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**'Breaking the Cycle of Violence': A Quantitative Evaluation of an  
Educative Intervention Aimed at Improving the Self-Concepts and  
Behaviours of Vulnerable Adolescents**

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By

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## Abstract

The present research offers an evaluation of the LINX Programme; an intervention for young people who have been exposed to domestic violence and ultimately have severe self-concept and violence related issues. The methodology primarily consists of quantitative likert-scale surveys which are administered to the participants both before they begin the programme and 12 weeks later upon its completion. Therefore the data collection has been a longitudinal process. Additionally, reoffending data has been collected from past LINX participants and is used in conjunction with the survey data. For a significant statistical majority of young people, both self-concepts and behaviours had improved following the LINX Programme. Likewise, to highlight further the achievement of this intervention, no significant variance of scores was found across either gender or age. This suggests that the programme has been consistently delivered and is applicable for the majority of young people in attendance; however due to certain limitations other alternative explanations for this statistical outcome are discussed. This study has an extensive rationale due to the currently very limited academic focus on intervention efforts. Particularly minimal are studies which adopt a quantitative approach. Furthermore, this investigation takes an original approach by developing very informative regional comparisons where the same intervention is employed within four different counties of the United Kingdom. Beyond its contribution to social psychological research, this study has implications for the LINX Programme itself, by effectively applying social scientific knowledge to the evaluation of an existing intervention. In conclusion to the project, recommendations for extensions to the present research and the future development of the LINX Programme are identified.

## Introduction to Dissertation

### **1.1 Introduction**

Existing theoretical understandings of exposure to domestic violence are echoed throughout the academic literature, though there is a limited recognition of intervention efforts to reduce the internal and external symptoms of its impact on young people. The present research has the realistic aim to extend current knowledge, using a hard to reach non-sheltered group of adolescents to provide a necessary evaluation of their intervention - the LINX Programme. As the main research title suggests this programme aims to break the cycle of violence, with empirical evidence that young people who have observed abuse between parents are vulnerable to then mirror this aggression onto themselves and others. The key aim of the intervention is to encourage young people to improve their self-concepts and behaviour. The oldest members of the LINX Programme are only approaching adulthood yet many are already involved with the Criminal Justice System, highlighting the seriousness of the behavioural difficulties these young people face. Therefore, beyond its contribution to social psychological research, an evaluation of this intervention is a valuable necessity. It can be used to assist and advise the programme to positively continue to develop vulnerable individuals whose personal improvements could ultimately enhance the cohesion of the local community.

It is important at this early stage to note one area of definitional confusion in research surrounding children who have a background of parental violence. Despite a complication of terminology in this area, recent studies use the broad term 'exposure to domestic abuse' to describe the experiences of children who see or hear physical or emotional abuse between parents (Evans et al, 2008, p.132). This general term is adopted within the present research as the word 'exposure' provides a sophisticated improvement on the previously used term 'witness', to include the potential minority of children who have been directly victimised. Throughout this research the terms 'violence' and 'abuse' will be used

interchangeably, though it is understood that these words may have subtly different connotations.

The course of this dissertation will initially consist of a comprehensive literature review beginning with a broad understanding of the scale of parental abuse, before focussing on its effects which are principal targets of the LINX Programme: anti-social behaviour and the self-concept. The final section of the review will be based around current intervention evaluations which ultimately feed neatly into the details of the present research. The subsequent methodology chapter provides a concise but informative description of the LINX Programme before detailing the current methodological approach and the data analysis tools employed. Lastly, the key questions below will be answered, with a conclusion outlining any implications for LINX with regards to the findings.

The broad objective of this research is to evaluate the overall effectiveness of the LINX Programme based on quantitative data supplied by participants during the intervention.

Therefore the main research question is:

***Do the behaviours and self-concepts of young people improve after completion of the LINX Programme?***

Other subsidiary research questions to be analysed in depth in the forthcoming discussion include:

- Are there any gender differences in the change of self-concept and/or behaviour following the LINX Programme?
- Are there any age differences in the change of self-concept and/or behaviour following the LINX Programme?

- Are there any regional differences in the change of self-concept and/or behaviour following the LINX Programme?
- How have those experiencing exposure to domestic abuse differed from those who have not in terms of their pre-programme and then post-programme scores?

A detailed discussion of the strength of specific statement responses within the broader themes of self-concept and behaviour is also given. Finally, the reoffending data is examined with a conclusion made regarding whether it supports or contradicts both the survey data and the aims of the LINX Programme itself.

As illustrated in the later discussion the present research is limited most prominently by the disadvantages of survey research in general and a high sample attrition rate. However, the study design is both distinctive and highly beneficial, providing some much needed quantitative and longitudinal data. The information given by participants is non-retrospective and findings are given further weight from academically credible reoffending records acquired from local Youth Offending Teams. There is a widespread rationale attached to undertaking research involving the evaluation of an existing intervention; this study in particular makes numerous unique contributions while encompassing areas of both criminology and social psychology. It is undoubtedly of great importance to be carrying out academic research into such an intriguing and contemporary area of the social sciences.

## Literature Review

### **2.1 The Scale and Problem of Childhood Exposure Domestic Abuse**

With domestic violence understood to be a public health concern, the majority of research in this area is based on the psychology of deviant perpetrators and the emotional and physical consequences for the direct victims who are predominantly female. Conversely, research centred on the psychological effects following exposure to parental abuse is very much in its infancy, with little recognition of children as 'silent victims' until the 1980's (Edleson, 1999, p.839). Meltzer (2009, p.491) and Bedi and Goddard (2007, p.68) highlight the fundamental need for further research to understand that parental abuse can have detrimental internal and external effects on the seemingly uninvolved child; particularly as more children are *indirectly* victimised than subject to abuse themselves (Lepistö et al, 2010, p.1233).

