Abstract
Domestic violence is widespread in the United Kingdom (UK) and accounts for 14 per cent of all violent crimes. It is a significant health concern, as it damages physical and emotional health and can have long lasting negative impact across a wide range of health, social and economic outcomes for families as well as having a major impact on the social development of young people. A recent report shows that in 2002 there were 750,000 children in Britain estimated to have witnessed domestic violence. However, studies demonstrated that children's exposure to domestic violence between parents tend to seal its “inexiguably prints” on “their impressionable minds”. They are thought to express more anger, antisocial behaviour, as well as fear, anxiety, depression and have greater risk of behavioural, emotional, and psychological problems. It shows that exposure to domestic violence in adolescence is thought to be having more of an impact than exposure in younger children, with earlier exposure having little or no impact without adolescent exposure.

This systemic review focuses on the exposure of male adolescents to domestic violence and the impact of domestic violence on them. The review highlights that there were a number of disparate ways in which domestic violence impacted on adolescent males. This ranged from animal cruelty, drug taking, violence and aggression, through to feelings of depression, suicidal ideations, and feelings of sadness and ambivalence. However, the results suggest that while the exposure to domestic violence does indeed have an impact on adolescent males, there appears to be no agreement on any single way in which this impact may be experienced. However, we recommend that combating the scourge of domestic violence requires skilled practitioners to intervene at any given stage. As such, practice educators must ensure that staff under their remit are adequately equipped with the necessary knowledge and skills of detection, to impact on the root causes of domestic violence. This must include increasing awareness among staff of the knowledge of the latest legislation and policies. In addition, training should emphasise the need to maintain liaison with external agencies in developing pathways into services, and timely responses by stakeholder and associate institutions to adequately address this issue that is impacting negatively on male adolescents.

Keywords: Adolescent male; Domestic violence; Victims; Abusive

Introduction
Domestic violence refers to any incident or pattern of incidents of controlling, coercive threatening, violent or abusive psychological, physical, sexual, financial or emotional behaviours between those aged 16 or over who are, or have been intimate partners or family members regardless of gender or sexuality and includes issues of concern to Black and Minority Ethnic (BME)
communities such as so called 'honour based violence', Female Genital Mutilation (FGM) and forced marriage [1]. It has been proposed that the definition aims to increase awareness that young people in this age group do experience domestic violence and abuse [1-6]. McIntosh defines the term “domestic violence” broadly as the intimate context within which one partner is abused by another, involving both men and women as victims [7].

Domestic violence impacts all of society and is widespread in the UK, and accounts for 14% of all violent crimes in the UK [8]. In 2011 the Director of public prosecutions stated in one of his key note speeches that “domestic violence is serious and pernicious. It ruins lives, breaks up families and has a lasting impact. It is criminal and it has been with us for a very long time”. Yet, it is only in the last ten years that it has been taken seriously as a criminal justice issue. Before that, the vast majority of cases were brushed under the carpet with the term refrain “it's just a domestic” [9].

Domestic violence is a significant health concern, as it damages physical and emotional health and can have long lasting negative impact across a wide range of health, social and economic outcomes for families as well as having a major impact on the social development of young people [1]. For example, more than one in four women has experienced at least one incident of domestic violence in England and Wales since age 16, which equates to 4.8 million women, while two women per week are killed by their current or former partner [1].

Even more remarkable is the fact that by virtue of the fact that domestic violence occurs within the family home, millions of children are therefore exposed to domestic violence. According to Women’s aid (2015), in 2002 there were 750,000 children in Britain estimated to have witnessed domestic violence [2]. Utilising retrospective adult reports, Henning et al. found that there is a 20-40% exposure rate in childhood to domestic violence [10]. In defining exposure to domestic violence, Mohr et al. indicates that there has been no consensus among researchers regarding the definition of children’s exposure to domestic violence [11]. However most describes it as seeing hearing, or directly involving the young person. Jouriles et al. and Edleson goes further to suggest that while some researchers describes it as children’s witnessing or observing domestic violence, it goes further and involves all that as well as the experiencing of the aftermath of domestic violence such as physical or sexual assault that occurs between care givers [12,13].

It is clear that there has been many research explorations into domestic violence and its impact on children, with some researchers proposing that there are links between childhood exposure to domestic violence and subsequent social behaviours, such as bullying, offending, drug abuse, low self-esteem, running away, with adolescents 6 to 9 times more likely to have attempted suicide or have suicide ideations [3,14-16]. In addition, Edelson proposed that children’s exposure to domestic violence between parents tend to seal its “inexpugnable prints” on “their impressionable minds”, they are thought to express more anger, antisocial behaviour, as well as fear, anxiety and depression [13]. Similarly other studies have reported children to have greater risk of behavioural, emotional, and psychological problems if they were exposed to domestic violence [5,17]. Conversely, other researchers proposed that the impact of domestic violence on children may vary with age and they may be less symptomatic of its impact with maturity [18,19]. In contrast Thornberry et al. reported exposure to domestic violence in adolescence as having more of an impact than exposure in younger children, with earlier exposure having little or no impact without adolescent exposure [6].

From a gender, perspective, research suggest that there are gender differences in the externalisation behaviour problems as a result of domestic violence, boys are thought to have more externalisation while girls internalise more [20]. However adolescent boys are thought to express more sadness while girls express more anger [21,22]. Other research studies caution against these findings of these findings as they postulated that exposure to domestic violence is not a “homogenous one-dimensional phenomenon and some research has been beset with many methodological complexities [23,24].

There is a significant body of research relating to domestic violence and its impact on women and children with disparate findings [4,25-28] A systematic review is warranted whenever there is a substantive question, several primary studies—perhaps with disparate findings—and substantial uncertainty [29]. Using recognised tools and methods, this systematic review synthesised the findings of current research on the impact of exposure to domestic violence on adolescent males and made recommendations for future practice within health and social care.

**Review Question**

These authors have utilised a PEO research tool in the formulation of the research aims in this process as it is thought to be better suited to the research question and will structure the search process.

P: Population: Adolescent males;

E: Exposure: Domestic violence;

O: Outcome: Prevalence and social impact [30].

This research study will therefore aim to ascertain ‘What impact does domestic violence have on the social wellbeing of adolescent males?’ For the purposes of this systematic review, exposure will utilise Edleson’s definition, of witnessing, observing and or experiencing of the aftermath of domestic violence for any period between the care-givers of adolescent males [13]. The definition will exclude actual abuse of the young persons’ themselves, but instead will refer to domestic violence inflicted on their care givers which in term affects the young person. The actual experience of abuse is beyond the remit of this paper as it would require an entirely different focus in relation to experiences of victims.

**Aim**

The aims of this review is to systematically identify studies related to the impact of exposure to domestic violence on adolescent
males and to describe the key features of these studies as it relates to this issue. In particular the exposure to domestic violence will be explored across the domain of prevalence and consequences on social wellbeing as it relates to adolescent males.

**Objectives**

The objectives of the review are to address two questions:

To identify any, prevalence of domestic violence exposure on adolescent males.

To identify consequences of domestic violence including effects on social wellbeing of adolescent males.

To make recommendations for practice education based on findings.

**Rationale for this review**

Both national and local data show that domestic violence is highly prevalent in the UK. The data analysis shows a growing concern about the impact of domestic violence on children and young people, which affects them mostly through exposure to violence perpetrated against their mothers [31]. Children are often the hidden or silent victims of domestic violence [32] and to help the children, all agencies such as Social services, National Health Services (NHS), schools, the courts; national and local authorities must put child protection policies and guidelines in place. All professionals who serve children must increase efforts to identify children who are exposed to domestic violence and apply the child protection guidelines where necessary. This systematic literature review seeks to add to the body of knowledge by synthesising the findings of current research on the impact of exposure to domestic violence on adolescent males and made recommendations for future practice within health and social care.

