Victimization profiles, non-suicidal self-injury, suicide attempt, and post-traumatic stress disorder symptomology: application of latent class analysis

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Abstract

Few studies have incorporated multiple dimensions of victimization or examined whether victimization profiles differ by gender. Consequently, the present study sought to extend prior research by using latent class analysis (LCA) to identify naturally occurring subgroups of individuals who have experienced victimization, and to test for sex differences. Data from 4,016 females and 3,032 males in the Adult Psychiatric Morbidity Survey (APMS) were analysed. Evidence of the existence of similar victimization subtypes for both males and females emerged, with a three-class solution providing the best fit to the data for both sexes. Furthermore, the classes were labelled 'low victimization' (the baseline class; class 3), the 'high victimization class' (class 1), and 'the bullying and domestic violence class' (class 2) for both males and females. Multinomial logistic regression was used to interpret the nature of the latent classes, or groups, by estimating the associations with PTSD dimensions, suicide attempt, and non-suicidal self-injury. Although different constellations of victimization experiences did not emerge through the gender-specific analyses, the nature of the associations between class membership and external variables differed between males and females. Findings highlight the heterogeneity of victimization experiences and their relations to functioning, and have implications for policy and practice implications.

1. Introduction

Adverse experiences in childhood and adulthood have been linked to an array of negative outcomes (Briere & Runtz, 1993; Chartier, Walker, & Naimark, 2010; Kendall-Tackett, Williams, & Finkelhor., 1993). In particular, trauma-exposed individuals are reported to be particularly vulnerable to the development of Post-Traumatic Stress Disorder (PTSD) (Feeny, Foa, Treadwell, & March, 2004), with rates varying from 10% to 100% (see Pynoos, Steinberg, & Wraith, 1995). Research further indicates that individuals who are subjected to maltreatment are at increased risk for behavioural and psychological problems such as anxiety disorders, depression, non-suicidal self-injury (NSS), suicide ideation and attempts, substance abuse, and disordered eating (Feeny, Foa, Treadwell, & March, 2004; Fergusson, Boden, & Horwood, 2008; Lansford, Dodge, & Pettit et al., 2002).

Previous research also indicates that experiencing multiple types of victimization (as opposed to a single type such as physical or sexual abuse) increases the likelihood of maladjustment (Holt, Finkelhor, & Kaufman-Kantor, 2007). Specifically, individuals subjected to more than one form of victimization are more likely to experience more severe PTSD symptomology (Naar-King, Silvern, Ryan, & Sebring, 2002), more internalizing and externalizing problems (Sternberg, Baradaran, Abbott, & Gutterman, 2006), a reduced sense of belongingness (Holt & Espelage, 2003), and greater academic and social difficulties (Holt et al., 2007) than individuals subjected to a single type of victimization. The reasons for these increased negative outcomes are not, however, fully understood. As noted by Kinard (2004), "it is not clear whether the impact of multiple types of maltreatment is due to the actual number of different types or to a particular combination of types" (p. 648).

Researchers have traditionally focused on examining the effects of singular forms of victimization such as childhood sexual or physical abuse (e.g., De Petrillo, 2010; Springer, Sheridan, Kuo, & Carnes, 2007) and findings are often conveyed as if subtypes occur

independently. However, research increasingly shows that victimization types cluster both among adults and children (Edwards, Holden, Felitti, & Anda, 2003; Higgins & McCabe, 2000; Lau et al., 2005; Ney, Fung, & Wickett, 1994). Finkelhor, Ormrod, and Turner (2007), for instance, found that 69% of the children who had experienced direct or indirect victimization in the prior year had experienced multiple incidents and had been subjected to an average of three types of victimization. Sexual abuse evidences the highest rate of comorbidity with sexually abused children being more likely to be exposed to other serious family problems, such as domestic violence (DV) and physical abuse (PA) (Dong, Anda, Dube, Giles, & Felitti, 2003; Kellogg & Menard, 2003). A substantially higher risk of being sexually victimized and living in violent relationships in adulthood has also been linked to childhood sexual abuse (Campbell, Greeson, Bybee, & Raja, 2008).