In terms of the prevalence of exposure to domestic violence, figures vary but all appear to show an alarmingly high proportion of children and adolescents being present during parental abuse on a frequent basis. It is estimated that around one third of all American children are witness to parental violence on at least one occasion (Straus, 1992, cited by Edleson, 1999, p.843). Similar figures are given in the United Kingdom, however as McGee (1997, p.15) explains statistics usually only include *physical* violence as an example of domestic abuse. Due to these definitional issues there remains an even larger amount of unreported exposure to domestic violence than suggested, particularly as young children may not have the cognitive capacity to define the abuse. It is therefore surprising, and arguably unjustifiable, that research has largely neglected the latent negative effects on huge cohorts of children until very recently.

Though research in this area is incomplete, it is essential to review the existing theoretical and empirical debates. These have begun to close knowledge gaps of the psychological consequences of parental violence and have helped inform

intervention strategies. While inconsistent findings are an inevitable pitfall due to the infancy of this domain within psychology, the effects of domestic violence exposure and its stressful aftermath are shown to be highly individualised, affecting young people in very unique ways. Effects are arguably mediated by socio-economic, regional, gender and age variables and the interpretation and seriousness of the impacting events themselves (Bedi and Goddard, 2007, p.69). More substantial research is needed before a causal relationship between variables can be theoretically assumed, whereby apparent 'effects' may be due to other factors besides parental conflict. Temporally, the greatest success and some indication of causality may be achieved by intervening as close as possible to the occurrence of domestic abuse (Fantuzzo and Mohr, 1999, p.30). This may avoid retrospective bias in research and, more importantly, it may have the potential to reach children before effects are able to manifest and impact negatively upon them.

## **2.2 Aggression and Anti-Social Behaviour**

The previous section has outlined the justification for studying the effects of domestic abuse on children; among other issues such effects include behavioural difficulties and insecurities in the self-concept. The review will now focus on literature surrounding youth violence, where programmes have become necessary due to a high prevalence of delinquency within our teenage population.

Despite adolescent criminality remaining a public concern, figures from the Youth Justice Board (2011) show the promising finding that proven youth offences have declined by 19% in the last year. This may be a reflection of the efforts of current interventions and local authorities and it is vital that the risk factors for aggression and criminal behaviour are understood in order for academic research to inform these interventions. While parental conflict and abuse may be key accompaniments and potential antecedents to this behaviour, there are many variables which contribute to the ultimate actions of an individual. This uncertainty of susceptibility is outlined by Roustit et al (2009, p.563) who highlight that

academics are still unaware of how parental violence and other childhood hardships may culminate to endorse instability in adolescence and adulthood.

The 'Cycle of Violence' explanation has been adopted as the key theoretical understanding of the apparent relationship between observed violence and the future performance of a similar act. This aspect of Social Learning Theory has widespread empirical support from qualitative studies (Roustit et al, 2009) and quantitative research (Widom, 1989). From a feminist perspective, Mullender and Morley (1994, p.230) believe that young men rather than women have the additional worry that they may display learned abuse in later relationships. Such a 'Cycle of Violence' is heavily reported and therefore this may be a very real and rational fear (Mullender and Morley, 1994, p.230). On the other hand this notion that men are believed to identify with the male aggressor, is contradicted by the unanticipated finding that male aggression levels remained stable following violence exposure in a study by Forsstrom-Cohen and Rosenbaum (1985, pp.470-1). Though these findings are inconsistent, they are conveyed with very different vested interests and it is therefore logical that they show such discrepancy. For instance, Mullender and Morley (1994, p.230) are not empirically informed and portray the embodiment of violence as a general 'characteristic' to guide those helping a vulnerable adolescent. This implies, however does not state, a generalised observation. On the other hand, Forsstrom-Cohen and Rosenbaum (1985, p.469) had a very specific self-reporting sample of less than one hundred undergraduate students. It is clear that with inconclusive findings relating to gender differences there is a need for more research in this area (Fantuzzo and Mohr, 1999, p.28). Further investigation could pinpoint whether there really *are* categorically diverse outcomes of violence exposure or whether in fact these effects are subject to *individual* resiliency within both genders as a whole.

An interesting and relatively unusual study from Baldry (2003) examines the prospective effects of exposure to domestic violence on school bullying. It is argued that when parents seemingly care little for the feelings of their child, the child may then struggle to feel empathy themselves (Baldry, 2003, p.715). This can lead to a

lowered conscience involving a heightened tendency to harm or bully others. Those exposed to violence at home were more likely to be both victim and perpetrator of bullying at school (Baldry, 2003, p.727). This is worrying as in accordance with the 'Cycle of Violence' explanation, those subject to abuse through bullying even without their own exposure to domestic violence, could similarly become perpetrators and further fuel the vicious cycle. Moreover, as found by Kim et al (2011, p.142), the enactment of bullying is intrinsically related to later problems of substance abuse as well as violence in young adulthood. This clearly damaging behaviour is argued by Paton et al (2009, p.52) as a vent for anger which is built up through childhood abuse. One participant is quoted as saying: "... I'll have a go at the little person because I was the little person to someone else" (Paton et al (2009, p.52). This suggests that by displacing negative feeling and adopting an aggressor role the young person can acquire a coping mechanism that combats the feeling of being a permanent 'victim'. As Baldry (2003, p.729) acknowledges, home-life experiences may be one precursor to bullying but this is a correlational finding. Cause and effect cannot be established without assessing for the many other contributing variables to a child's behaviour.

The methodological problem of research regarding the effects of domestic violence is raised by Wilson et al (2009, p.774), who show that this 'relationship' is not uniform across studies; with the uncertainty of whether other variables are affecting results. This makes it difficult to assess the strength of the relationship or to infer any causal association; particularly where other factors unrelated to domestic violence may be the actual cause of aggression. Research is beginning to imply a biological and genetic component for the 'Cycle of Violence' which goes beyond environmental explanations offered by Social Learning Theory (Patrick and Vaidyanathan, 2011). Nevertheless, the empirical research discussed has proven the necessity to accurately differentiate between violent or hostile youths who have and have not been exposed to domestic violence, and also to establish other potential risk factors for their behaviour.