**Methodology**

In recent times systematic reviews have been hailed as a robust method of identifying, selecting, appraising and synthesising all high quality research evidence relevant to a single question” [30]. This systematic review method engenders a thorough and all-encompassing summary of relevant literature to the question posed and provides a most reliable source of evidence to guide practice. The method of research allows for a precise structured process of systematic review that aims to minimise bias, improving the quality and accuracy of the conclusions that was drawn [33]. The process for producing a systematic review involves these clear stages: framing of the review question, identifying relevant studies with a clear search strategy, specifying inclusion and exclusion criteria for studies, search strategy, sifting process, critical appraisal and process of data extraction; summarising data and synthesizing data [34].

According to Aveyard, once the research question has been developed, then a systematic review of the literature should be undertaken to ensure that the widest range of published material is obtained to answer the research question comprehensively, using all available published literature [35]. These researchers had undertaken a mixed method systematic review of the literature over the last ten years (2005-2015) on domestic violence exposure and social disadvantage relating to adolescent boys, through a qualitative and quantitative appraisal of published research. Furthermore, in order to maintain validity and reliability of the research process these authors will maintain the use of the P.E.O framework to govern the search terms, paper selection, and the data extraction process. The Cardwell et al. tool will be employed to critique the paper quality. All results of the study will be presented as well as the limitations of the study [36].

However, in our attempts to undertake this research study, we were confronted with an ever increasing amount of information, with significant time limitations together with inadequacies of traditional sources of information to meet the expectations and criteria of modern academic studies, all presents substantial challenges. From a historical perspective, for instance, it has been suggested that expert opinion has often been presented in narrative reviews which are not necessarily evidence-based, and as such is prone to limitations [37]. Likewise, Montori et al. argued that unsystematic narrative reviews are more likely to include only research selected by the authors, and as a result introduces bias and frequently lag behind and contradict available evidence [38]. In Clarke view not sure what this was originally doesn’t read right, systematic assembly, critical appraisal and synthesis of all relevant studies on a specific topic [33]. In view of these realities, we endeavoured to undertake a critical review of the literature using search strategy from a number of sources.

There is a significant amount of published research relating to exposure to domestic violence with varying methodologies and outcomes as significant impact on children and young people [4,25-28,39] Many of which according to Holt et al. have been beset with methodological complications and concerns [24]. We envisaged that the careful and meticulous approaches we adopted would ensure robust procedures are utilised thus increasing validity and reliability of the outcomes of this research. According to Denzim and Lincoln the combination of approaches to the study of the same phenomenon enables cross validation thus facilitating greater reliability of the study [40].

**Data sources and search strategy**

Cumulative Index to Nursing and Allied Health Literature (CINAHL) recognised as a comprehensive and authoritative source for professional literature related to nursing, biomedicine and allied health, Medline the main source for bibliographic literature, pycarticles, pycinfo both recording professional articles relevant to psychology and sociology, Soc Index, child development and adolescent studies, education research complete, Cochrane library, BNI, Psychology and behavioural science collection, Scopus, social care online, ERIC and TRIP were also searched. These data bases were selected as they were considered to be the most comprehensive scholarly research data bases that were relevant and applicable to the question. The authors of this systematic review attempted to collect all primary research studies relating to the question both published and unpublished. This systematic search of the literature included
three elements. It began with a systematic search of the above
data bases. Passer proposed that a broad and comprehensive
search directly underlies the quality of the research [41]. In
addition, Bruce proposed that not all published research can be
found on data bases so an attempt should be made to search all
grey literature [42]. In response to this view, these researchers
search internet sites such as Google scholar, some governmental
sites and sites of other reputable Organisations such as the
NSPCC and women’s aide sites were also searched and finally
bibliographies and references were also checked. In addition,
fonseca stressed that appropriate search terms or key words
are fundamental to an effective literature search [43]. These
authors therefore began with the research question listing the
key elements of the question into search terms with synonym’s
relating to the P.E.O framework (See Appendix A for the complete
list, with Boolean operators).

Results of the search strategy

The search yielded 2,489 papers on domestic violence or inter-
parental violence and adolescents. Other search terms included
for example domestic violence, or inter-parental violence and
adolescent and males or boys which yielded 539 papers, while
domestic violence and gender and prevalence yielded 381
papers. Boolean search terms and operators were used to limit
and widen the search as appropriate and the literature relating
to domestic violence and male children were also searched
when they were found to include any of the searched terms
with reference specifically to adolescent males. Some of the
data bases were also combined in searches reducing duplication.

From the search of the Grey literature 28 papers were retrieved
22 of which were excluded as they were mainly reports, editorial
discussions papers and policy documents and as such did not
meet the inclusion and exclusion criteria.

From the combined searches of all the data bases, web pages,
and the hand searches of the grey literature, reference list and
bibliographies 94 papers were extracted for analysis.

Of the 94 papers extracted 40 were duplicates and therefore 54
extracts were read, of these 35 were removed as they did not meet
the criteria for inclusion see the inclusion and exclusion criteria.
18 full text studies were retrieved and another 6 removed as they
did not meet all the inclusion criteria. Therefore eligibility criteria
yielded 12 studies as the primary research papers and deemed
suitable to answer this research question based on reading the
titles, abstracts, and full text of the papers. Selecting the optimal
tool requires effort to obtain the necessary functionality (See the
list of included papers below and Appendix B for the entire list of
included and excluded paper details).

Selection criteria

As these authors were undertaking this systematic review, it was
felt that collecting primary research papers would be important
[30]. Papers written in English from any country were collected
as it was felt that this will allow for an international perspective,
applicability and appreciation of the findings of the review.
While it may be argued that research specific to a particular
population, country or culture will reveal findings specific to
the area from which data is being collected and possibly reduce
generalizability, it was felt that to exclude some papers based
on country of origin could equally result in presentation of bias
findings, and therefore all articles including the key search terms
were included regardless of country of origin. Conversely, these
authors acknowledged that to exclude papers not written in
English will add bias to the study but to have done so would be
beyond the scope of this review. Articles were selected according
to the predefined inclusion and exclusion criteria in order to
reduce selection bias [37]. All the papers generated from the
search have been managed using ‘Refworks’ which saved and
managed references, and generated bibliographies.

Data extraction and quality appraisal

These authors’ intention was to capture all relevant references
covering the topic as wide as possible in order to identify any
gaps in the evidence where available. Hausner et al. suggest that
a concept-based, subjective approach is the traditional way of
undertaking a search strategy, but cautioned that this method
relies heavily on the researcher’s knowledge of the topic under
investigation [44]. All the above data bases were therefore
searched, and abstracts of research based papers, peer reviewed
papers both published and unpublished relating to the key
concepts of adolescent males, domestic violence, prevalence,
and social impact, using the P.E.O framework were extracted.
The literature relating to domestic violence and its impact on
children were also examined as it transpired that there were
some documented evidence relating to adolescents within this
literature. Additional searches, grey literature, reference list and
bibliographies revealed another six papers that were relevant to
the questions of this research paper.

Initial results from the data bases revealed one hundred and
fourteen published papers having used the key search terms,
after application of Boolean operators these were reduced to
ninety four papers. Forty of which were removed due to
duplicates. Fifty four abstracts were then read and full text
papers retrieved for eighteen of these thought to be relevant to
the question. Of those papers extracted, six of them were not
relevant to this review as they either were not gender specific or
adolescent specific, or not relevant to the key outcomes being
researched. Final papers selected equalled twelve papers (See
Appendix B for the summary of the papers selected and criteria
for paper selection).