Given that victimization experiences rarely occur independently, and that pure sub-types are a rarity (Cicchetti & Rizley, 1981; Claussen & Crittenden, 1991; Higgins & McCabe, 2001; Pears, Kim, & Fisher, 2008; Trickett & McBride-Chan, 1995; Lau et al., 2005), it could be argued that studies including only one victimization type are limited and may not be representative of the 'typical' victimized individual. Concentrating on single victimization types could be further considered problematic because it potentially obscures the impacts of other types of victimization on individuals (Finkelhor et al., 2007; Holt et al., 2007). At the opposite end of the spectrum, some research has assessed the impact of victimization as a unified construct. While this research has undoubtedly made significant and important contributions to our knowledge of victimization experience by documenting the overarching negative effects of victimization, including developmental pathways, it may have exaggerated the contribution of a single type of victimization to adverse outcomes (Holt et al., 2007; Finkelhor, Omrod, Turner, & Hamby, 2005). Furthermore, this research has overlooked issues of subtypes and comorbidity (e.g., Smith & Walden, 1999).

Although few studies to date have examined victimization groupings (Pears et al., 2008), preliminary research suggests that differential combinations of victimization experiences may result in varying negative outcomes (Ford, Elhai, Connor, & Frueh, 2010). However, because of the paucity of research conducted in this area, little is known about the association between the various victimization typologies and psychological and behavioural responses; such as NSSI, suicide attempts, and PTSD symptomology. Moreover, studies that have included more than one victimization type have most often focused on the co-occurrence of physical and sexual abuse (Higgins & McCabe, 2001). In a critical review of 29 studies investigating the incidence and effects of childhood maltreatment, physical abuse was assessed in all 29 studies, childhood sexual abuse was assessed in 26 studies, psychological or emotional maltreatment was assessed in 12 studies, witnessing domestic or family violence was assessed in eight studies, and physical neglect was assessed in only four studies

Of the studies that have sought to identify specific patterns of multiple victimization experiences, few have employed the latent modelling approach of Latent Class Analysis (LCA) to identify underlying groups of individuals with similar experiences (e.g., Shevlin & Elklit, 2008). Furthermore, previous studies have generally been constrained to small samples, have combined males and females, and/or have failed to evaluate unique relations to adjustment. In a recent investigation (Romano, Zoccolillo, & Paquette, 2006), the best fitting solution was a two class solution, which consisted of "no maltreatment" and "multiple maltreatment", while Nooner et al., (2010) examined only physical and sexual abuse experiences. Furthermore, another recent study did not reveal distinct patterns of multiple victimization experiences; rather, the researchers' analyses evaluated the impact of ''low maltreatment,'' ''multiple maltreatment,'' and one additional profile that excluded sexual abuse (Hazen, Connelly, Roesch, Hough, & Landsverk, 2009)

1.1 The current study

The current research had two main aims. The first was to identify the appropriate number and nature of naturally occurring latent classes of victimization experiences for males and females separately based on responses to five items indexing different victimization types. Based on previous research (e.g., Claussen & Crittenden, 1991; Nooner et al., 2010), it was hypothesised that heterogeneous groups of individuals would emerge from the analysis and that we would uncover groups characterized by a variety of co-occurring abuse experiences. However, due to the paucity of research in this area, we did not make any predictions in relation to groupings. The second aim was to look at the associations between the latent classes of victimization and suicide attempt, non-suicidal self-injury, and PTSD symptomology (2 factors) while controlling for age. As the specific makeup of the classes was undetermined, we did not form any specific hypotheses about these relations. However, we expected that there would be differential relations between victimization classes and these factors.

2. Method

2.1 Sample

Data for the current study was drawn from the Adult Psychiatric Morbidity Survey (APMS) 2007. The APMS was commissioned by the NHS Information Centre for Health and Social Care and employed a multi-stage stratified probability sampling design. The survey consisted of a phase one and a phase two (clinical) interview. Fifty-seven percent of those who were eligible agreed to take part in the survey which resulted in the completion of 7,403 successful interviews (4,206 females and 3,197 males). Details of the survey methods can be found in McManus, Melzer, Brugha, and Bebbington (2007). The analytic sample for the present research included 4,016 females and 3,032 males. Participants were aged between 16 and 95 years ($M = 51.12$; $SD = 18.32$).

