Prevalence of juvenile violence exposure

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1. What is the exposure?

At this Think Tank, violent victimization has been defined as *personal exposure to acts of intentional harm in the first 18 years of life*. Examples include: physical or sexual maltreatment by parents or other caregivers, physical or sexual assault by other adults, exposure to parents' or caregivers' domestic violence, bullying by peers or siblings, and violence within the context of a romantic relationship. These forms of victimization are defined more specifically below using definitions that were employed in a recent comprehensive review of the area (Gilbert et al., 2009) and which were adapted from US guidelines (Leeb, Paulozzzi, Melanson, Simon, & Arias, 2008):

- *Physical maltreatment/assault* is usually considered to involve the intentional use of physical force or implements that could potentially or actually did cause physical injury. For example, beating, punching, strangling, burning, poisoning. Occasional smacking on the bottom with an open hand is commonly excluded.

- *Sexual maltreatment/assault* often involves attempted or completed sexual acts or touching of genitalia, breasts or buttocks. It can sometimes involve non-contact interactions such as being forced to watch sexual acts, being filmed, or prostitution. Single incidents of flashing by a stranger are usually excluded as are solicitations where no interaction actually takes place.

    - The above are generally classed as being perpetrated by parents/caregivers (*maltreatment*) or other adults (*assault*).

    - When they are perpetrated by peers or siblings they can be classified as forms of *bullying* (if the assault is repeated and there is a power differential between the victim and perpetrator) or more generally as *peer/sibling victimisation*.

    - Where assault occurs within the context of a romantic relationship (commonly limited to adolescence) then this is termed *dating violence*.

- *Bullying* involves repeated patterns of harmful interactions between juveniles (peers or siblings). Single instances are excluded. There should be a power imbalance between the victim and the perpetrator (physical, age or status within the peer group) which makes it difficult for the victimised child to defend him/herself. [Adapted from Arseneault, Bowes, & Shakoor, 2010]

- *Exposure to domestic violence* usually requires that a juvenile has witnessed (visually or aurally) actual or threatened physical or sexual assault between parents or other caregivers. The perpetrator can be either male or female.

As the focus of this Think Tank is specifically on individual exposure to violence, other forms of trauma such as neglect, separation or death of parents, violence within the wider community, having your house burgled, living in a war zone and exposure

to natural disasters will not be considered here. The inclusion or exclusion of psychological or emotional abuse by parents or caregivers is open to debate but as it does not technically involve 'violence' and can include non-intentional harm (Gilbert et al., 2009) it will not be classified as a form of violent victimization in this report.

The definitions used by prevalence studies are varied. This is in terms of which types of interactions can be classified as violent victimization, whether there is a threshold for severity or frequency of exposure, the age difference or relationship required between the victim and the perpetrator, and the maximum age at which victimization can have occurred to still qualify as juvenile exposure. This makes combining prevalence estimates from different studies extremely problematic and thus broad ranges will be provided in the next section. Furthermore, these aspects of violence exposure have been shown to be differentially associated with later health outcomes (Fisher et al., 2010; Keiley, Howe, Dodge, Bates, & Petti, 2001; Shevlin, Houston, Dorahy, & Adamson, 2008) and thus should be taken into account when considering the evidence for the psychobiological effects of victimization.

2. What does the research literature show?

A substantial minority of juveniles are exposed to violence. There are a large number of studies from many countries around the world that have explored the prevalence of juvenile exposure to violent victimization and most find it occurs to less than a quarter of children. Nonetheless, this still poses a major concern in terms of the potentially very damaging effects of early exposure to violence on the life-long health and well-being of a substantial number of children. Given that only a small proportion of reported cases of victimization come to the attention of medical, police or social-welfare services (see discussion in section 3), the estimated prevalence rates for each type of violence exposure that are presented below are based on child or parent reports. Exact figures are not available and rates vary between countries so the range of prevalence estimates is provided.