There is extensive media coverage of anti-social behaviour and violence in young people, though the social norm of what is understood as 'anti-social' is continually changing. The confusion of how to deal with this social problem is echoed by insufficient policies which fuel a youth-fearing moral panic within the general population. Batchelor et al (2001, p.1) indicate that the media is used as a powerful tool to exacerbate public concern. However, in recent years there has been journalistic acknowledgement that the fear of young people has become out of control to the point of absurdity. One such BBC News article by Casciani (2003) highlights the problem of labelling adolescents stating that "...the national mood is reaching a point where society virtually criminalises being a teenager". Nevertheless, despite definitional issues and the identification of moral panic, many young people *are* unnecessarily involved in the Criminal Justice System and this could be reduced with intensive preventative intervention (Soloman, 2011).

Cases of youth violence and the understanding of individual risk factors remain ambiguous and paradoxical, though some encouragingly reliable results have shown the gender pattern that boys may externalise symptoms of domestic abuse through aggression more frequently than girls (Moylan et al, 2009, p.59 and Hay, 2000, p.348). Despite theoretical dispute, interventions are increasing which aim to prevent young people entering or re-entering the Criminal Justice System, such as those discussed in the latter part of this literature review. Such programmes may obtain increased demand from Youth Offending Teams as the recent political decision to increase university tuition fees may hinder the future opportunities of children from lower socio-economic backgrounds (Williams, 2011). With the co-occurring cuts to spending on youth clubs this will provoke a rise in boredom for young people, and for those subject to an abusive home-life less legitimate forms of escapism; inevitably a rise in anti-social behaviour and criminality will develop (Williams, 2011). Without nationwide government support local level interventions face many hurdles. Therefore, Williams et al (2007, p.200) argue that this is a highly topical time to engage in extensive evaluative research with community-based

projects, to understand which youth violence schemes are most effective and ensure society-level consistency.

### **2.3 Self-Concept and Domestic Violence Exposure**

Alongside theoretically driven research based on the modelling of violent behaviour, there is consistent empirical evidence to suggest a strong correlation between childhood exposure to domestic violence and both emotional and cognitive disorders in adolescence (Olaya et al, 2008). Whereas the Social Learning Theory is dominant in the context of many studies of precursors to violence, in terms of negative self-concepts and emotions there are numerous ideas which attempt to account for their origins. Therefore confronted with such a variation of perspectives, this section will only touch on these, given their limited credence in the majority of research in this area. Nevertheless, one gendered approach to the experience of depression is given by (Forsstrom-Cohen and Rosenbaum, 1985, pp.470-1). They claim that the Learned Helplessness Model of depression explains why girls who are either abused or who identify closely with their victimised mother, may feel less in control of their lives in adulthood and become more susceptible to depression. While the principal theme within this section is based on negative self-concepts, these are agreed to be inextricably linked to cognitive aspects of depression (Tarlow and Haaga, 1996, p.124). Given its relationship to a clinical and diagnosable psychological disorder it is clearly critical that young people maintain a positive level of self-worth. This however may be very challenging in such cases where individuals are blaming themselves for their parents' abusive relationship Lepistö et al (2010, p.1240). This occurs at a time when they are perhaps equally vulnerable to other risk factors for low self-esteem which are of particular salience during adolescence.

Early research echoes theories such as the Learned Helplessness Model, by querying the short and long term impacts on the emotional health of children which appear to persist into adulthood. Forsstrom-Cohen and Rosenbaum (1985) found

startling gender differences in the expression of problems associated with violence exposure, with only women displaying increased mood-disordered symptoms. However, this finding may be temporally biased due to retrospective reporting some years after the negatively affective incidents. In a similar but very recent study using a clinical group of males and females with depression, Russell et al (2010) found that both genders associated depressive symptoms with their high amount of exposure to domestic violence in childhood. It would be interesting to compare these results with non-retrospective reports of the immediate effects following domestic abuse; particularly using a non-clinical sample to help avoid unrepresentative generalisations.

Young offenders in a study by Paton et al (2009, p.51) were seemingly distancing themselves from the effects of their exposure to violence. This fascinating and regularly used maladaptive coping mechanism is also reported by participants in a large-scale study by Lepistö et al (2010, p.1242), though it was understood that this method of dampening the issue would be ineffectual in the long-term. Due to young people feeling ashamed and hiding their home-life experiences it is perhaps unsurprising that many potential role-models, including teachers, are in threat of passing uninformed judgement on those who simply appear academically or socially indolent (Hay, 2000, p.349). If these research findings were mirrored in the media, they could be used in a progressive way to highlight conceivable reasons why many young people have difficulties with authority and education. Some reports have provided coverage of this connection including *BBC News Online* (2006). However children, as opposed to their abused adult equivalents, are given little recognition within the majority of national media. They are therefore potentially more prone to the counterproductive social stigma and labels of idleness which are applied thoughtlessly to groups of vulnerable individuals.

Lastly and of key importance to this theme is research from Hay (2000) which is highly relevant and comparable to the present study in terms of gender differences in self-concept profiles. In a similarly synergistic approach, the research is centred on the importance of strengthening the self-concepts of vulnerable young people in

order to reduce the anti-social behaviours which tend to go hand-in-hand with negative opinions of the self. In citing the work of one key criminologist (Hay, 2000, p.346, citing Cohen, 1955), it is argued that the 'acting-out' behaviour of adolescent boys in particular is a means of establishing status within the subculture which thus enhances the self-concept; this argument does not necessarily apply to girls. It was found that for boys, perhaps due to their 'masculine' identification, exposure to domestic violence tended to be demonstrated through modelled behaviour, while for girls the effects appeared to be more internal with damaged self-concepts leading to depression and anxiety (Hay, 2000, p.348). Hay (2000, p.350) concludes by highlighting the need for longitudinal research which looks at motivators leading to anti-social behaviour and low self-opinion in order to gain an in-depth picture of the relationship between risk variables and the behavioural outcome.

#### **2.4 Effectiveness of Current Interventions**

Education-based interventions designed to improve adolescent behavioural and emotional problems are on the rise particularly in the United States and the United Kingdom, with an appreciation of risk factors which include exposure to domestic violence (Herrenkohl et al, 2000, p.184). Smith (2006, p.15) explains how punishments for minor youth crimes have a negative labelling effect. Therefore any intervention which can keep adolescents away from the criminal justice system is clearly well justified and targeted, even on a wider macro-level. Interventions also arguably have the potential to aid natural desistance from delinquency by helping young people to mature, take responsibilities and increase social competence skills (Mulvey et al, 2004, p.227). Given that these predominantly non-profit organisations are reliant on external funding, research evaluations of their effectiveness are crucial in securing the continuance of their programme delivery. The following theme will review current studies which have examined the effectiveness of intervention programmes from various theoretical perspectives and methodologies.