2.2 Measures

Posttraumatic Stress Disorder (PTSD). The trauma screening questionnaire (TSQ; Brewin et al. 2002) is a PTSD screening instrument and was adapted from the PTSD symptom scale-self report (Foa, Riggs, & Rotherbaum, 1993). The TSQ is a ten-item instrument consisting of five re-experiencing and five arousal items from the DSM IV TR (American Psychiatric Association 2000) PTSD criteria. Re-experiencing (Factor 1) comprises of items 'upsetting thoughts or memories about the event that have come into your mind against your will', 'upsetting dreams about the event', 'acting or feeling as though the event were happening again', 'feeling upset by reminders of the event', and 'bodily reactions (such as fast heartbeat, stomach churning, sweatiness, dizziness) when reminded of the event'. Arousal (Factor 2) items are 'difficulty falling or staying asleep', 'irritability or outbursts of anger', 'difficulty concentrating', 'heightened awareness of potential dangers to yourself and others', and 'being jumpy or being startled at something unexpected'. Participants were asked whether or not they had experienced each symptom at least twice in the past week. Brewin et al. (2002)

found an optimal cut-off score of 6. The present study had good estimates of reliability for each of the subscales [re-experiencing (α =.80), arousal (α =.71)], and the scale as a whole (α. = 82).

Suicide Attempt. Suicide attempt history was assessed using a single dummy coded item which asked, "Have you ever made an attempt to take your own life?"

Non-suicidal self-injury (NSSI). NSSI history was assessed using a single dummy coded item which asked, "Have you ever deliberately harmed yourself, without the intention of killing yourself?"

Victimization experiences. Victimization was assessed using five dummy coded items which have previously been strongly linked to suicide attempts, NSSI, and PTSD: (V1) lifetime rape, (V2) lifetime bullying, (V3) lifetime violence in the home, (V4) physical abuse - severely beaten before the age of 16, and (V5) domestic violence – violence from a partner or ex-partner since the age of 16.

2.3 Analysis

Latent class analysis (LCA) is a statistical method used to identify homogeneous groups (or classes) from categorical multivariate data. In the current research, LCA was employed to determine the number and the nature of victimization experience groups based on the endorsement of each of the five items reflecting victimization experiences for females and males separately. The five victimization experience items were dummy coded. Selection of the optimal number of latent classes was based on several statistical fit indices. The statistical fit indices were: Akaike information criterion (AIC), Bayesian information criterion (BIC), sample size adjusted BIC (SSABIC), the Lo-Mendell- Rubin's adjusted likelihood ratio test (LRT), and entropy measures. The information statistics AIC, BIC, and SSABIC are goodness of fit measures used to compare competing models; lower observed values indicate better fit. The LRT statistic was used to compare models with differing numbers of latent

classes; a non-significant value ($p > 0.05$) suggests that the model with one fewer class should be accepted. Entropy is a standardised measure of how accurately participants are classified. Values range from 0 to 1 with higher values indicating better classification.

Multinomial logistic regression was used to assess the association between class membership (posterior probabilities from the model were used to assign individuals to a class) and suicide attempt, NSSI, and PTSD symptomology (2 factors), while controlling for age. The subsequent odds ratios (OR) indicate the expected increase/decrease in the likelihood of scoring positively on a given variable compared to the reference, or control group (in this case low victimization experience group). The analysis was conducted using Mplus 6.12 (Muthen & Muthen, 1998– 2010).

3. Results

Descriptive Statistics

Table 1 presents the rates of endorsement for each of the five victimization items, suicide attempt, and NSSI for females and males separately, after list-wise deletion of missing data. The most commonly endorsed items were domestic violence (29.6%), bullying (18.7%), and violence in the home (12.8%) for females, and domestic violence (19.2%), bullying (18.6%), and physical abuse (5.4%) for males. Just over six percent (6.2%) of females and 3.7% of males reported at least one suicide attempt, while 4.6% of females and 3.8% of males reported a history of NSSI.