Gilbert et al. (2009) conducted a comprehensive review of population-based studies undertaken in developed countries and concluded that 4-16% of children were *physically abused* each year though this rose to 5-35% across the whole of childhood. Approximately 5-30% of children were *sexually abused* during their childhood (but only 1-10% for penetrative sexual abuse), while 10-20% had *witnessed domestic violence*. The wide variation in these rates is partially due to differences between the exposure of boys and girls (see later discussion) as well as the varying definitions used within different countries and studies.

Kessler et al. (2010) have subsequently reported on the World Health Organization's World Mental Health Survey which comprised nationally or regionally representative surveys of adversities that occurred prior to 18 years of age. The same measurement tool was used to gather retrospective reports of 51945 adults from 21 countries of varying economic status. They found that *physical abuse* was reported by 5-11% of respondents while 1-2% reported *contact sexual abuse* and 4-8% reported *exposure to family violence*. These figures are at the lower end of the estimates provided by Gilbert et al. (2009) but may be more accurate due to the use of the same assessment tool and definitions of each form of victimization.

Prevalence rates for exposure to a wider range of violent victimizations are available from recent representative household surveys conducted in the US and the UK. These cross-sectional studies used almost identical methodologies including the use of the Juvenile Victimization Questionnaire (Finkelhor, Hamby, Ormrod, & Turner, 2005) which was completed by caregivers for younger children (under 10 years in the US or under 11 years in the UK) and the children themselves when aged 10-17 years (US) or 11-17 years (UK). The National Survey of Children's Exposure to Violence (Finkelhor, Turner, Ormrod, & Hamby, 2009) included reports on 4549 children aged 0-17 years in the US and found the following rates across all ages:

- *Bullying:* 8-22% (past year), 20-29% (up to 17 years)
- *Dating violence:* 1-6% (past year), 2-9% (up to 17 years)
- *Physical maltreatment:* 1-5% (past year), 5-19% (up to 17 years)
- *Physical assault:* 1-19% (past year), 7-33% (up to 17 years)
- *Sexual maltreatment/assault:* 1-5% (past year), 3-11% (up to 17 years)
- *Witnessing partner violence:* 5-8% (past year), 13-27% (up to 17 years)

Reasonably similar figures were reported by Radford et al. (2011) in the 2009 UK survey of 4435 children aged 0-17 years, though lifetime rates of physical maltreatment and witnessing domestic violence appear slightly lower:

- *Bullying:* 12-22% (past year), 19-33% (up to 17 years)
- *Dating violence:* 5% (past year), 8-13% (up to 17 years)
- *Physical maltreatment:* 1-3% (past year), 1-7% (up to 17 years)
- *Physical assault:* 1-15% (past year), 2-37% (up to 17 years)
- *Sexual maltreatment/assault:* 1-2% (past year), 1-11% (up to 17 years)
- *Witnessing partner violence:* 3% (past year), 14% (up to 17 years)

These figures suggest that bullying is a particularly prevalent form of victimization amongst juveniles, followed by direct physical assault and witnessing violence between caregivers. Rates of sexual violence are reasonably low and maltreatment within the home is very rarely reported (though this might be expected given that parents reported on behalf of younger children – see later discussion).

It is not clear whether rates of violent victimization have declined in recent years. A reduction in reports of victimization might be observed if interventions to prevent exposure to violence have been implemented successfully (Briere, 1992). However, as it has become more fashionable and less stigmatizing to discuss victimization over the past couple of decades, an increase in the reported prevalence of violent victimization might actually be expected in more recent studies that have utilized young respondents. Similarly greater recognition of victimization, employment of broader definitions, and more resources to detect it within social, welfare and health services might also be anticipated to result in higher rates of documented cases of exposure to violence amongst juveniles (Mansell, 2006). The evidence for changes in the prevalence of violent victimization over time is mixed. Finkelhor, Turner, Ormrod and Hamby (2010) found that caregiver and child reports of physical bullying by peers had declined between 2003 and 2008 (21.7 to 14.8%) along with a small drop in reports of sexual assault (3.3 to 2.0%). However, physical abuse rates increased slightly (3.4 to 4.2%) and there was no significant change in reports of witnessing domestic violence. Other survey and official figures from the United States report substantial decreases in physical and sexual abuse as well as assaults by