The screening of the papers was conducted by the first reviewer
but was supervised and checked by the second reviewer. Similarly,
data extraction was conducted by the first reviewer using
established data extraction forms and independently checked by
a second reviewer. Bethany Saltikov outlines that appraising the
quality of articles is fundamental in the judgement of the quality
of the study results, and ultimately the conclusions drawn and its
subsequent applicability to practice [30]. As such it is important
to outline who will be doing the quality assessment how many
people as more than one person increases cross referencing and
reduces bias.

This article is available in: http://healthcare-communications.imedpub.com/archive.php
The methodological quality of the included studies was therefore appraised by the two reviewers using established data extraction forms. Petticrew and Roberts proposed that in order to conduct an effective quality assessment a robust quality assessment tool is required, and a tool suitable to meet the study design should be selected. Twelve primary research papers were extracted for this systematic review, of which were Quantitative papers, and one qualitative paper. The study designs among all the papers reviewed were all different and some had mixed methods, some were longitudinal studies others were correlation studies and yet still there was the single ethnographic qualitative paper. In view of this the authors elected to utilize a mixed method framework as proposed by Caldwell et al. to analyse the papers (see Appendix C for the framework) [36].

All the twelve papers extracted in this systematic review were read and quality appraised, to assess the extent to which the papers have attempted to reduce methodological bias. Petticrew and Roberts proposed that assessing quality relates to the internal validity of the study, and whether it is free from methodological bias [45]. Assessing quality in systematic reviews as in the case of this review, relates to the methodological quality. Higgins and Deeks outlines that appraisal of a study is an attempt to judge the degree to which the study is an approximation of the truth [34]. In addition, Petticrew and Roberts proposed that a comprehensive appraisal requires a systematic approach in which the strengths and weaknesses, and validity of the research can be judged [30]. Thus, the twelve extracted papers were appraised against the eighteen questions set out in the Caldwell assessment tool, and the papers marked against the criterion “yes”, “no” or “partially” [36]. The results were presented in tabular form and will be discussed further in the results section of this systematic review.

In addition, these authors chose a Likert scale to assign a numerical value to the answers gained in the Caldwell assessment tool and also presented the results of the assessment with a numerical value; adding to the ease of assessment of the overall quality of the papers. While this will not affect the inclusion criteria, as the findings from all the papers will be presented, it is envisaged that this valued scale presentation will enhance the appreciation of the quality of the papers selected. For each individual answer to the eighteen questions in the Caldwell tool, a value will be added 0=No, 1=Partially, and 2=Yes, allowing a maximum score of 36 for each paper. Papers with a score of 36 will then be judged as the best quality papers (refer to Appendix C for these). This process carefully analysed all the extracted research papers included in this systematic review, the authors’ attention must now turn to the data extraction process undertaken.

The data extraction phase in this review was the most challenging [30]. Thus, careful consideration was given to extract data relevant to the salient issues being studies, which are aimed at answering the research question. As such, a specified data extraction matrix was created considering the population being studied, the interventions, the comparative interventions, the outcomes and recommendations. The process of the data extraction was therefore aimed primarily at answering this question. Higgins and Deeks proposed that in order to standardise the process and improve the validity of the results, a data extraction form should be created and its effectiveness checked (see Appendix D for data extraction matrix) [34].

**Data analysis and synthesis methods**

Parahoo suggest that data analysis is a process of information gathering techniques and the organisation of raw data [37]. There are many different tools used in the data analyses and synthesis, depending on the type of data being analysed. For example, quantitative data may include measurements such as correlational measures, nominal measurements, ordinal measurements or even ratio measurements, while qualitative data is more concerned with presentation of description data using themes, sub themes and meta-synthesis [46]. Because the studies reviewed for this paper have included a wide range of research designs, and included mostly quantitative papers but also included a qualitative paper, and more importantly as the studies have all yielded insufficient similarities in the variables being measured. These authors have chosen to present a narrative synthesis of the data collected [47].

The narrative approach, therefore, involved collating the data from the studies included in each review paper to present a summary of the outcome supported by a discussion. This included identification of emerging themes relating to the impact of exposure to domestic violence on adolescent males. This is in-line with Petticrew and Roberts view that the use of thematic presentation of results is commonly used for qualitative papers. However, where studies included in order to answer the research question are insufficiently similar, with a range of study designs and methods, or where mixed methods and both qualitative and quantitative papers are included, it may be best to seek emerging themes to present a narrative synthesis of the findings [30]. The selected papers for this review were all dissimilar in the variables being measured, in the methodologies used as well as outcomes obtained. Despite the extensive heterogeneity among the papers what emerged was that the outcomes were extensively either externalising factors or internalising factors, it was therefore found that presentation of the findings using the externalising and internalising themes would best allow accurate presentation of the findings. Externalising behaviour was therefore taken to represent and included measurements of mental health concerns such as depression or anxiety, identity problems, and coping issues. While externalising behaviours included issues such as violence, conduct disorder, withdrawal, behaviour concerns, bullying, aggression, or drug use.

**Results of the Paper Selection**

**Results of the quality assessment of included papers**

All the included papers were critically analysed using the eighteen questions set out in the Caldwell et al. assessment tool, and the papers marked against the criterion “yes”, “no” or “partially”. As eluded earlier, these authors have also chosen to utilise a Likert scale to assign a numerical value to the answers gained in the
Cardwell assessment tool. For each individual answer to the eighteen questions in the Caldwell tool, a value was added 0= no, 1= partially and 2= yes, allowing a maximum score of 36 for each paper, a score of 36 was deemed the highest quality [36].

Results from the critical appraisal of the included papers using the Likert scale tool revealed that all the papers were of high quality with scores ranging from a minimum score of 30 to a maximum score 36. From the Cardwell et al. tool it was clear that all the papers had clear titles which reflected the content of the studies as well as clear aims, methodologies, study designs with rational for choice, all had clearly defined populations, abstracts and rational for each study [36]. The Qualitative paper included in the study will be discussed additionally at the end of this summary.

From the documented credentials the researchers all appeared to be credible and suitably qualified to undertake the studies done. Credibility check is particularly important in this review as it serves as a common criterion used to evaluate research studies and is one of the most important factors in establishing trustworthiness [37].

While ethical considerations were not explicitly documented for all the papers, each had comprehensive literature reviews, except for paper 1 and paper 2. One would suggest that this may be due to the specificity of the population and variables being studied, and possible lack of previous research in that area, this was acknowledged by (Hindin and Gultiano 2006) in paper 2. However, Beauchamp and Childress argued that it is important to note that ethical issues often arise at different stages in a study and may be dealt with at a particular stage rather than under a specific heading of the study [48].

Eight of the papers adequately described the sample and were reflective of the population; however this was not found to be the case in papers 3, paper 6, paper 8 and paper 11. In paper 3 for example, the sample was a convenience sample of inpatient adolescent on a psychiatric unit, for whom the self-reporting questionnaire design were not reliable and did not represent the population as a whole this limitation was acknowledged by the authors of the paper. While non-probability sampling affords the researcher a ready population, the sample chosen may or may not be representative of the entire population [37]. In addition, paper 6 reported to have lost some of the data during collection as such were unable to report entire findings of the study. The implications and consequences of this loss of data are not known. However, the researchers did acknowledge this attrition concern in their reporting of the findings.

Among the papers selected there were 6 papers found to have reliable data collection these included paper 2, paper 3, paper 4, paper 8, paper 9 and paper 12. Paper 1 and paper 2 was found to have data collected from inpatients records in a residential unit which were found to have discrepancies at times, and prevented generalizability of the findings. The researchers in paper 1 accepted this as a limitation to the study reporting that this data was used due to time constraints, financial constraints and accessibility issues.

It may be argued that a candid discussion of limitations could assist readers in correctly interpreting a particular study and frank and open discussion of limitations may inform future studies, which potentially could result in higher quality if these limitations of earlier studies are addressed [49].