Table 1

Prevalence rates of victimization items, suicide attempt, and NSSI for females and males

Item	Criteria endorsed count (%) for females ($N = 4,016$)	Criteria endorsed count (%) for males ($N = 3,032$)
V1. Rape	267 (6.6)	34 (1.1)
V2. Bullying	750 (18.7)	565 (18.6)
V3. Violence in the home (family)	513 (12.8)	150 (4.9)
V4. Physical abuse	166 (4.1)	164 (5.4)
V5. Domestic Violence	1190 (29.6)	582 (19.2)
Suicide	250 (6.2)	111 (3.7)
NSSI	183 (4.6)	116 (3.8)

Latent Class Models for Males and Females

The fit indices for alternative latent class analyses are presented in Table 2. The 3-class

solution for both groups was considered to be the best model. The Bayesian information

statistic (BIC), sample size adjusted Bayesian information statistic (SSABIC), and Akaike

information criterion (AIC) were markedly lower than for the 2 and 4 class solutions. Most

importantly, the Lo-Mendell-Rubin's LRT indicates that the 4 class model was not

significantly better than the 3 class model for females (LRT = 15.96, p = .07) or males (LRT

= 60.15, p = .24). Consequently, the 3 class solutions were preferred on the basis of

parsimony.

Table 2

Fit indices for the latent class analysis of victimization experiences for females and males separately

| Group	Model	AIC	BIC	SSABIC	LRT	p	Entropy
Females	2 classes	16429.93	16543.29	16486.10	2106.67	<.001	.77
	3 classes	16190.06	16372.70	16208.55	259.03	<.001	.79
	4 classes	16198.93	16450.85	16323.75	15.96	.07	.71
Males	2 classes	9816.49	9924.79	9867.60	870.13	<.001	.70
	3 classes	9682.23	9856.73	9764.58	12.78	<.001	.73
	4 classes	9686.71	9900.39	9773.29	60.15	.24	.59

Note: AIC = Akaike information criterion, BIC = Bayesian information criterion, SSABIC = sample size adjusted BIC, LRT = Lo-Mendell-Rubin's adjusted likelihood ratio test.

The profile plots indicating the probability of endorsement, across each of the three classes, for each victimization type, are presented in Figure 1 for females and Figure 2 for males. The probabilities indicate the strength of a particular item in distinguishing whether an individual would be a member of each class. The majority of female respondents were classified into Class 3 (44.7 %) which was characterized by individuals who had low probabilities of endorsing all of the victimization experiences (response probabilities did not exceed 0.1 for any single item). Consequently, this class is considered to be the baseline/normative class ('low victimization class'). Class 1 (20.5%) was characterized by individuals who had the highest probability of endorsing of all victimization types, but in particular had high probabilities of endorsement of bullying, violence in the home, and domestic violence. Class 1 will, therefore, be referred to as the 'high victimization class'. Class 2 (34.8 %) was characterized by a similar pattern of item endorsement as Class 3. However, members of this class can be differentiated from those belonging to class 3 by higher rates of endorsement of bullying and domestic violence. Class 2 is, therefore, be referred to as the 'bullying and domestic violence class'.