Mullender (1994, p.252) examines the benefits of using group-based talking therapy with children who have been exposed to domestic abuse, with discussion facilitated around the disclosure of feelings and experiences with others who have similar stories to tell. While offering insight into the effectiveness of interventions as a whole, this assessment is based on one programme, centred primarily on supporting children who are at high risk of direct abuse or are residing in shelters due to extremely serious parental violence (Mullender, 1994, pp.240-252). This sample, though not representative of the majority of children from abusive homes, is typical of feminist research in this area which for ease of access tends to study only those in direct threat of harm. Research is based around educating vulnerable children of how to stay safe against the current abuser (Mullender, 1994), rather than as a programme designed to prevent the projection of witnessed violence onto others, which may be of more relevance to the present study. Despite this, a few recent studies have looked to breaking the 'Cycle of Violence' with a focus on child behaviour even in extreme shelter-based cases. Poole et al (2008, p.684) evaluate a 10-week programme which is based around discussing common experience and learning how to express feelings in an appropriate and healthy way. The LINX Programme offers a very similar educative training intervention (Hampton Trust, 2011). Therefore, the present evaluation offers data which could enable comparison between sheltered children and non-sheltered (LINX) children. Poole et al (2008, p.685) indicate that this is a necessary knowledge gap to fill.

With a focus on female delinquency, Hipwell and Loeber (2006) argue that while the gender difference in criminality is decreasing, intervention programmes aimed at treating adolescents are still male-focused with a clear ignorance of the needs of young women experiencing similar behavioural difficulties. The need for interventions which acknowledge family problems as a significant risk factor for youth crime and emotional instability is emphasised (Hipwell and Loeber, 2006, p.239). However while this research calls for the recognition of young women, it ironically neglects analysis of young men. This arguably contradicts the main aim of the article which is to highlight the need to recognise gender disparities. A recent

paper by Andow (2009) similarly uses qualitative data to provide a successful evaluation of a youth violence intervention based on girls' experiences of domestic abuse and the effects it has had on their personal development. However, Andow (2009, p.30) does indicate that the girls in her study found it easier to engage with the programme without the presence of boys. This is perhaps an indicative example of the preferences of an adolescent age group in general and may provide support for the decision by Hipwell and Loeber (2006) to use a same-sex approach to strengthen intervention.

Both Buchanan (2008) and Holt et al (2008) take an Attachment Theory standpoint claiming that children can be safeguarded from the devastating effects of witnessing violence by having a secure and strong relationship with their mother. However, this relationship may be difficult to maintain for young men if they are in fear of mirroring the abusers actions, as suggested by Mullender and Morley (1994, p.230). Many strategies have been guided by models, including the Theory of Reasoned Action, to understand reasons why particular adolescents engage in violent behaviour (Cooper et al, 2000, p.1135). This model would argue that young people who experience domestic violence, irrespective of their gender, may have a higher vulnerability to engage in violent behaviour. This is because their subjective norms (how they believe their parents would feel) may not be influential in a positive direction. One of the many alternative explanations may be that children have become desensitised to violence due to their experiences at home and thus may use it themselves as a maladjusted technique for solving disputes and issues (Orue et al, 2011, p.4).

Intervention strategies therefore need to be non-judgemental and empowerment-based for both genders with a focus on creating stability within the home, which could be made easier with parental involvement (Holt et al, 2008, p.807). It can be inferred that accentuating presumed gender differences may cause discomfort and alienate young men who already feel an element of self-blame and insecurity. Therefore interventions which treat both genders in unison may be more appropriate. By adopting a consistent and standardised approach to intervention

any gender, age or even regional differences can be drawn on during and after the programme. This can be achieved through the use of self-report measures which determine whether or not the negative consequences of domestic violence are reducing in each individual's opinion. Ultimately whether interventions employ a same-sex approach or not, there is a justification for helping adolescents collectively. This can undoubtedly provide social networks to improve the self-concepts of otherwise lonely and isolated young people (Kunst et al, 2010, p.423).

An interesting focus group study by Buckley et al (2007, p.302) found that domestic violence often affected the child's behaviour long after the family had left the violent home. Children were found to be more aggressive, have lower self-esteem and fear rejection more than their peers, experiencing "... maturational processes in an acute and sometimes pathological manner" (p.308). Buckley et al (2007, p.304) highlight the need for teachers to be more tolerant of academic difficulties in children who were subject to immense emotional strain at home, even after moving away from the abuse. This implies a requirement to support children beyond issues of personal safety, which is unfortunately where many shelter-based interventions are limited. Buckley et al (2007) have provided a sound piece of research to inform future intervention strategies based on assessment of individual emotional needs. However, while many organisations are already incorporating such advised techniques, they are in need of evaluation particularly due to a discrepancy between those strategies most used and those most predominantly assessed (Cooper et al, 2000, p.1134). As an advancement of the existing research discussed, the present study will provide an evaluation of the LINX Programme, which adopts a synergistic approach to the improvement of aggressive behaviours and negative self-concepts in vulnerable adolescents.

## Methodology

### **3.1 The LINX Programme**

The objective of this research is to evaluate the effectiveness of the LINX Programme as an intervention scheme for young people provided by a charity organisation named 'The Hampton Trust', based in Southampton and established in 1996. Following exceptional achievement improving the behaviour of teenage girls in the local area, the LINX Programme has been recently adapted for the inclusion of boys, while securing funding to reach four counties within Southern England: Hampshire, The Isle of Wight, Devon and Gloucestershire. This programme is targeted at adolescents who have been exposed to domestic violence and is aimed at encouraging young people to understand the link between their violent behaviour and their self-evaluations, using a 'cycle of abuse' theoretical approach (Hampton Trust, 2011).