Other concerns with data collection in paper 2 included issues of self-reporting of depression when depression rates were being measured as a variable the researchers acknowledge this could have resulted in underreporting therefore affecting the findings. Other issues related to lost and missing data as well as reduced attrition rates were reported among the papers undertaking longitudinal studies, such as in paper 6, paper 10 and paper 11. Attrition rates can result in bias from skewed data and may result in unpredictable and inaccurate outcomes.

In paper 7, the data was also collected from samples in a residential psychiatric unit, which was not representative of all adolescent males and the variables being measured could not reliably answer the questions being asked in their research. Though there were concerns regarding loss, missing or unreliable data collection among the papers, data analysis among the papers were mainly clearly outlined and explanations provided to support the approaches adopted. However, due to the variation in the study designs and the variables being compared and assessed among the papers, there were a variety of tools utilised in the analysis of data.

For ten of the papers, the methods of analysis appeared valid and reliable. However, Calvete and Orue highlighted that due to the schemas being measured, which included the measurements of feelings of mistrust and victimization as well as perceptions of victimizations, the analysis of the data could be unreliable due to difficulty measuring these schemas [50].

All the papers had clearly and appropriately presented results with comprehensive discussions and conclusions. However, in terms of generalizability of the findings of the papers, only two could be considered as having results which could be said to be a general reflection of adolescent males. There was an over representation among the papers of convenience sample collection from residential and treatment centres which limited generalizability of approximately half of the papers. This type of sampling offers simplicity but represents a weakness due to selection bias [37]. In addition most of the papers were found to have limitations due to population specific characteristics which did not allow for application of findings to general adolescent populations such as in paper 2, paper 7 and paper 9.

**Summary of included studies**

All the studies were related to adolescent males, whose ages ranged from twelve to twenty years.

Ethnicity and Social class of the participants varied from study to study, which in itself had implications for the findings of some of the studies as in paper 4. This study looked at family violence and children’s behaviour and mental health, all the participants in this study were reportedly selected from what was reported to be lower class two parent families. In the context of British social stratification, lower class refers to individuals who are semi-skilled and manual workers. Since the authors of this study...
did not explain what was meant by lower class, the results of the study cannot therefore be said to be transferable. While various methods were used to recruit the samples and included non-probability and random sampling, cluster sampling, and randomised sampling, among the twelve papers half of the studies’ utilised populations from residential treatment centres and units which contained a convenient sample of adolescents receiving treatment and support for behaviour concerns. It could be argued that this convenience sampling has implications for generalizability due to possible selection bias [46]. Sample sizes varied across the twelve papers resulting in some researchers reporting their sample sizes to have been too small to adequately address the phenomenon being studied which has been a limitation to their study as in paper 3. Conversely others reported larger sample sizes of over five thousand participants as in the study paper 6. Interestingly none of the twelve studies were British based studies, almost half were American, the rest Danish and Finnish, one was Spanish, Filipino and one Israeli. Nevertheless the implications of this will be discussed in the strengths and weaknesses section of this paper.

**Summary of the papers in terms of Prevalence of domestic violence exposure on adolescent males**

While the authors have not produced actual figures in support of their claims in the presentation of the results of the studies in relation to the prevalence of exposure to domestic violence and outcomes, results generally highlighted that there were varying outcomes.

All the studies were concerned with measuring the effects of, or the relationship domestic violence witnessing had on adolescent males through the measurements and assessment of different outcome variables (See the Appendix).

Paper 1 was the only paper to have assessed the significance of witnessing domestic violence and resultant animal cruelty in adolescent males. Six of the papers were concerned with effects on behaviour, conduct disorder, and violence, while three of the papers were concerned with exposure and its effects on mental health, another three were concerned with coping responses, identity development, and exposure and its impact on drug use. The heterogeneity of the papers and varying results emanating from the studies reviewed, were better summarised into two themes, internalising and externalising behaviours:

Internalising behaviour was taken to represent and included measurements of mental health concerns such as depression or anxiety, identity problems, and coping issues. While externalising behaviours included issues such as violence, conduct disorder, withdrawal, behaviour concerns, bullying, aggression, or drug use [28].

Seven of the papers reported results which were classified under the externalising behaviour theme. These included paper 1, 3, 4, 5, 7, 9 and 10 all the other papers 2, 6, 8, 11 and 12 were classified as internalising behaviours themes. Below is a table depicting some of the inconsistencies in the findings, see Appendix E for the entire Data extraction Matrix.

### Externalising factors

Among the externalising themes, findings from paper 1 were that adolescents who were cruel to animals had significantly higher histories of exposure to domestic violence and were two to three times more likely to have been exposed to domestic violence. There were some limitations in this study in relation to measuring the variables which affected reliability of cause and effect and so intern affected the reliability of the study, results were presented therefore as probable cause.

Among the six papers looking at domestic violence exposure and effects on behaviour the findings were mixed, while paper 3 found exposure to parental violence to have no statistical significance associated with the likelihood of violent or nonviolent conduct disorder in adolescent boys they found conduct disorder to be higher among the males sampled. Limitations to the study resulted in conclusions being drawn that domestic violence effects cannot be commented on in relation to conduct disorder. In addition, paper 4 reported in their longitudinal study that boys who were exposed to domestic violence in childhood, reported less internalisation problems in adolescence, and concluded that early exposure in the absence of continued exposure had little effect.

Meanwhile, paper 7 found that boys who witnessed inter-parental violence were 2.5 times more likely to be at risk of becoming a victim of bullying and were less likely to become bullies as a result of witnessing inter-parental violence than girls.

In contrast, paper 9 reported that more males committed violent crimes, and reported more drug use as well as frequency of drug use but were more likely to use drugs if their peers did the same. Alternatively, paper 10 found that exposure to domestic violence had less impact on development of aggressive behaviours in males than females. The authors suggest that this may be as a result of the paper focusing on measurements during adolescent stages rather than in childhood using longitudinal studies as in many of the other studies. It is worth noting that aggressive behaviour in this particular study referred to getting angry and fighting.

### Internalising behaviours

In the papers measuring witnessing domestic violence and its relationship to adolescent mental health symptoms, both paper 2 and paper 11 found that males reported and exhibited less depressive symptoms and accessed less professional mental health services as a result of exposure to domestic violence than females. Paper 2 reported this outcome even though there were differences in the prevalence level for both genders. In terms of other internalising behaviour such as those in paper 5, it was found that domestic violence exposure was significantly related to delinquency, depression, withdrawn and marginal to anxious behaviours more so in females than in males and more so among exposed adolescents in comparison to those who were not exposed to domestic violence.

In relation to identity development, paper 8 found all adolescents to have encountered identity problems, when exposed to
domestic violence and this in turn influenced problematic gender role identity development, and the development of self-concept, as well as having negative effects on psychological wellbeing, there were no gender differences found in relation to this concept.

Paper 12 is the only qualitative study included in this systematic review, which focussed on coping responses to domestic violence exposure. It found that all the adolescents reported varying degrees of effects which included, moving from place to place, feelings of depression, suicidal tendencies, feeling of inequality, ambivalence, anxiety, sadness, and poverty. In addition drug and involvement in crime was also reported to have resulted from their exposure.

Finally, we have presented the results of the search strategy, the results of the paper selection process, the characteristics of the papers and data extraction from the papers. In addition, the results of the quality assessment of the included papers and a summary of the findings of all the twelve papers included have been presented. The author will now present an overall discussion and analysis of the systematic review undertaken and then conclude the study.