Most male respondents (49.5%) were classified into class 2 which was characterized by participants with near zero probabilities of endorsing rape, violence in the home, and physical abuse as well as low probabilities of endorsing bullying and domestic violence. However, as this class had higher probabilities of endorsing bullying and domestic violence than Class 3, it will be known as the 'bullying and domestic violence class'. Class 3 (37.8 %) was characterized by individuals who had lowest probabilities of endorsing all items except for physical abuse, which had the lowest probability of endorsement by members of Class 2. Thus, this class is considered to be the baseline/normative class ('low victimization class'). Class 1 was characterized by individuals who had the highest probability of endorsing of all victimization types. Class 1 will, therefore, be referred to as the 'high victimization class'.
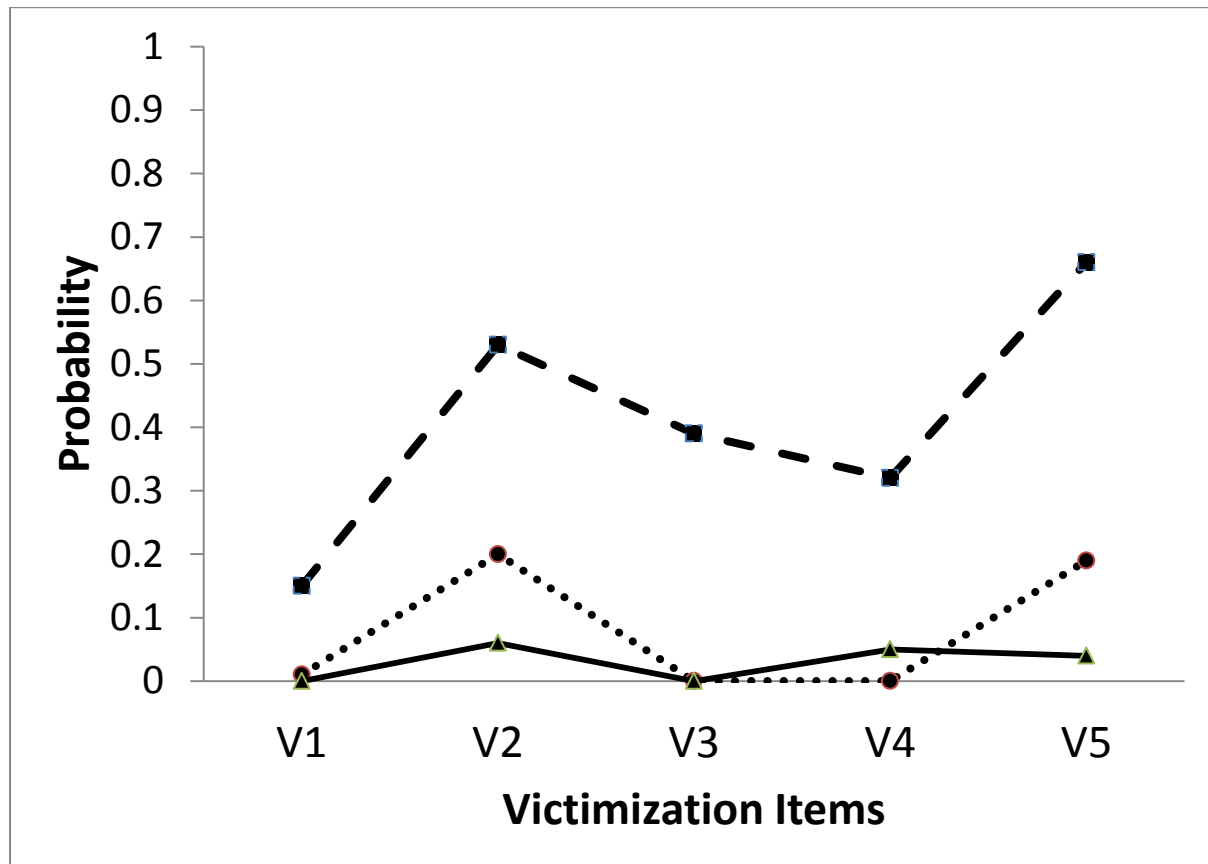
Figure 1