The LINX Programme consists of twelve two hour sessions which run over a twelve week period; it continually takes in groups of young people and is approached most frequently by schools and local Youth Offending Teams. Topics covered by the educational programme include understanding reasons why people may become violent and how to control urges to act aggressively and adopt non-violent ways of coping with challenges. Furthermore there is a focus on empowering individuals with a non-patronising emphasis on taking personal responsibility as well as developing respect, empathy and listening skills. Each session is undertaken in a flexible manner adapting to the individual needs of the group. The success of this spontaneous approach is undoubtedly dependent on the experience and abilities of the programme leaders, thus this research evaluation will benefit from regional comparisons to assess groups which use different facilitators in each area. With the literature review uncovering an element of dispute with regard to the effectiveness of intervention by gender, such a comparison of outcomes for boys and girls may also be advantageous. The LINX Programme offers an inspiring research opportunity

within Social Psychology, to access a hard-to-reach and sensitive population and gain a thorough evaluative analysis of youth intervention.

### **3.2 Methods**

The predominant method used to obtain data for this research is Likert scale surveys distributed to participants of the LINX Programme to assess for self-concept and behaviour change (Appendices 1 and 2). To account for behavioural trends the present study uses the 'Aggression-Problem Behaviour Frequency Scale; 18 Items' which was recently adapted and tested by the Multisite Violence Prevention Project (2004) (see Appendix 4). The similarly tested scale for self-concept measurement named 'Self-Concept – Individual Factors Index; 12 Items' was developed by Phillips and Springer (1992) and will be used in this research (see Appendix 3). Given that both scales have been successfully implemented in previous research, good reliability of findings can be anticipated (Denscombe, 2010, p.300). The surveys are employed at two intervals both before and after the programme; therefore each participant completes four surveys in total, apart from a few who have completed only those referring to either behaviour or self-concept (participant numbers below). As the raw data covers young people across a twelve week period it is considered to be longitudinal in nature and while this can create a high attrition rate, this particular investigation is also non-retrospective, filling a gap in methodology left vacant by previous research.

The survey method is highly valuable for practical reasons as they can be produced in abundance allowing for a large sample size (Babbie, 2008, p.303); this will maintain a consistency of measurement across the included counties. Despite this strength, quantitative surveys are prone to being rushed through with answers sometimes given little thought, particularly where the young person may be bored or uninterested; this can affect the validity of responses (Denscombe, 2010, p.299). However, the present research has the huge advantage of having acquired re-offending data from local Youth Offending Teams for eleven young people to add

significant evidential weight to the credibility of survey responses, particularly those which assess for behaviour change. Unfortunately re-offending data could not be collected for participants in *this* research as the data from the surveys is very recent, though offending statistics will be from similar individuals who took the programme at least six months ago. Thus these can be assumed to vaguely fit the situation for the current participants. The ultimate weakness in using a quantitative approach is that participants are constrained from talking about other matters which may be personal to them. Nevertheless, with similar literature discussed as having already used a qualitative approach, this drawback is not considered detrimental to the success of the present research.

The sample size for the present research is 100, with 67 males and 33 females and a mean age of 13.67 years from a range of 11 to 21 years. The numbers of participants for each county are: Devon = 41; Isle of Wight = 30; Hampshire = 15 and Gloucester = 14. Of the sample 48 of the young people had confirmed their exposure to domestic violence, 5 confirmed they had no experience of this and for the remaining 47 participants this situation is unknown. However it is most likely that those in the 'unknown' group have experienced, or at least been susceptible to, exposure to parental violence. This is because this category of young people is the typical violence-reduction target according to the underlying principles and theoretical standpoint of the LINX Programme (Hampton Trust, 2011). The sample of those experiencing domestic violence is typical of the majority of young people who have been exposed to parental abuse, being both non-clinical and non-sheltered. The findings will be more general than much of the previous feminist research which has been conducted with sheltered children. However, owing to the distinctiveness and vulnerability of this group findings cannot be assumed to fit *all* young people with behavioural difficulties.

There are many potential ethical issues involved in gaining data from such a sensitive group of individuals. Accordingly, a reciprocal relationship was built with The Hampton Trust whereby freshly collected data was passed on by programme facilitators for each county in its raw form for research purposes. The opportunity

was taken to spend time at The Hampton Trust between November 2010 and February 2011 to compile this data in Microsoft Excel®, ready for analysis. This contributed to updating their database system and the categorisation of survey responses for the benefit of both this research and the organisation itself. An example of this spreadsheet data as is provided in Appendix 5, where it is clear how survey responses have been coded and reversed for negative statements.

An advantage to collecting data through the help of the organisation is that the survey distributors (being the programme leaders) have already built a trusting relationship and rapport with the young people in their group. This situation is particularly salient after the course where post-programme surveys are completed following twelve weeks of building mutual respect and understanding with the LINX facilitators. An unknown researcher coming into this atmosphere from a different background could have potentially induced a perception of threat for the young people who may therefore become defensive and less likely to give honest responses to survey statements. Therefore having this opportunity was paramount to the success of the research.

A further strength of this methodological choice is that the surveys could be integrated into the programme, to avoid the disruption of activities while maintaining objectivity as participants were free from the influence of the researcher (Denscombe, 2010, p.301). This was essential to obtain results of the highest accuracy possible; if the young people (who may also have literacy difficulties) felt rushed to complete the survey their answers may not have been a true reflection of their feelings and recent behaviour. The main concern associated with not being in complete control of the survey distribution is that research was not able to include all the potentially available data, as programme facilitators were required to post survey responses to The Hampton Trust. Though the research is fortunate enough to have an abundance of data particularly from pre-programme surveys, only 95 self-concept survey responses were matched out of a potential 310, as the vast majority had only completed pre-programme surveys. Therefore only 30.65% of self-concept data was matched at the point of analysis, with an attrition

rate of 69.35%. Similarly, only 83 behaviour survey responses were matched out of a potential 283, as again the vast majority had only completed these surveys once (before the onset of the programme). Therefore only 29.33% of behaviour data was matched at the point of analysis, with an attrition rate of 70.67%. Even though this figure is high, such an attrition rate is completely understandable in research which is both sensitive and running continuously with intakes of new young people every twelve weeks. Furthermore, particularly in the case of Hampshire, recent changes of programme co-ordinators meant that the completion of surveys as part of the course became entirely new, explaining the limited number of completed surveys post-programme.

