0.21 |                |
|                |                |                |                |                | Co-habiting (vs. married) | 0.11 | 0.06 | 0.37*** | 0.10 | ** | 0.27 | 0.24 |                |
|                |                |                |                |                | Divorced or separated (vs. married) | 0.48*** | 0.09 | 0.71*** | 0.12 |                | 0.74* | 0.30 |                |
|                |                |                |                |                | Widowed (vs. married) | −0.13 | 0.23 | −0.67 | 0.40 |                | 0.41 | 0.64 |                |
| Financial difficulties |                |                |                |                | Yes (vs. no) | 0.22*** | 0.02 | 0.27*** | 0.03 |                 | 0.53*** | 0.06 | *** |
| Property crime victimization |                |                |                |                |                |                |                |                |                |                |
| Postal-code-area level |                |                |                |                | Neighbourhood disorder | 0.30* | 0.15 | 0.48* | 0.24 |                | 0.48 | 0.56 |                |
|                |                |                |                |                | Proportion of rental accommodation | 0.52* | 0.23 | 0.35 | 0.37 |                | −0.11 | 0.83 |                |
|                |                |                |                |                | Proportion of low-income residents | −1.36* | 0.62 | −1.86 | 1.03 |                | 3.14 | 2.05 | * |
| Random effects |                |                |                |                | Variances SD | Variances SD | Variances SD | Variances SD |                |                |
| Intercept     | 0.13 | 0.35 | 0.21 | 0.46 |                | 1.46 | 1.21 |                |                |                |

*** p < 0.001, ** p < 0.01, *p < 0.05.
not significantly with poly-victimization, and the difference between these was statistically significant. In addition, there was a negative association between the proportion of low-income residents and single-type non-IPV victimization, and a positive although not significant association with poly-victimization, and the difference between these two coefficients was statistically significant.

No other statistically significant differences in coefficients concerned the direction of the association when compared to non-victims. Comparison of the single-type IPV model with the single-type non-IPV violence model revealed that the female gender and the marital status as co-habiting were more strongly associated, and age, secondary education and property-crime victimization less strongly associated, with single-type IPV than single-type non-IPV violence. When the coefficients in the poly-victimization model were compared to those in the single-type non-IPV violence model, the female gender, financial difficulties and property-crime victimization were more strongly associated with poly-victimization.

*Sensitivity analysis*

In order to assess the extent to which the inclusion of sexual violence in the victimization measures could explain our results, we re-ran all the analyses with victimization variables based solely on physical violence victimization. Overall, the results of the sensitivity analysis, concerning both the co-occurrence of different types of violent victimization and the correlates of different victimization profiles, were substantially similar with the results presented in the tables, and the same conclusions can be drawn from both the analyses. The main reason for the similarity of the results is likely to be that the majority of respondents reporting sexual violence also reported other types of physical violence.

*Discussion*

The aim of the current study was to investigate the generality vs. specificity of IPV victimization by assessing both the outcome generality (poly-victimization) and the predictor generality (correlates of victimization). Prior research has largely overlooked victimization in evaluating whether IPV represents a specific type of violence or a subtype of general violence. We have contributed to prior research by studying these aspects of victimization using a large community survey with register-based controls for community composition.

On the whole, the current findings reveal significant associations between different victimization experiences. Notably, IPV victims have an elevated risk of being poly-victims of violence. This is consistent with some prior findings (e.g. Rodriguez-Menés et al., 2014), and our results show that this applies to both genders. Complementing the results indicating that violent victimization cumulates, the regression analyses showed that property-crime victimization was associated with IPV as well as non-IPV victimization, and most strongly with violent poly-victimization. This finding is interesting as such, and seems to support the idea of an IPV-inclusive general proneness to victimization that even goes beyond violence, also affecting non-violent victimization (e.g. Schreck et al., 2012). However, our analysis does not reveal the mechanisms causing this generality.
The results of the current study point to several correlates of violence that are shared by all victimization types of our interest: female gender, young age, being divorced or separated, household financial difficulties and property-crime victimization were associated with both IPV and non-IPV violent victimization as well as poly-victimization. The finding of similar correlates is consistent with some prior research addressing similar questions (e.g. Lauritsen & Carbone-Lopez, 2011; Salmi & Danielsson, 2014). However, some correlates were differentially associated with different victimization types. For instance, while all the area-level variables were associated with single-type non-IPV victimization, none of these variables showed statistically significant associations with poly-victimization. In addition, the results indicated that the associations of different marital statuses vary across victimization types. This is not necessarily surprising as IPV is likely to be differentially tied to relationship characteristics compared to non-IPV violence. On the other hand, the result showed that being divorced or separated is, among different marital statuses, most strongly associated with not only IPV but all types of violent victimization which is interesting as such and calls for further research.

While most of our findings concerning the correlates of violence are consistent with known risk factors of violent victimization in general, the results indicating an association between a higher educational level and victimization are difficult to explain in the light of criminological theories linking crime causally to social disadvantage: these associations could rather be linked to different levels of sensitivity to violence (e.g. Kivivuori, 2014). In fact, the finding in victimization surveys that self-reported victimization is positively related to higher education is neither new nor uncommon, posing a methodological conundrum for victimological research (e.g. Skogan, 1986). Our result indicating a negative association between non-IPV violence and the proportion of low-income residents in the area was also unexpected. There is a possibility of reporting bias or sampling bias: those who live in more advantaged areas may be more likely to respond to a survey, particularly if they have victimization experiences relevant to the topic of the survey. More research is needed on how social groups perceive violence, and on how such differences pose validity threats to victim surveys.