Profile plot of three victimization classes for females
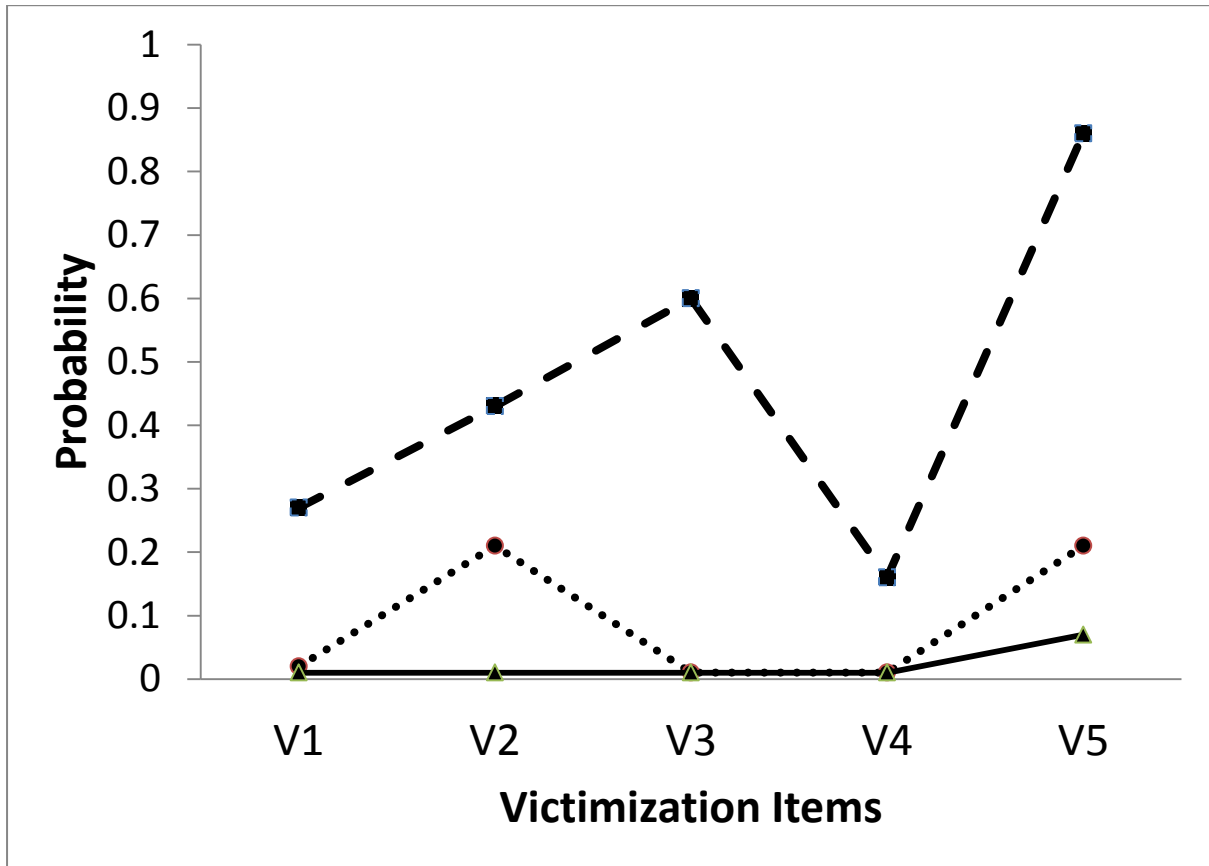
Note: Class 1 = long dash line (the 'high victimization class'; 20.5% of participants); Class 2 = dot line (the 'bullying and domestic violence class'; 34.8% of participants); Class 3 = solid line (the 'low victimization class'; 44.7% of participants).

Figure 2

Profile plot of three victimization classes for males

Note: Class 1 = long dash line (the 'high victimization class'; 2.6% of participants); Class 2 =

dot line (the bullying and domestic violence class'; 49.6% of participants); Class 3 = solid

line (the 'low victimization class'; 37.8% of participants).

Multinomial logistic regression was used to analyse the association between latent

classes of victimization and suicide attempt, NSSI, and PTSD (2 factors), while controlling

for age, for female and males separately. The reference category for the outcome variable in

both cases was the baseline/normative class ('low victimization class'); each of the other

classes were compared to this reference group.

The first column in Table 3 has the outcome of the 'high victimization class' (class 1) compared to the 'low victimization group' (reference category) for females. The results suggest that suicide attempt history (OR = 11.28), NSSI history (OR = 4.18), higher PTSD factor 2 scores (OR = 1.69), and older age (OR = 1.03) significantly increase the probability of membership in class 1, while controlling for all other variables. The second column in Table 3 has the outcome of the 'bullying and domestic violence class' membership (class 2) compared to the reference category (class 3). The results indicate that the only factor significantly associated with class membership for this group was age (OR = 1.14), with older age significantly increasing the probability of membership in this class. The third column in Table 3 has the outcome of the 'high victimization class' (class 1) compared to the 'low victimization group' (reference category) for males. The results suggest that suicide attempt history (OR = 29.98), NSSI history (OR = 52.77), higher PTSD factor 2 scores (OR = 5.57), and younger age (OR = 0.88) significantly increase the probability of membership in this class. The final column in Table 3 has the outcome of the 'bullying and domestic violence class' membership (class 2) compared to the reference category (class 3). The results indicate that suicide attempt history (OR = 6.70), NSSI history (OR = 3.63), higher PTSD factor 2 scores (OR = 2.63), and younger age (OR = 0.82) significantly increase the probability of membership in this class.