Analysis of the literature in relation to the systematic review question

In terms of the quality and critical appraisal of the included studies, it could be argued that the papers were mainly of high quality according to the findings of the assessment tools applied. Though the Likert scale tool applied could be considered a subjective measure as outlined by Cardwell, it allowed a numerical value to be assigned to each paper allowing easy comparison. These authors however considers the additional application of the Cardwell et al. critical appraisal tool to have been a particular strength to this critical review process and found it to have revealed a number of methodological concerns among some of the included studies [36]. It was obvious that there were data collection concerns and therefore subsequent implications for validity and reliability of findings among some of the studies. For example, in Duncan et al. study which assessed relationship between exposure to domestic violence and animal cruelty, data was collected from inpatient records rather than from interviews which was acknowledged as a gross way of assessing data which may affect reliability and variability. However, the study concluded that adolescent males who displayed cruelty to animals were 2 to 3 times more likely to have been exposed to domestic violence [51]. In contrast, data collection through interviews were considered to be a weakness in some studies due to the variables being measured, as in the study by Fagan and Wright measuring the long term effects of exposure to intimate partner violence, drug use and gender differences [52]. Similarly three of the studies which included that by Hindin et al. that by Calvete and Orue and the study by Ilomaki et al. they were all reported to have used cross sectional data which had implications for the resultant interpretation of the findings [53,54]. Nevertheless from the analysis of the data and recognition of the limitations by the researchers, conclusions can still be drawn from the findings that more males committed crimes, indulged in drug taking and violent offences than females. While females displayed more depressive illnesses and accessed mental health services more frequently than males.

Synthesis of the findings

Among the twelve papers reviewed, it was found that the findings would be better discussed in themes due to the heterogeneity of the papers as discussed earlier. In relation to the externalising theme; Ilomaki et al. found exposure to parental physical abuse, had no statistical significance associated with either likelihood of violent or nonviolent conduct disorder in boys, even though prevalence of conduct disorder and conduct disorder were significantly higher among them [55]. One could suggest that this could possibly be due to inconsistent reporting as suggested by Fagan and Wright [52]. In addition Sternberg et al. had mixed findings and found effects on adolescence males were inconsistent, however all adolescents who witnessed violence had more behaviour problems [19]. This has been supported by Duncan who reports adolescent males who were cruel to animals were two to three times more likely to have been exposed to domestic violence [51].

In addition Cavette and Oruze found that in general, exposure to domestic violence contributed more to the development of aggressive behaviours in females than in males, and witnessing domestic violence had an impact on aggressive behaviour development, both proactively and reactively in both genders.

Moreover, the main findings in the study by Mustanoja, et al. was that males who witnessed inter-parental violence had a 2.5 fold risk of becoming victims of bullying during adolescence compared to those who had not witnessed domestic violence [55]. Furthermore Fagan and Wright reported that more males committed violent crimes and violent offences, they were less likely to be exposed to severe violence between parents and were in fact less consistent in reporting witnessing domestic violence than females. In addition they were found to have more reported drug use with increased frequency than females, and had higher levels of delinquency, delinquent friends and were more likely to be influenced by friends taking drugs to do the same [52]. The influences of peer group are thought to be more important in adolescent years than that of parental influences. Veed in his research suggest that the effect of peer influence on an adolescent could be related to the amount of time spent in the presence of the group [56].

In terms of the internalising factors, Petonen et al. found a significant association between parental violence and poorer mental health and pro social behaviours in adolescents exposed to domestic violence [57]. It may be suggested that this should not be surprising, as exposure to domestic violence has been proposed to have significant consequences for all populations affecting every aspect of an individual’s physical mental and social wellbeing [1]. In addition, while Moylan et al. found gender to be only marginally significant in withdrawn and aggressive behaviours, females were found to demonstrate more internalizing behaviours while males demonstrated more externalizing behaviours [28]. Similarly, Hindin and Gultiano
found that while there were no differences in prevalence levels of exposure to domestic violence according to gender, and that domestic violence was found to be common among the population screened, males had a lower mean score for depressive symptoms, while females were found to exhibit higher rates of depression than males [53].

In congruence, Franzese et al. reported no difference in physical health problems i.e. functional limitations, but males were less likely to seek professional help from mental health services, findings consistent the study by Moylan et al. that females were more likely to demonstrate internalizing behaviours [28,58].

In a more general sense Idemudia and Makhubela results showed adolescence encountered identity problems when exposed to inter-parental domestic violence, which in turn influences problematic gender roles, gender identity development and the development of self-concept. Domestic violence exposure was reported to negatively affect psychological wellbeing [59]. Additionally the study by Aymer found adolescent males who were exposed to domestic violence at home, also experienced more poverty, and had increased alcohol and drugs use, and moved from place to place more frequently. This was reportedly due to antisocial behaviours and family exclusion from society. In addition they experienced more feelings of depression, suicidal ideations, ambivalence, anxiety, sadness, and being unequal [60].

This systematic review highlighted that there were a number of disparate ways in which domestic violence impacted adolescent males. This ranged from animal cruelty, drug taking, violence and aggression, through to feelings of depression, suicidal ideations, and feelings of sadness and ambivalence. However while there appears to be no common agreement as to how it impacts on these individuals, what the evidence suggests is that there is consensus that this vulnerable group of individuals are negatively impacted by exposure to domestic violence.

The strengths and weaknesses of the review

The potential strength or weaknesses of a systematic review lies in the transparency of each phase of the synthesis process, allowing the reader to focus on the merits of each decision made in compiling the information (Garg, 2008). The author therefore utilised a number of frameworks to enhance the rigour of the results [61]. Having used the (P.E.O) framework throughout the paper as well as the Cardwell framework, it is envisaged that these well-established tools added validity to the findings of the review. Cardwell framework provided a generic set of questions, designed to ensure the papers were ‘good quality studies’ to base the review of the chosen topic [36].

While other tools based on hierarchy of evidence levels, e.g. Gallagher and Polit and Beck could have been used, it was envisaged that the (P.E.O) framework would assist in presenting an easily understood and transparent method of developing the questions, developing the search terms as well as the resulting data extraction [46,62]. While it has been proposed that the (P.E.O) framework is most frequently used for qualitative questions and in view of the fact that this review is comprised of only one qualitative paper among eleven quantitative pieces of literature, this may be regarded as a weakness of this review [30]. However in utilising the framework of Caldwell these authors aimed to archive in-depth analysis and increase precision of the result by using a meaningful, but relatively easily understood method of analysing the data emanating from each of the papers used in the review [36].

These researchers acknowledge the value of collecting data from key people involved in the field of domestic violence but found the time limitations to produce this systematic review restrictive and so acknowledges this as a weakness to the study. A further weakness to the study was the inclusion of papers written in English language only, which excludes other primary papers written in other languages and so potentially presents bias findings. Alternatively, it may be argued that language may not be of great importance and the selection of papers from a number of different countries gives a representation of different cultural perspectives on domestic violence. Similarly, while it may be argued that since none of the studies included in this research were of British origin, one would argue that the findings could also be applicable in developing training and education for practitioners working with similar issues in Britain, given that westernised adolescent males will be of similar developmental stages [63].

In relation to the methodological flaws of some of the papers included, these authors acknowledge that a significant number of these papers contained results that were not wholly generalizable due to convenience sampling and data collection issues such as self-reporting which can be possibly inaccurate or bias and therefore had implications for the findings of the paper. In addition the review highlighted considerable heterogeneity among the different studies which has contributed to the lack of consensus in relation to the prevalence of exposure. While this may demonstrate a lack of conclusive findings to some extent, it does not indicate a weakness, as the emerging outcome is based on a robust process of analysis.

Taking all these issues into consideration, these authors propose that the presentation of the findings of this research process will advance the knowledge towards increasing the current overall awareness and understanding in relation to the impact of domestic violence on adolescent males.