Only matched (pre and post) surveys could be included for analysis; however as mentioned above, in a minority of cases participants had only completed either the self-concept (17 participants) or behaviour surveys (5 participants); these were also included in the overall sample. For purposes of The Hampton Trust, completed surveys were received with the full names of respondents written on. After inputting the responses into the database for the organisation, these names were made fully anonymous by being replaced with a reference number for use in this research. As a further ethical requirement, consent for partaking in research was given by the young people and their parents upon signing up for the LINX programme; therefore the research itself had no ethical constraints.

### **3.3 Data Analysis**

The initial input of data at The Hampton Trust was carried out using Microsoft Excel®. A pre-formatted spreadsheet template was used. This enabled survey responses from each participant to be recorded on separate sheets within the template file, corresponding to their relevant county. While the spreadsheet was able to visually display the results of the survey in a simple way and could also be used to attain summaries for the effectiveness of the LINX Programme, it was not advanced enough to conduct the statistical tests needed to get the most out of quantitative data. Accordingly, the data was later manually transferred to the statistical Social Science software named SPSS 17. The data was analysed via a t-test to account for any statistically significant differences in gender, and analysed through an ANOVA to account for regional and age differences. This gives an accurate representation of the mean scores and standard deviations per age, gender and county while testing for overall change in the self-concepts and behaviours of the young people. The academically credible re-offending data which is quantitative, while also supplying a degree of qualitative description, was incorporated into the findings where appropriate. Tests of summaries and comparisons, alongside any anomalous results or striking improvement or deterioration in the tested variables, is displayed in the findings below as bar charts later referenced in the discussion.

## Findings

### **4.1 Self-Concept and Behaviour Relationship**

This section will display key findings gathered from statistical analysis of the data. Firstly and most importantly is to check whether or not there is a general improvement in the scores for self-concept and behaviour following the LINX Programme and secondly whether the improvement is statistically significant.

The hypotheses are stated as:

Ho – The mean scores since the pre-programme surveys have not improved.

HA – The mean scores since the pre-programme surveys have improved.

A paired samples t-test was carried out with the frequencies shown in the following table:

<b>Paired Samples</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>
Pre-Programme Self-Concept Mean	2.89	95	.05
Post-Programme Self-Concept Mean	3.05	95	.05
Pre-Programme Behaviour Mean	4.90	83	.10
Post-Programme Behaviour Mean	5.22	83	.08

Table 1: Paired Sample Statistics

After testing for any significance between these means it was found that the average change was both positive and statistically significant at the 5% level and thus the alternative hypothesis is accepted for both self-concept and behaviour:

Self-Concept change:  $t(94) = -3.329, p < .05$

Behaviour change:  $t(82) = -3.606, p < .05$

Therefore there is a 95% confidence that the improvement is due to the LINX Programme rather than random chance. As this test has shown statistical significance, a copy of the output has been put in Appendix 6.

It is now of interest to assess for any correlation between the variances of both self-concept and behaviour. This has been calculated by subtracting the post-programme mean scores from the pre-programme mean scores for each individual participant.

The hypotheses are stated as:

Ho – There is no significant relationship between change in self-concept scores and change in behaviour scores.

HA – There is a significant relationship between change in self-concept scores and change in behaviour scores.

Having first used a scatter plot in SPSS 17 (as advised by Field, 2009, p.167 and evidenced in Appendix 7), the linear correlation between the variables was found to be  $r^2 = 0.031$ . From this it is conclusive that there is a fairly weak but positive correlation between self-concept change and behaviour change; therefore as self-concept has improved, behaviour has also generally improved and vice versa.

To test if this general relationship is statistically significant at the 5% level a bivariate correlation was conducted using a two-tailed test (as the hypothesis is non-directional). The null hypothesis could not be rejected because the relationship between self-concept change and behaviour change was not significant at the 5% level,  $r = .176$ ,  $p$  (two-tailed)  $>.05$ .

#### **4.2 Impact of Domestic Violence Exposure**

No significance was found to suggest that domestic violence exposure had an impact on the self-concepts or behaviours of the young people either before or after completion of the LINX Programme.

### 4.3 Gender and Age Differences

An Independent t-test revealed that both males and females on average had improved self-concepts and behaviours following the LINX Programme, this is demonstrated in Table 2:

Variable	Gender	N	Mean Improvement
Self-Concept	Male	64	.1709
	Female	31	.1971
Behaviour	Male	56	.2893
	Female	27	.4082

Table 2: Mean Variance Scores by Gender

For Self-Concept change the difference between males and females was not significant at the 5% level:  $t(93) = -.256, p > .05$ . For Behaviour change the difference between males and females was similarly insignificant at the 5% level:  $t(81) = -.647, p > .05$ .

As participant ages range from 11-21 years, this independent variable has more than two levels so a one-way ANOVA test was conducted. The average variance by age is shown in Table 3, with ages yielding the largest change (both negatively and positively) highlighted in blue:

Variable	Age	N	Mean Change
Self-Concept	11	1	-.7500
	12	26	.3473
	13	18	.2450
	14	30	.0477
	15	10	.0920
	16	5	.2520
	17	3	.0267
	18	1	-.0800
	21	1	.7500
	Behaviour	11	1
12		24	.2871
13		18	.2633
14		24	.4925
15		8	-.1413
16		3	.5237
17		3	.6300
18		1	.0000
21		1	1.190

Table 3: Mean Variance Scores by Age

For Self-Concept change these differences across the ages were not significant at the 5% level:  $F(8,86) = 1.688, p > .05$ . For Behaviour change, the difference across the ages was similarly insignificant at the 5% level:  $F(8,74) = .753, p > .05$ .

#### **4.4 Regional Differences**

Arguably the most unique aspect of this research, and therefore most useful to analyse in depth, is the ability to conduct regional comparisons. This provides the extent to which LINX programmes have acquired more successful results in some areas over others.

The hypotheses are stated as:

Ho – There is no significant difference in the self-concept and/or behaviour variance between the four counties.