Although the current study does not allow for causal interpretations, the findings appear to challenge the view that IPV is a product of a substantially different causal pathway compared to other types of victimization. More research is needed to clarify whether the similarity of correlates is attributable to similar aetiologies or other reasons. As for the implications of the current results, it should be noted that the IPV-specific framework is unable to explain why the same correlates are associated with different types of violence, and why IPV and other violent victimization are significantly associated. On the other hand, the framework of general violence, in assuming that IPV and other violence share essentially similar aetiologies, may be unable to explain some differences between victimization types, such as the differences concerning the area-level correlates. In addition, the general framework may be unable to account for why women face a higher risk of being subject to some forms of violence (e.g. Lauritsen & Carbone-Lopez, 2011). However, our findings are more consistent with the general violence approach than the IPV-specific framework.

Despite the novelty of some findings and the strengths of the data, the current study has limitations that should be addressed in future research. Notably, the results of this study are associational rather than causational, and stronger study designs are needed
to properly test the hypotheses on the generality of victimization. Moreover, it is possible that respondents who have never been in an intimate relationship may cause bias in the results, although we would expect the possible bias to be quite small. In addition, some measures used in the analysis could be enhanced. In the absence of more detailed neighbourhood and block-level data, we used postal-code areas to measure any context effects. Some of these areas may be too large and diverse to capture relevant mechanisms affecting victimization. Furthermore, our study lacked direct lifestyle measures that could be differentially associated with victimization types, or alternatively, explain propensity to victimization across life domains. For instance, respondent information on alcohol or drug use, or criminal behaviour, would shed more light on how lifestyles affect different types of violent victimization. In addition, our study lacked measures of IPV-supportive attitudes (e.g. Robertson & Murachver, 2009) and measures of bidirectionality of violence (e.g. Langhinrichsen-Rohling et al., 2012) that could be differentially associated with special and general victimization. Measures of stable individual personality features would also be useful in the study of IPV victimization (e.g. Gover et al., 2011; Kerley et al., 2008) and poly-victimization (e.g. Tanksley et al., 2020) to better control for the effects of evocative behaviour and offender target selection in the genesis of IPV victimization.

Although we explored the generality of violence from the perspective of the victim, a fuller explanation of the issue is likely to comprise all dimensions of the routine-activity approach (Cohen & Felson, 1979): the suitable victim, the motivated and perceptive offender, and situational aspects. Along with a stronger focus on properties of the victim that directly or indirectly increase vulnerability to crime, there is a need for more research on offender target-selection tactics (e.g. Book et al., 2013) and their impact on IPV and poly-victimization. We also call for more studies on incident characteristics that could create victimization continuity across interaction scenes, such as revenge sequences and types of displaced revenge (e.g. Aaltonen et al., 2018). Future research should explore the micro-level mechanisms generating the generality of victimization and causing poly-victimization in greater detail, and from all relevant perspectives, using both qualitative and quantitative approaches and study designs.

Studies exploring the general causes of violence, as well as the co-occurrence of different types of violence, would be of great benefit not only to criminological theory but also to policy and practice. From the policy perspective, the tendency to study different types of violence separately calls for separate crime-prevention measures for each one. Given the implications of our findings, such a focus would appear to be too limited on both the predictor and outcome side of the equation. With regard to predictors, it ignores the similarity of correlates, and with regard to outcomes, it dismisses the accumulation and versatility of victimization experiences.

Specifically, IPV prevention measures should take into account the fact that a significant proportion of IPV victims are, in fact, poly-victims. Overall, poly-victims experience a large proportion of all victimization incidents, and paying special attention to such victims in crime prevention policies may serve to reduce overall crime (Farrell, 1992). Furthermore, ignoring that IPV victims are at a high risk of poly-victimization may also lead to underestimating the material and immaterial costs of IPV. On a broader societal level, there is a need for locating general risk factors for all forms of violence and crime and building policies accordingly, in addition to targeting specific crime types.
Focusing on general causal processes that affect both IPV and non-IPV violence, including structural social disadvantage, could be effective in preventing both IPV and overall crime in society.

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### Appendix A

Descriptive statistics. Percentages and means are weighted.

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |
|---------------------------------|-----------|-----------|------|---------|------|-----|-----|
| IPV victimization               | 96.1      | 3.9       | 25,006 | 921 | 44.36 | 15 | 75 |
| Non-IPV violent victimization   | 88.4      | 11.6      | 23,407 |     |       |    |    |
| Gender                          | Male      | Female    | 49.7  | 11,664 | 50.3 | 14,263 | | |
| Immigrant background            | No        | Yes       | 94.0  | 24,38  | 6.0  | 1547 |    |
| Education level                 | Primary education or less | Secondary education | 14.9 | 4514 | 49.6 | 1301 | | |
| Marital status                  | Married   | Unmarried | Co-habiting | 45.1 | 12,954 | 25.8 | 5235 | | |
| Property-crime victimization    | No        | Yes       | 90.4  | 23,625 | 9.6  | 2302 |    |

Financial difficulties

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Neighbourhood disorder

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Financial difficulties

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Neighbourhood disorder

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Financial difficulties

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Neighbourhood disorder

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Financial difficulties

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Neighbourhood disorder

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Financial difficulties

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Neighbourhood disorder

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Financial difficulties

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Neighbourhood disorder

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Financial difficulties

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Neighbourhood disorder

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Financial difficulties

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |

Neighbourhood disorder

| Category                        | No        | Yes       | %    | N       | Mean | Min | Max |