peers at school since the early 1990s (Bureau of Justice Statistics, 2005; Dinkes, Forrest Cataldi, Kena, & Baum, 2006; Jones & Finkelhor, 2009). However, Gilbert et al. (2012) investigated trends across six developed countries and concluded that there was no consistent evidence that documented rates of maltreatment amongst children less than 11 years of age had altered substantially since the 1970s.

Some evidence has been found for sociodemographic differences in rates of exposure to violent victimization. Greater exposure to juvenile sexual assault tends to be reported for girls than boys (Gilbert et al., 2009; Koenen, Roberts, Stone, & Dunn, 2010; Pinheiro, 2006). Reported rates of physical maltreatment appear to be similar for girls and boys in high-income countries (Andrews, Corry, Slade, Issakidis, & Swanston, 2004; US Department of Health and Human Services, 2006) but elevated rates of physical abuse amongst boys have been reported in low-income countries (Pinheiro, 2006). Additionally, Kessler et al. (2010) found higher rates of physical abuse (proportions for each gender not provided) in higher-middle income and low-middle income countries compared to high-income countries as part of a large World Health Organization survey (N=51945). Juveniles who have parents on a low income and/or with no qualifications are also more likely to have reported exposure to maltreatment but the findings are inconsistent with regards to whether rates of physical or sexual abuse are elevated (Hussey, Chang, & Kotch, 2006; May-Chahal & Cawson, 2005; Sidebotham, Heron, & Golding, 2002). Reports of witnessing domestic violence during childhood have also been shown to be more common amongst individuals whose parents had low levels of education (Koenen et al., 2010) though this analysis of US data found no differences in terms of exposure to physical or sexual maltreatment.

Some differences between ethnic groups have also been observed with higher rates of physical abuse reported by ethnic minority groups in the US (Hispanics and others, Koenen et al., 2010; African Americans, Roosa, Reinholtz, & Angelini, 1999) and the UK (Black Caribbeans, Fisher, Morgan, et al., 2011) when compared to the White majority population. These differences may be, at least in part, due to different cultural practices and it is unclear what impact the perceived normativeness of violence exposure has (if any) on the psychobiological consequences of exposure to victimization (Lansford et al., 2005). However, other studies have found no such ethnic differences in reports of physical abuse (McCauley et al., 1997; Scher, Forde, McQuaid, & Stein, 2004; Schilling, Aseltine, & Gore, 2007) indicating a very mixed picture. Koenen et al. (2010) also reported elevated rates of witnessing domestic violence amongst minority ethnic groups in the US. In these studies though it is difficult to disentangle socioeconomic deprivation and exposure to other traumatic experiences from minority ethnic status which suggests these potential ethnic differences should be interpreted with extreme caution. Gilbert et al. (2009) conducted a comprehensive review of child maltreatment in high-income countries and observed some inter-country differences in prevalence rates but refrained from drawing definitive conclusions due to inconsistencies in definitions, measurement tools and study designs.

Repeated exposure to the same form of violent victimization or multiple different types occurs in a substantial minority of victimized children. Juveniles who are exposed to one incident of violent victimization are likely to be repeatedly exposed to the same type of violence (revictimization) or experience multiple different types of victimization (in extreme cases termed poly-victimization; Finkelhor, Ormrod,