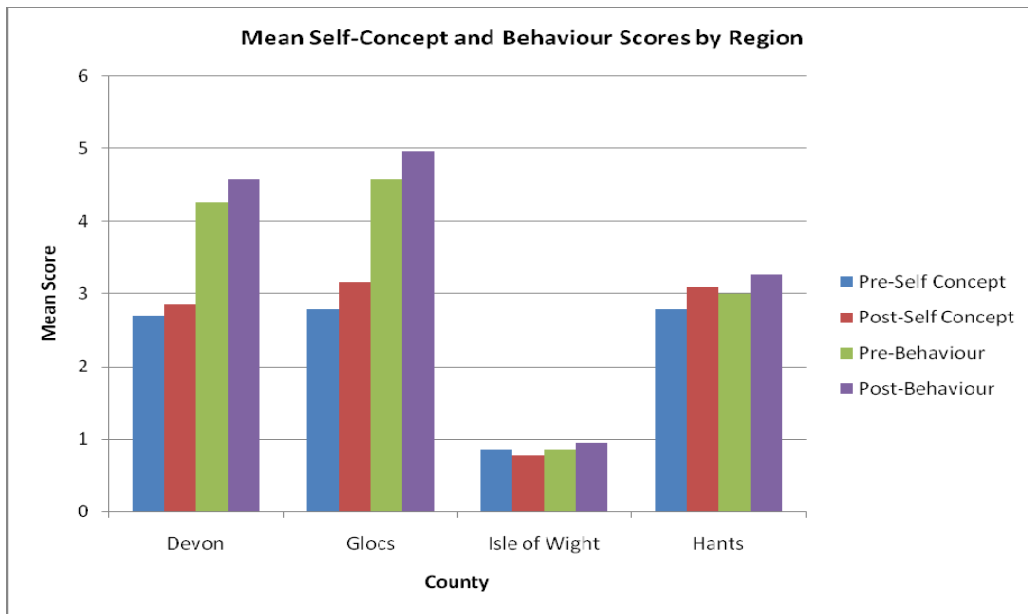
HA – There is a significant difference in the self-concept and/or behaviour variances between the four counties.

A one-way ANOVA test was firstly undertaken across the four counties, with a close to normal distribution shown by Self-Concept variance and a slight positive skew shown in the equivalent Behaviour variance histogram (see Appendix 8); homogeneity of variables can also be assumed.

The Null Hypothesis for Self-Concept variance cannot be rejected because the differences across the counties were not significant at the 5% level,  $F(3,91)=2.254, p > 0.05$ . Likewise the Null Hypothesis for Behaviour variance cannot be rejected at the 5% level,  $F(3,79)=.452, p > 0.05$ .

While these values are not statistically significant, the Self-Concept significance value was revealed to be 0.087 in the tests of between-subject effects, which implies a high confidence that regional differences for this variable are not down to random chance. Far higher equality across counties is suggested by the post-hoc test for behaviour scores which show only very insignificant regional differences.

A visual representation of the pre-programme and post-programme mean self-concept and behaviour scores in each county has been displayed below:



Graph 1: Regional Means

Table 4 shows the exact mean scores for both surveys for each county before and after completion of the LINX Programme. This has been calculated relative to the numbers in each county:

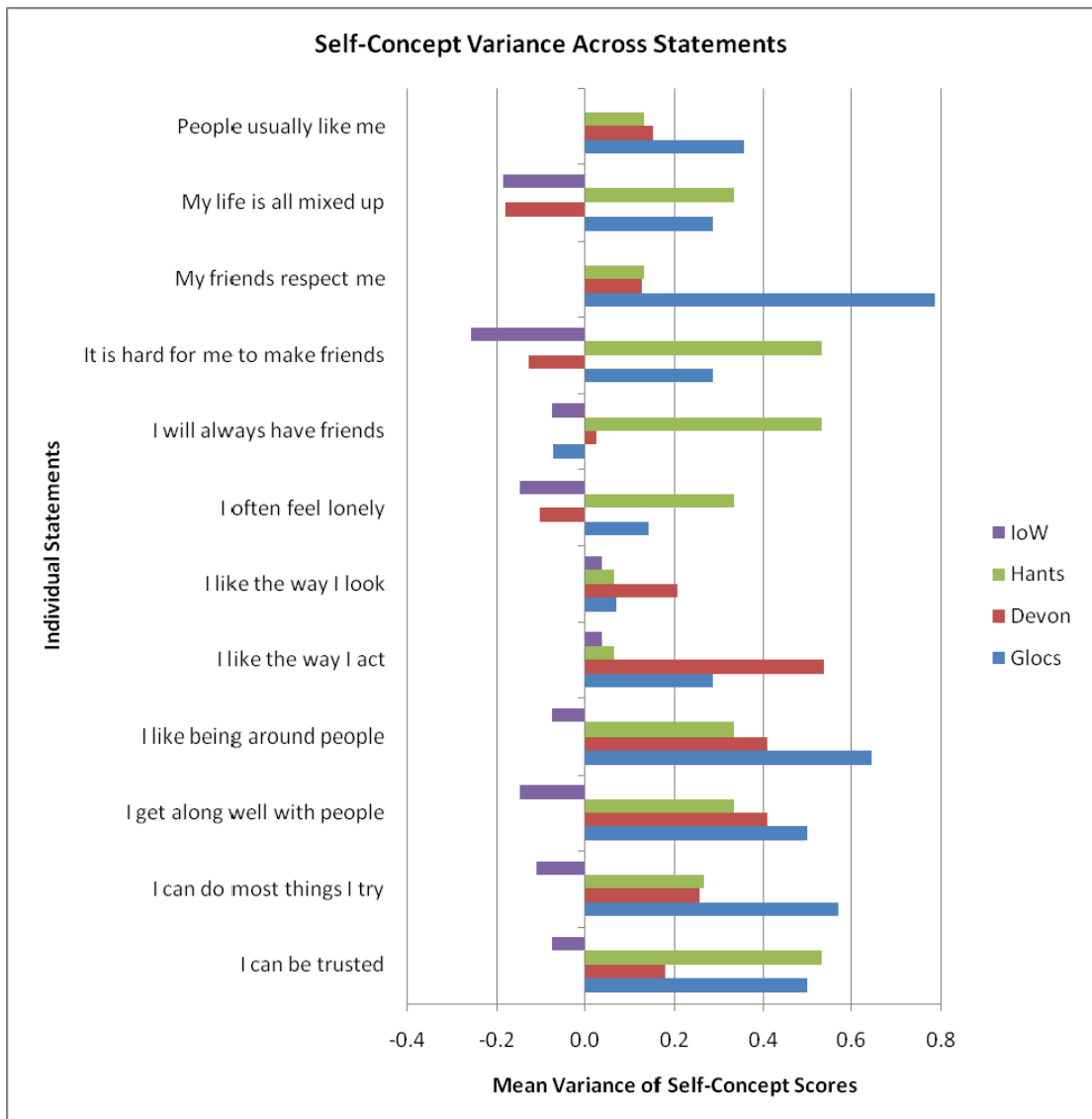
Region	Pre-SC Mean	Post-SC Mean	Pre-Behaviour Mean	Post-Behaviour Mean
<b>Devon</b>	2.6972	2.8476	4.2485	4.5747
<b>Glocs</b>	2.7914	3.1550	4.5757	4.9464
<b>IoW</b>	0.8557	0.7807	0.8583	0.9437
<b>Hants</b>	2.7833	3.0833	2.9920	3.2708