[Insert Table 3 about here]

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Table 3

Associations between victimization classes, suicide attempt, NSSI, PTSD (2 factors), and age.

	Females		Males	
	Class 1	Class 2	Class 1	Class 2
Variable	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Suicide attempt	11.28*** (5.21/24.42)	2.33 (0.78/6.97)	28.98*** (7.01/88.45)	6.70*** (1.18/36.82)
NSSI	4.18*** (1.94/8.99)	2.35 (0.73/7.52)	52.77*** (14.80/96.51)	3.63*** (1.30/27.87)
PTSD F1	1.04 (0.80/1.36)	1.04 (0.70/1.55)	1.45 (0.84/2.51)	1.17 (0.64/2.16)
PTSD F2	1.69*** (1.39/2.04)	1.07 (0.74/1.54)	5.57*** (2.50/12.41)	2.63*** (1.57/8.40)
Age	1.03** (1.01/1.04)	1.14*** (1.11/1.17)	0.88*** (0.83/0.93)	0.86*** (0.82/0.91)

Note. Reference group: 'low victimization class' (Class 3), Class 1 is the 'high victimization class' and Class 2 is the 'bullying and victimization class'. OR = Odds Ratio, 95% CI = Confidence Interval. ** $p < 0.01$; *** $p < 0.001$

4. Discussion

The present study aimed to identify the appropriate number and nature of latent classes of victimization experiences using data drawn from the APMS and to examine differences between the identified profiles on three domains that have been associated with victimization: PTSD symptoms, suicide attempt, and NSSI. Importantly, given that the dataset included a large number of both male and female respondents, it was possible for us to examine sex differences with respect to subgroupings and factors associated with group membership. A three-class solution provided an adequate and interpretable fit to the data for both males and females, and the resultant latent classes were found to differ both quantitatively and qualitatively. In other words, the classes differed quantitatively across all victimization items and differed qualitatively as the probability of endorsement for items did not uniformly increase or decrease across classes.

As would be expected within the general population, few participants (20.5% of females and 2.6% of males) belonged to the classes characterised by the highest likelihood of endorsing all victimization types ('the high victimization class'). The majority of female participants (44.7%) belonged to the baseline/normative class, a class characterized by low probabilities of endorsement of all victimization experiences, whereas, the majority of male participants (49.6%) belonged to the 'bullying and domestic violence class' (Class 2). The male 'bullying and domestic violence class' was characterised by participants with near zero probabilities of endorsing rape, violence in the home, and physical abuse, as well as low probabilities of endorsing bullying and domestic violence. Class 2 for females (34.8 %) was characterized by a similar pattern of item endorsement as Class 3. However, this class could be differentiated from Class 3 by higher rates of endorsement of bullying and domestic violence, and was therefore labelled the 'bullying and domestic violence'. Thus, despite a focus on the co-occurrence of physical and sexual abuse within the existing literature (cf.

Higgins & McCabe, 2001) and despite Nooner et al.'s (2010) concentration on sexual and physical abuse typologies, a sexual and physical abuse class failed to emerge in the present research.

As classes 1 and 2, for both male and female respondents, were both characterized by multiple victimization experiences, our results support the views of Mullen, Martin, Anderson, Romans, and Herbison (1996) that children who are victims of one form of abuse are more likely to also experience other forms of abuse. Furthermore, as none of the classes was characterized by only higher endorsement of sexual experiences, the results also suggest that individuals who experience sexual abuse often experience multiple other victimization types that in turn may impact upon them negatively. From a clinical perspective, this means that treatment which is solely directed at dealing with issues related to sexual victimization may be insufficient. Consequently, researchers and practitioners are advised to assess for a broader range of victimization experiences, and to avoid assessments that only focus on a single form of victimization.

The likelihood of membership in Classes 1 and 2, compared to Class 3 for males was significantly increased for individuals reporting a previous suicide attempt and a lifetime history of NSSI. For females, a slightly different pattern emerged with suicide attempts and NSSI associated with membership in Class 1 but not Class 2. Furthermore, the strength of the association between suicide attempts and NSSI and Class 1 membership was considerably higher for males than females. Interestingly, suicide attempt history evidenced the strongest association of all variables with Class 1 membership for females, but for males, the strongest relationship with class membership was found with NSSI. Consequently, the results if the present study underscore the importance of conducting analyses separately for males and females.