Turner, & Hamby, 2005) during childhood and adolescence (Gilbert et al., 2009). Previous exposure to maltreatment is particularly likely to increase the risk of repeated maltreatment in the near future (Finkelhor, Ormrod, & Turner, 2007; Hindley, Ramchandani, & Jones, 2006) probably because individual and contextual factors have not altered. Documented evidence from Europe and the US also support this, with up to a third of children who have been previously seen by social-welfare services for maltreatment being re-reported with 2-3 years (Fluke, Shusterman, Hollinshead, & Yuan, 2008; Hamilton & Browne, 1999; May-Chahal et al., 2006). Around a fifth of juveniles in a large US survey were found to have been exposed to 4 or more types of victimization (mainly physical or sexual abuse, assault, bullying and witnessing domestic violence) in a single year (Finkelhor, Ormrod, Turner, & Hamby, 2005). Other studies have suggested that between 30-60% of children who have witnessed domestic violence are also likely to experience maltreatment (Appel & Holden, 1998; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008).

An increasing number of studies suggest that repeated victimization, and particularly poly-victimization (exposure to a large number of different types of victimisation), can lead to worse health outcomes than single instances of violent victimization (e.g., Appleyard, Egeland, van Dulmen, & Sroufe, 2005; Felitti, Anda, & Nordenberg, 1998; Radford et al., 2011; Turner, Finkelhor, & Ormrod, 2010). These findings have led to calls for professionals to screen for other forms of victimization when faced with a child presenting with just one type of exposure in order to target interventions at the most high-risk children (Turner et al., 2010). Juveniles whose first victimization occurred at a young age are (perhaps not surprisingly) thought to be particularly vulnerable to repeated physical or sexual abuse (Stevens, Ruggiero, Kilpatrick, Resnick, & Saunders, 2005). Experiencing multiple types of victimization also greatly increases the likelihood of being victimized again in the following year (Finkelhor, Ormrod, & Turner, 2007). Furthermore, juveline victimization is highly associated with being exposed to victimisation in adulthood (Widom, Czaja, & Dutton, 2008) indicating that this can often become a continuing problem throughout the lifecourse.

3. Methodological issues

Despite the use of epidemiological designs, the prevalence rates of violent victimization may still be biased. The estimated prevalence of different forms of violent victimization presented in section 1 of this essay is largely based on studies that have taken representative regional or national samples of individuals or households and often weighted their figures to account for demographic differences that occurred between the eventual sample and the population it was intended to represent. Nevertheless, several potential sources of bias may have impacted upon the accuracy of the prevalence rates obtained in these studies. Two major sources of bias are the type of measurement tool employed to ascertain occurrence of victimization, which individuals/organisations provided the information and how long after the event it was obtained. The issues related to these biases are discussed in detail below. Additionally, some surveys excluded individuals who did not speak English or recruited such small numbers of individuals from minority ethnic groups that sub-analysis within these groups could not be conducted (e.g., Koenen et al., 2010; Radford et al., 2011) thus limiting the generalisability of the findings. Response rates may also have been affected by access to the relevant technology (e.g., telephone line), availability during the hours when the survey was conducted, as well

as the accessibility of the property for home visits and residence in a private household (where this was the unit of selection). Furthermore, institutional boards in some countries refused to allow questions concerning certain types of victimization to be asked of potential respondents (see Kessler et al., 2010) thus preventing accurate estimates of these forms of victimisation from being obtained from these locations. Finally, the response rate itself may influence the prevalence of victimisation obtained, with lower response rates associated with a higher reported prevalence of sexual abuse (Gorey & Leslie, 1997; Koenen et al., 2010).