Implications of the findings for practice, research and recommendations

The results of this review have several implications for professionals who work with adolescents. Firstly, the results suggest there is a relationship between the exposure to domestic violence and social outcomes for adolescent males, even though there is disagreement of what the impacts are. However, for policy makers, practitioners or other health professionals interested in addressing the prevalence of the effects of domestic violence on adolescent males, the reviewed results suggests several approaches would have to be adopted due to the diverse social effects on adolescent males. As it is well known, that there is a
The relationship between domestic violence and social deprivation, Radford et al. and Matczak macroeconomic policies therefore must address the root causes of domestic violence in society. From a wider policy perspective it is thought that there needs to be greater education via the media to reach out to all levels of society that domestic violence is unacceptable and could have significant negative consequences on those exposed to domestic violence, and on the identity development in children and adolescence. Similarly, practice educators are an important resource contributing to policy formation and subsequent embedding of policy initiatives. Practice educators should ensure greater awareness of established protocols of information sharing, consent and confidentiality. In addition, they must ensure that all education programs include consideration of local response pathways for adolescents exposed to all levels of risk, including clearly defined processes for responding to disclosure.[64,65].

Secondly, the results of this review also suggest potential targets that could maximally prevent the impact on vulnerable adolescents may be early detection and intervention. Professionals such as teachers, social workers, those employed in the police and criminal justice system and health care professionals must all be equipped to identify, intervene and interrupt at any stage where evidence suggest that an adolescent is at risk of suffering from the effect of domestic violence.

Many of the research studies suggest that the current approaches in many ways can be regarded as reactionary, as they proposed interventions such as psychological therapy Hindin and Gultiano, or parenting classes, Fagan and Wright as they seek to treat the problem after it has occurred. As such, future interventions may need to adopt prophylactic approaches aiming to address the issue of domestic violence and its causes from a preventative perspective or at the embryonic stage before it impacts on these vulnerable individuals [52,53].

As we have already established some of the causes and consequences of domestic violence, it is envisaged that future research should now focus on what are the most effective approaches in addressing the issue, taking into consideration that this age group is quite likely to be media savvy, and the media may well be a mediating factor. Secondly some of the papers also indicated that there was a relationship between exposure and impact on adolescents. Therefore future research also needs to identify what length of time, and what frequency these occurrences take before having an impact, as well as which adolescent males may be more likely to be impacted. It is thought that this evidence may assist professionals with timely intervention strategies.

Conclusion

The aims of this review was to systematically identify studies related to the impact of exposure to domestic violence on adolescent males and to describe the key features of these studies as it relates to this issue. In particular the exposure to domestic violence was explored across the domain of prevalence and consequences on social wellbeing as it relates to adolescent males. From the findings it is expected that recommendations for practice education can be made.

The effects of domestic violence in relation to women and children has been well documented, however the information relating to adolescent males has not yet been well researched, and is at best sparse. Through this systematic review the authors aimed to add to this body of knowledge. Thus, we recommend that the issue of the impact of domestic violence on adolescent males is not just an issue for professionals, but should involve a wide array of stakeholders as its impact is likely to have far reaching consequences for a wide cross section of society.

Practice educators and practitioners therefore could play a critical role in networking with NGOs and voluntary organisations in the development of social support networks to support victims of the exposure to domestic violence. Similarly, there is a potential for health and social care practitioners to undertake research, involving these victims to explore possible ideological and cultural factors which engender and perpetuate the phenomenon of domestic violence and resultant exposure to adolescents. It is envisaged that such research studies can provide the necessary background for policy-making, planning, and implementation of new policy initiatives in terms of addressing the impact on male adolescents.

In conclusion, each of the findings of this review study warrants replication due to the varying nature of the outcomes. Future studies with ethnically diverse samples will add to the generalizability of the present findings to adolescents groups in general. Future research might also consider investigating the role of the media and where professionals are best placed to address the consequences of the impact of domestic violence on adolescent males. It would also be interesting that future research may have quite different outcomes in non-western societies that focused more on the importance of the family who may regard adolescence as a transition period into independence from family and coming of age.
References

29. Hemingway, Brereton (2009) What is a systematic review?
34. http://handbook.cochrane.org/
36. https://eprints.mdx.ac.uk/2981/1/Developing_a_framework_for__critiquing_health_research.pdf


47 http://www.researchgate.net/profile/Mark_Rodgers4/publication/233866356_Guidance_on_the_conduct_of_narrative_synthesis_in_systematic_reviews_A_product_from_the_ESRC_Methods_Programme/links/02e7e5231e8f3a6183000000.pdf


56 http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1010&context=psychdiss


Appendix A: Example of data base searches carried out.

Appendix B: Paper selection template.
Demographic details of the twelve papers included for analysis, listed according to publication year.


Appendix B continued: List of six papers excluded after final paper selection process application.


Paper 2. Espilage, D, and Low, S. relations between peer victimization subtypes, family violence and psychological outcomes during early adolescence.


Template of the selection and rejection of the papers.

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**Appendix C:** Framework for research critique cardwell (2011) source.
Appendix C: Framework for research Critique Cardwell (2011) source Cont’d
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<tr>
<td>Is the study design clearly identified and is the rationale for choice of design evident.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<td>P</td>
<td>P</td>
<td>Are the philosophical background and study design identified and the rationale for choice of design evident</td>
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<td>Is there an experimental hypothesis clearly stated are the key variables clearly defined</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>P</td>
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<td>Are the major concepts identified</td>
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<td>Is the population identified</td>
<td>Y</td>
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<td>Is the context of the study outlined</td>
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<td>Is the sample adequately described and reflective of the population</td>
<td>Y</td>
<td>Y</td>
<td>P</td>
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<td>P</td>
<td>Y</td>
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<td>Y</td>
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<td>Is the selection of participants described and the sampling method identified</td>
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<td>Is the method of data collection valid and reliable</td>
<td>P</td>
<td>Y</td>
<td>Y</td>
<td>P</td>
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<td>Y</td>
<td>P</td>
<td>P</td>
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<td>Is the method of data collection auditable</td>
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<td>Is the method of data analysis valid and reliable</td>
<td>P</td>
<td>Y</td>
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<td>Y</td>
<td>Y</td>
<td>Y</td>
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<td>Is the method of data analysis creditable and</td>
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</table>
Are the results presented in a way that is appropriate and clear? | y | y | y | y | y | y | p | y | y | y | y | confirmable | y

Is the discussion comprehensive? | y | y | y | y | y | y | y | y | y | y | y | confirmable | y

Are the results generalizable? | p | p | p | p | y | p | n | p | p | n | p | Are the results transferable | p

Is the conclusion comprehensive? | y | y | y | y | y | y | y | y | p | y | y | confirmable | y

Score | 31 | 33 | 34 | 34 | 36 | 32 | 31 | 32 | 35 | 27 | 31 | 35

Appendix D: Characteristics of the papers and data extraction matrix.

<table>
<thead>
<tr>
<th>Research Title, Author, Date of study</th>
<th>Aims and objectives</th>
<th>Research Methods and Ethical Issues</th>
<th>Populati on and Sample Size</th>
<th>Strengths and weaknesses of methodology</th>
<th>Main Findings</th>
<th>Implications for Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 1. Significance of Family risk factors in development of childhood animal cruelty in adolescent boys with conduct</td>
<td>To understand if the risk factors of physical child abuse, sexual abuse, paternal alcoholism, domestic</td>
<td>Quantitative study using data from records of children in residential. Stratified randomized sampling for the population was used. Probability</td>
<td>A convenience sample of 289 American boys age 12-17 receiving residential treatment in an institution</td>
<td>Convenience sample in an institution with children likely to have higher rates of animal cruelty, generalizability of the findings therefore questionable. Data collection issues noted as having poorer reliability than say interviews</td>
<td>Children who were cruel to animals had significantly higher histories of exposure to D.V.</td>
<td>Acknowledge ment that in children with animal cruelty abuse may be present, Several limitations to the study was presented significantly all the</td>
</tr>
</tbody>
</table>
problems, Duncan et al (2005) violence or paternal unavailability contributes to childhood animal cruelty in adolescent boys. significanc e testing were used to test the variables being measured and co relational studies carried out. Risk difference and odd ratios were also used to check variables. There was no mention of ethical considerations. n. i.e. Information from history taking charts were use due to time, cost effectiveness and accessibility. Charts were coded and sometimes incorrectly coded, then corrected and evaluated by one evaluator and reviewed by a blind to hypothesis student. The Different variables were tested using different statistical tools. were twice to 3 times more likely to have been exposed to D.V. significance ratio p=0.050. variables measured and as well as other family factors overlapped, so it was difficult to examine the contribution each variable had on individual variables and to assess causality and effects.