The strong association between the victimization classes and self-injurious behaviour, particularly suicide attempts, compared to the baseline classes (Class 3) tentatively suggests that victimization experiences may create a vulnerability within individuals that increases the likelihood of self-damaging behaviour. However, the cross-sectional nature of the data and the non-specificity in time frames within questions makes this interpretation speculative, and further longitudinal research is needed. Despite this, our results are in line with several studies documenting a relationship between childhood abuse and chronic self-damaging acts and suicidal behaviours (Akyuz, Sar, Kuga, & Dogan, 2005; Klonsky & Moyer, 2008).

PTSD symptomology has frequently been linked to sexual and physical abuse. In line with this, in the present research, the likelihood of membership in classes 1 and 2 for males and class 1 for females was significantly increased for individuals reporting increased PTSD factor 2 (arousal) scores. The highest odds ratio for high PTSD factor 2 symptoms was among males belonging to class 1. However, the odds of belonging to class 2 was also high among those with greater PTSD factor scores. This suggests that it may be the experience of multiple-victimization types that is the risk factor for trauma symptoms, rather than a singular form of trauma. This finding, if confirmed with longitudinal data, would raise questions about the previous literature reporting on the impact of victimization. It is possible that studies concerned with single forms of victimization may have overestimated the unique association between singular forms and various negative outcomes, because they did not adequately control for other kinds of victimization. As noted by Karsberg et al. (2014), examining the difference in explanatory power of specific single traumatic experiences versus different clusters of multiple traumatic experiences in relation to PTSD symptomology may therefore, be an interesting direction for future research.

The APMS dataset provided us with a unique opportunity to explore the relationship between victimization experiences and PTSD factors, suicide attempt, and NSSI using a large

population based sample. This is important for two reasons. First, clinically-based samples are more prone to selection biases and consequently may not be representative of the population as a whole. Second, the large sample allowed us to test for gender differences in the patterns of victimization experiences, and factors associated with class membership. Strengths of the APMS dataset were its strong survey design and extensive evaluation of victimization experiences. The questions used to assess victimization experiences were clear and specific.

A possible limitation of the present research is the reliance on retrospective reports of victimization experiences and lifetime disorders. While the literature points to a certain amount of recall bias, it also suggests that if the instruments are of reasonable quality, establishing the occurrence of childhood abuse is likely accurate (Brewin, Andrews, & Gotlib, 1993; Hardt & Rutter, 2004; Kosten, Anton, & Rounsaville, 1992). The cross-sectional design of this study, similar to other large community surveys, limits the conclusions that can be drawn about the causal nature of the associations between class membership and PTSD symptomology, suicide attempts, and NSSI. However, while longitudinal designs have the advantage of being able to clarify temporal and causal relationships, few longitudinal datasets are available that include the variables included in the present research. It is also important to note that the present study also evaluated a non-exhaustive set of victimization experiences that did not consider timing, sequencing, persistence, or severity. Further research including a larger number of victimization experiences and that includes items to capture such variations in experiences is, therefore, needed. A final limitation is the measures that were used to assess the correlates of class membership. Single items were used to measure suicide attempts and NSSI, and a PTSD screener (which is likely to have overestimated symptom severity) was used to assess PTSD

symptomology. However, the present study underscores the importance of collecting data on these constructs in studies of victimization.

Despite these limitations, the results of the present study have a number of practical, policy, and theoretical implications. On a theoretical level, the study represents an important step in furthering knowledge about the processes and mechanisms of victimization and the effects that such experiences might have on individuals. The findings suggest that it is possible to discern meaningful victimization profiles that differ both quantitatively and qualitatively. This underscores the co-occurrence of different types of victimization and the importance of considering multiple dimensions of victimization when examining this phenomenon and its sequelae, both behavioural and emotional. As noted above, the three latent classes of victimization experiences were differentially related to PTSD factors, suicide attempt, and NSSI for both males and females. Consequently, when recommending treatments and services for an individual, practitioners need to be cognizant of the individual's victimization profile.

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