The measurement tool employed to assess violent victimization may influence the veracity of the information obtained. One criticism of obtaining histories of violent victimization using face-to-face interviews and questionnaires is that they may be inaccurate due to respondents being too embarrassed or unwilling to disclose abuse to a stranger especially when only interviewed once (Femina, Yeager, & Lewis, 1990; Hepp et al., 2006). This has led to suggestions that anonymous questionnaires may be more likely to elicit abuse histories than face-to-face interviews (Dill, Chu, Grob, & Eisen, 1991). However, these may leave too much room for subjective interpretation of the questions. Therefore, the more in-depth enquiry and repeated questions often afforded by interviews (Hardt & Rutter, 2004; Maughan & Rutter, 1997) may yield more accurate information assuming rapport has been established and there are no legal or social ramifications of disclosing (Finkelhor, 1986). Roy and Perry (2004) also recommended that for optimal assessment interviewers should be provided with manualized guidance or be required to undertake specific training. However, such assessments can be expensive to conduct in terms of time and resources and thus are not always utilized in large population-based studies. Some compromises have been reached though with the use of extensive questionnaires completed via telephone or on a computer in some large prevalence studies (e.g., Finkelhor, Ormrod, & Turner, 2009; Radford et al., 2011). Consistency in the measurement tool employed by studies conducted in different countries and across different generations would be useful in the future to ensure greater comparability of victimization rates across locations and time periods.

There has been frequent scepticism about the utilization of retrospective self-report in adulthood to obtain histories of juvenile victimization. This methodology has been criticised for producing unreliable and inaccurate accounts as events recalled from a long time ago may be affected by normal processes of forgetting (Halverson, 1988), an inability to recall very early events (occurring prior to 4/5 years of age; Lewis, 1995), repression of particularly traumatic events (Feldman-Summers & Pope, 1994), subsequent events that alter existing memories (Rovee-Collier, 1990), as well as neuroanatomical deficits and cognitive impairments (Moscovitch et al., 2005). Furthermore, false memories of early victimization have been hypothesised to be ‘recovered’ by some adults during hypnosis or psychoanalysis (Loftus & Davis, 2006). Current mental health problems have also been proposed to increase the likelihood of exaggerating the severity of past exposure to victimization. For instance, depressed mood may result in overly negative perceptions of the past (Lewinsohn & Rosenbaum, 1987; Wolfkind & Coleman, 1983), individuals may have a need to justify or understand their current difficulties (Gerlsma, Emmelkamp, & Arrindell, 1990; Schacter, 2001), or they may even falsely claim to have been victimized due to delusional beliefs (Young, Read, Barker-Collo, & Harrison, 2001). Conversely, high levels of current functioning may lead to minimisation of the severity of past victimization in an attempt to create a

more consistent view of the self (Maughan, Pickles, & Quinton, 1995). Moreover, studies comparing retrospective reports with those obtained prospectively or from documented records have found low levels of absolute agreement (Henry, Moffitt, Caspi, Langely, & Silva, 1994; Widom & Morris, 1997).

Nevertheless, retrospective assessment has been utilized in some studies exploring the prevalence of violent victimization to get the full picture of exposure from birth to 18 years of age. This approach is also commonly used in studies investigating the longer-term effects of early victimization. Usually, this is to avoid the massive expense associated with following up a very large number of participants over several decades and for convenience as early victimization has only fairly recently been suggested to be of aetiological significance for a range of later difficulties (Hardt & Rutter, 2004; Moffitt, Caspi, & Rutter, 2005). Several studies have found that current mental health problems do not appear to result in exaggerated accounts of exposure to violent victimization and that restrospective reports are reasonably consistent over time and can often be corroborated by unaffected siblings or clinical records (e.g., Brewin, Andrews, & Gotlib, 1993; Brown, Craig, Harris, Handley, & Harvey 2007; Fisher, Craig, et al., 2011; Herman & Schatzow, 1987) suggesting that this may not be a major methodological limitation of this approach. Additionally, the use of memory aides, such as a life history calendar (Caspi et al., 1996), can improve recollection of past events.