| Paper 2. Association between witnessing parental domestic violence and experiencing depressive symptoms in Filipino adolescence | Data was collected from a Longitudinal health and Nutrition survey. Cross tabulation and analysis as well as multiple regression models were used. There was a large sample of 2051 Pilipino Adolescents, age 17 to 19 and the results were presented accordin g to | Data was collected over a number of years and results presented according to gender. Conside ration was given o reliability and scores of variables being measured summed to create a reliability | There were no difference in prevalence levels of exposur e to D.V according to gender. Males had a lower mean score | Untreated adolescents with depression are at risk of continued mental health problems. Perhaps less help seeking by males could result in less diagnosis, as such consideration |
Hindin and Gultiano (2006) Paper 2 cont’d

<table>
<thead>
<tr>
<th>Research Title, Authors, Date</th>
<th>Aims and objectives</th>
<th>Research Methods and Ethical Issues</th>
<th>Population and Sample Size</th>
<th>Strengths and weaknesses of methodology</th>
<th>Main Findings</th>
<th>Implications for Practice</th>
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</thead>
<tbody>
<tr>
<td>Paper 3 Familial risks, conduct disorder and violence.</td>
<td>To investigate the impact of familial risk factors on the development</td>
<td>Convenienced sample of clients in residential unit. Data was collected from interviews</td>
<td>278 Finnish adolescent males and females age 12-17 consecutively admitted to a psychiatric unit were studied, and results discussed</td>
<td>Some of the strengths included Triangulation of data collection which</td>
<td>Exposure to parental physical abuse, had no statistical significance associated with either</td>
<td>Unstable home situations appear more harmful to girls than boys.</td>
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<tr>
<td>Ilomaki et al (2005)</td>
<td>Effects of early and later family violence on children’s behaviour problems and with triangulation from 3 different sources, and categorical variables created.</td>
<td>according to gender.</td>
<td>aided reliability, as well as the use of Pearson’s chi squared test to analyse differences between variables. However the authors reported sample size to be small and reported this to be a weakness.</td>
<td>More research was recommended.</td>
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<tr>
<td><strong>Paper 4.</strong></td>
<td>To examine the effects of different forms of violent behaviour and conduct disorder by gender in adolescent psychiatric patients.</td>
<td>Quantitative</td>
<td>Some of the likelihood of violent or nonviolent conduct disorder in boys. Even though prevalence of conduct disorder and conduct disorder were significantly higher among the boys sampled.</td>
<td>Discrepancies among informants indicates a need to consider various</td>
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<tr>
<td>Depression: A longitudinal multi-informant perspective, Sternberg et al (2006)</td>
<td>Family violence at two developmental stages in Israeli children e, Longitudinal study children with interviews and reports from three sources by professionals at age 8 - 13 and early adolescence age average 15.9. homo geneity could not be maintained throughout the study period due to divorce, families moving away etc. Data collection was by teacher reports youth self-reports and behaviour checklist. Pearson’s correlation s were used to test consistency of the weaknesses included questionnaires which were read and response s written to the participants due to poor reading, while Consistency of findings using Pearson correlations using T score demonstrated little consistency of informants.</td>
<td>All children who witnessed violence had higher behaviour problem scores. Boys who witnessed abuse had significantly more externalizin g problems than victims of domestic violence. Adolescent males demonstrated less internalizin g problems.</td>
<td>Informants in service planning</td>
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<tr>
<td>Paper 5. The effects of child abuse and exposure to domestic violence on adolescence internalizing and externalizing behaviour problems Moylan et al (2009)</td>
<td>informatio n, results were coded and scored and analysed by pairing.</td>
<td>Data was collected from a longitudinal study in children and collected at three key developmental stages, and from different sources these being interviews, parent reports, and surveys. The final assessment for this study was at the adolescent stage. Results were presented separately according to gender.</td>
<td>416 American adolescents’ participants 229 of whom were males. Some participants were from a child welfare abuse and protection program, some were from a head start program, others from day care and yet still others from a nursery.</td>
<td>Strengths were the multiple sources of data and retrospective data reduced bias and allowed increased reliability of the reporting of domestic violence and the effects. The sample was only accepted if there was multiple reporting methods of domestic violence.</td>
<td>Gender was only marginally significant in the withdrawn and aggressive behaviours. Females were found to demonstrate more internalizing behaviours while males demonstrated more externalizing behaviours. D.V exposure was significantly related to delinquency, depression, withdrawn,</td>
<td>Implications for practice while the study reveal a relatively high number of children exposed to D.V there was no record of how often or for how long this exposure was.</td>
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<tr>
<td>Paper 5 cont’d</td>
<td>n of outcomes</td>
<td>Results were presented showing the means and standard deviation for all variables as well as by gender.</td>
<td>which was a strength as well as a weakness as it reduced the sample size but resulted in a more reliable sample.</td>
<td>and marginally to anxious behaviours compared to non-exposure.</td>
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<td><strong>Paper 6. Parental violence and adolescent mental health</strong> Petonen et al (2010)</td>
<td>The study examined if different levels of parental violence over a twelve month period was associated with mental health problems, as well as if different levels of severity of parental violence was</td>
<td>A quantitative analysis of a multimedia computer based self-administered interviews during school time were used in Finland and Denmark. The authors assumed that some missing answers indicated no experience to</td>
<td>A large sample size of 2856 Finnish girls and 2906 Finnish boys as well as 1999 Danish girls and 1944 Danish boys between the ages of 15-16 data reported to be appropriately representative of both countries.</td>
<td>In both countries results were similar, with clear differences in outcomes for both the sexes. In levels of parental violence boys reported less exposure to verbal aggression, less experience of mild or severe physical violence, smaller</td>
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<td>Some exact response rates measured could not be presented due to missing data, and so comparisons were used against other socioeconomic factors in other studies.</td>
<td>The researchers concluded that due to the accumulation of adversity in families it would be difficult to conclude if mental health problems are a primary result of physical abuse.</td>
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<tr>
<td>Research Title, Authors, Date</td>
<td>Aims and objectives</td>
<td>Research Methods and Ethical Issues</td>
<td>Populatio n and Sample Size</td>
<td>Strengths and weaknesses of methodology</td>
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<td>Implications for Practice</td>
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<td>Paper 7. Is exposure Domestic violence and violent crimes associated with bullying behaviour among</td>
<td>To investigate whether violence occurring outside the home and domestic violence differ as risk factors for bullying</td>
<td>Semi structured interviews were carried out using the schedule for affective disorder and schizophrenia for school age children present and</td>
<td>The sample consisted of 508 males and 300 female Finnish adolescents aged 12-17</td>
<td>Statistical significance of the data collected was assessed using Pearson χ² rest or Fisher exact test which was appropriate for the data. Appropriately</td>
<td>One of the main findings was that boys who witness interparental violence had a 2.5 fold risk</td>
<td>In this study girls are more likely to be bullies or bully victims if they perceive violence at home or outside,</td>
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</table>
Mustanoja et al (2011) investigated the effects of domestic violence and bullying on adolescence and bullying behaviour. They used a logistic regression model to assess the effects of domestic violence, other violence on adolescence and bullying behaviour. Limitation and implication for generalization is the convenience hospital in patients. Results were separated according to gender which allowed comparison. Analysis of the data by logistic regression model was used to assess the effects of domestic violence, other violence on adolescence and bullying behaviour. Limitation and implication for generalization is the convenience hospital in patients. Results were separated according to gender which allowed comparison.

While boys in contradiction seem to be more victims of bullying, and had no active outward directed violent behaviours. Boys were less likely to become as a result of witnessing domestic violence than girls.
<table>
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<tr>
<th>Paper 8</th>
<th>To understand the relationship between gender, exposure to domestic violence and identity development of adolescents.</th>
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<td>109 15 to 20 year old South African students were randomly selected, of whom 64 were females and 45 were males.</td>
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<td>Strengths: There was a 10 % sample pilot study to test validity and reliability of the instrument internal consistency and reliability was also high at 0.85% used, and the reliability calculated by Cronbach alpha of Erickson scale was statistically reliable at 0.78. Ethical approval was obtained and consent achieved from participants. The fact that the female sample size were larger than males may have affected the outcome, other study limitations included small sample size, population specific</td>
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<td>The results showed adolescence encountered identity problems when exposed to interparental domestic violence which in turn influence s problem atic gender roles gender identity development and the development of self-concept. It also found that domestic violence negatively affected psychological</td>
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| Idemudia, E. and Makhubele, S. (2001) | A random sample of adolescence were taken from a convenience sample of university students and two instruments used to collect the data. Both type and length of exposure were measured. Both an adapted Erickson child exposure to domestic violence scale questionnaire as well as an adapted Edleson’s child exposure to domestic violence scale tool were used. Both tools were tested extensively for reliability and found |

**To understand the relationship between gender, exposure to domestic violence and identity development of adolescents.**

Idemudia, E. and Makhubele, S. (2001)

A random sample of adolescence were taken from a convenience sample of university students and two instruments used to collect the data. Both type and length of exposure were measured. Both an adapted Erickson child exposure to domestic violence scale questionnaire as well as an adapted Edleson’s child exposure to domestic violence scale tool were used. Both tools were tested extensively for reliability and found.
<p>| Paper 9 | Gender differences in the effects of exposure to intimate partner violence on adolescent violence and drug use | To investigate the long term effects of exposure to intimate partner violence, drug use and gender differences in these relationships. | Longitudinal cohort study using stratified cluster sampling, data was collected from interviews and three different tools used in analysis logistic regression, negative bimodal models and equality of coefficients | 1,315 American adolescents 49% males, who were exposed to intimate partner violence. Aged 12-15. Results were examined according to gender | Longitudinal cohort study using interviews of adolescents and their carers. Variables measured were exposure to D.V with multiple control variables to account for predictors of youth problems. Analysis was with logistic regression | More males, committed violent crimes and violent offences, more males reported drug use and frequency of use than females. Males had higher | More research is recommended for further understanding of these findings. | Conflict of findings with previous research females were more influenced by inter parental violence to take drugs than males. |</p>
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<tr>
<th>Paper 10. Cognitive Mechanism of the transmission of delinquency</th>
<th>The study aimed to determine whether cognitive</th>
<th>The study employed a quantitative approach using</th>
<th>166 participants aged 11-18 were</th>
<th>Ethical consideration were given to the subjects and questions</th>
<th>D.V witnessing was found to have an impact, and its levels are significantly higher in males than females.</th>
<th>It is clear that exposure to D.V increases delinquency.</th>
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<tr>
<td>test</td>
<td>models, negative bimodal model. Strengths of the methodology is that there were a large control variables included so assessment of other influences in families were taken into consideration. In this study the longitudinal cohort were both of adolescent age other studies assessed childhood and adolescent. Limitations the reports were self-reports.</td>
<td>levels of delinquency, and delinquent friend, males were less likely to be exposed to severe violence between parents than females, and were more likely to be influenced by friends taking drugs to do the same. Males were less consistent in reporting witnessing D.V, compared to females.</td>
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Paper 10 cont’d

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<th>schemas consisting of the justification of violence mistrust and grandiosity explain the association between exposure to family violence and subsequent aggressive behaviours carried out by adolescents who have experienced abuse and neglect.</th>
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<tr>
<td>different questionnaires to measure each variable. Statistical alpha coefficient for each tool employed ranged from .82 to .87.</td>
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<td>taken from a convenient sample of adolescence in a residential child and welfare protection Centre, in Spain.</td>
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<tr>
<td>adjusted to apply to the population. Participation was voluntary. Some of the weaknesses of the study include the convenience sample chosen as they were all from a child welfare facility and may not represent the population. Also the data collected were from self-reports only and there was no consideration of a second measure of data collect to increase reliability of the reports.</td>
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<td>impact on aggressive behaviuor both proactive and reactive. There were no gender differences in any of the variables except for proactive aggression, boys were higher than girls. In general exposure to D.V contributed more to the development of aggressive behaviours in girls than in boys.</td>
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<td>the risk of developing aggressive behaviours in adolescents with concentration on therapy strategies to address grandiosity, justification of violence and mistrust issues may be useful strategies to address the problem.</td>
</tr>
</tbody>
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Paper 11

<p>| Adolescent | To investigate | Longitudinal correlational | 2,360 youths | The data was collected from | There were no | Exposure to D.V can |</p>
<table>
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<tr>
<th>Paper 12.</th>
<th>Adolescents males</th>
<th>To explore coping</th>
<th>A Qualitative</th>
<th>Sample size 10</th>
<th>Small sample size, limited to All the boys</th>
<th>Child welfare</th>
<th>have significant implications for the wellbeing of male adolescents, but they are less likely to seek treatment if targeted treatment options are recommended.</th>
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<td>how adult exposure to parental violence, and violence in the neighbourhood, is related to self-reported physical problems and seeking assistance with mental health</td>
<td>study, using multistage cluster sampling, using a multistage cluster sampling design, eleven waves of data over a 27 year period was collected using retrospective questionnaires and logistic regression and odds ratio to analyse results.</td>
<td>aged 11-17 were collected. From a national American youth survey. Results were presented according to gender.</td>
<td>self-reported surveys which raises questions for the reliability of the data collected at the data was retrospective and over 27 years.</td>
<td>different in physical health problems that is functional limitatons but males were less likely to seek professional help from mental health services, finding consistent that females were more likely to demonstrate internalising behaviours, males were also less consistent in reporting witnessing D.V.</td>
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Franzese, R., Covey, H., Tucker, A. and Scott, L. (2014)
| coping response to Domestic violence: A Qualitative study. Aymer, S. 2008 | strategies of adolescent males who experience domestic violence perpetrated by male parent. | study using in-depth interviews. A non-probability purposive sampling procedure was used to obtain fair representation of the population and validation of some reports were undertaken by reports of counsellors. Triangulation was obtained by interviewer attendance to group meetings | adolescnet Urban American male clients of a social services agency in New York. | one urban area, difficult to generalize findings. | were exposed to domestic violence at home, perpetrated by fathers or step fathers. As a results of D.V moving from place to place was a factor, as well as feeling depressed suicidal and unequal. Ambivalence, anxiety, sadness, poverty drugs and crime all affected the boys. | systems, mental health and criminal justice systems should focus on the effects domestic violence has on young men, taking into account the complex factors that eventually produce adolescent behaviours. |

**Appendix E:** Complete list of all the search terms applied. These were selected relating to the P.E.O Framework.

**Population**

Adolescent*, Adolescence*, young person*, “young people*, young
<table>
<thead>
<tr>
<th>adult*, youth*, male*, gender, boy*, teen* and juvenile*</th>
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</thead>
</table>

**Exposure**


**Outcome**

Outcome, impact, effect*, influence* prevalence, frequency, incidence*, occurrence*, “social impact”, consequences, result, implications witnessing, seeing, observing, experiencing and exposure