Contemporary reports of violent victimization also have disadvantages. Documented medical, forensic or social services' records are often heralded as the gold standard for obtaining independent evidence of violent victimization exposure amongst juveniles. However, these may well severely underestimate the prevalence of victimization as the focus is often upon maltreatment rather than other forms of violence (Finkelhor, Ormrod, Turner, & Hamby, 2011) and only a small proportion of incidents are thought to ever come to the attention of the authorities (Ammerman, 1998; Fergusson, Horwood, & Woodward, 2000; Woodman et al., 2008), though these rates may well be increasing (Finkelhor et al., 2011). Furthermore, there is likely to be some inconsistency in whether officials document victimization depending to a degree on locally agreed definitions, their role in the process and legal obligations, ramifications for the family or the system, how much they 'believe' the reported abuse occurred or the degree of evidence, as well as the personal characteristics of the official and the child (Finkelhor, Hamby, Ormrod, & Turner, 2005; González-Izquierdo et al., 2010; Koenen et al., 2010).

Another possible source of information is the child themself. However, it can be very challenging to communicate about such sensitive issues with very young children who lack appropriate language skills. Questioning a child about recent adverse experiences may cause unnecessary distress that would be difficult to justify ethically in the context of research (Kinard, 1985). Juveniles may also be likely to under-report victimization due to the operation of defence mechanisms such as denial, repression or dissociation (Briere & Conte, 1993; Herman & Schatzow, 1987; Terr, 1991) or because they have been convinced by the perpetrator that it is somehow 'normal', their own fault, or that disclosure will lead to their own life or that of family members being put in danger (Finkelhor, 1983).

Caregivers, usually mothers, are thus often used as proxy reporters of violent victimization of juveniles, particularly during pre-adolescent years. Although utilization

of caregiver reports overcomes some of the issues raised above, there are downsides to this approach as well. For instance, it seems logical that where caregivers are the perpetrators of violence towards the child they may wish to cover this up for fear of prosecution or to prevent their child from being taken away from them, but it is also possible that they may lack insight into their own parenting practices (Bifulco, Brown, Lillie, & Jarvis, 1997). For some types of victimization they may also be unaware that it has occurred – this seems reasonably likely where sexual assault is perpetrated by someone outside of the home as this is often shrouded in a high degree of secrecy. Moreover, as children get older caregivers are less likely to be privy to the occurrence of violence that occurs to their children at school and in the context of romantic relationships. Therefore, during teenage years, children are increasingly being asked to report directly upon their exposure to violent victimization (e.g., Finkelhor et al., 2009; Radford et al., 2011). Some studies have shown that mothers may downplay the severity or frequency of their children's exposure to violent victimization (Fisher, Bunn, Jacobs, Moran, & Bifulco, 2011; Tajima, Herrenkohi, Huan, & Whitney, 2004) though Finkelhor et al. (2005) found reasonable comparability between caregiver and child reports for a range of victimization experiences.

What is apparent from the above discussion is that there is **no obvious best method for obtaining reports of violent victimization** and thus caution is required when interpreting prevalence figures that have relied on a single methodological approach. Utilization of various sources of information and triangulation of the reports obtained would seem the way forward in order to improve confidence in the validity of reported exposure to violence amongst juveniles (Rutter et al., 2001). Nonetheless, prospective assessment appears on balance to be subject to less biases and thus combining contemporaneous reports from different informants should be encouraged (Widom, Raphael, & DuMont, 2004).

Conclusions

There is a wealth of information from a range of different countries that indicates that a substantial minority of individuals are exposed to various forms of violent victimization during childhood and adolescence. This translates into a significant number of juveniles who are subjected to potentially very harmful violent acts that may well have effects throughout their life-course. Therefore, this risky environmental factor definitely warrants further attention in order to minimise the likelihood of future generations of children being exposed to victimization as well as gaining a better understanding of how to effectively intervene with victims in order to prevent detrimental psychobiological outcomes both in the short and longer term. Given the inconsistencies in the rates reported between countries, the definitions of victimisation employed, the assessment tools utilised and the type of reporters, it is advised that the above rates should be considered the best available estimates but by no means definitive figures. Consequently, future research should employ more scientifically rigorous approaches preferably using prospective longitudinal designs, incorporating detailed, standardised instruments conducted on multiple occasions and drawing on multiple sources of information.

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