Table 4: Mean Scores per Region

Here it is clear that on average young people attending LINX in Devon, Gloucestershire and Hampshire now have a slightly higher self-concept. However in the case of the Isle of Wight the average self-concept score has declined. Behaviour has improved on average in every region.

A final and beneficial comparative analysis is to look at the strength of the nominal values for each statement answered across the participants. The Self-Concept bar chart is displayed with variance of means used for the scoring; as the Behaviour

chart was very large due to a higher number of statements it is located in Appendix 9 and, like the chart below, will be analysed in detail in the forthcoming discussion.



Graph 2: Self-Concept Statement Variance

#### 4.5 Re-offending Data

To add further weight to the survey findings, the research benefits from re-offending data for young people who have attended the LINX Programme in the past 18 months.

<b>LINX Status</b>	<b>Nature of Offence(s) after 6 months</b>	<b>Nature of Offence(s) after 12 months</b>
Non-Starter	Shoplifting; Common Assault x 2; Criminal Damage x 2; Obstructing Police; Harassment; Assault & Battery; Theft; Breach of Order	No Offences
Non-Starter	No Offences	Threatening Words or Behaviour; Breach of Court Order
Non-Starter	No Offences	No Offences
Non-Starter	No Offences	No Offences
Non-Starter	No Offences	No Offences
Non-Starter	Breach of Court Order	Assault & Battery
Left Group	No Offences	No Offences
Left Group	ABH; Common Assault x 2	No Offences
Completed	Threats to Kill	No Offences
Completed	No Offences	No Offences
Completed	No Offences	Handling Stolen Goods

Table 5: Re-offending data taken from past members of the LINX Programme in Gloucestershire

The re-offending data in Table 5 illustrates young people absent from the main survey sample but representative of a similar background and experience with LINX. The data is taken at six and twelve month intervals after a particular programme has finished; those used in the survey sample have only recently completed so any re-offending data for those groups could not yet be obtained. The table shows details of offences committed by a cluster of young people from the Gloucestershire programme that either had or had not completed the LINX Programme. For absolute anonymity, reference numbers as well as dates of offences have not been given in the table though all re-offending data shown is from males with a mean age of 16. For clarity, those who have completed the LINX Programme are highlighted in blue, those who left during the programme are highlighted in green and those who did not start the programme are highlighted in red.

## Discussion

### **5.1 Detailed Analysis of Findings**

The findings, as presented in the previous section, will now be analysed in depth in comparison to existing literature surrounding the impact of domestic violence exposure and the successes and failures of interventions to improve the behaviour and self-concepts of adolescents. The significance of age, gender and regional variables has been identified; they will be understood in relation to methodological concerns and situated within existing research findings.

The first promising and most important finding for evaluating this intervention is the statistical significance found between pre-programme and post-programme self-concept and behaviour scores. The overall improvement regardless of age, gender or regional differences, is large enough that there can be a 95% confidence that mean improvement is due to the success of the LINX Programme rather than down to random chance. Therefore, it is almost undeniable that this programme has been far more positive than negative for the self-concepts and behaviours of the average young person who has completed it. A similar intervention scheme is described in the literature review (Poole et al, 2008) and the findings of its evaluation can be compared to the present research. Interestingly in an evaluation of a programme based on sheltered children, attitudes towards violence and responsibilities had positively changed, though actual behaviour had not improved (Poole et al, 2008, p.684). It could therefore be argued that in more extreme cases where personal safety is the main objective of the programme the behaviours of the young people themselves are given less focus than in a programme such as LINX, which has typically been shown to improve both self-concept and behaviour. However, despite this finding from the present research, the discussion will benefit from an explanation of why more specific variables, such as gender differences, have not shown statistical difference and ultimately the implications of this for the LINX Programme.

While a positive correlation has been established between self-concept improvement and behaviour improvement following the LINX Programme, this relationship is not strong enough to be statistically significant. This is a rather surprising finding given a general understanding in the literature that negative self-concepts can be a predictor for anti-social behaviour (Hay, 2000). Therefore it could have been assumed that an intervention such as the LINX Programme may conversely have the positive effect of improving self-concepts to then naturally improve behaviour. Nevertheless, the relationship is still linearly positive and therefore a larger sample size could have shown more significance between these two dependent variables.

Similarly, no significant correlation was found between whether or not a participant had been exposed to domestic violence and their level of behaviour or self-concept both before and since the LINX Programme. This finding on-the-surface appears to contradict much of the literature which is based around a 'Cycle of Violence' or 'Learned Helplessness' theoretical approach. However there are many reasons that account for this unexpected occurrence. Firstly, for a total of 47 participants it was unconfirmed whether or not they had experienced exposure to domestic violence and these were thus placed in an 'unknown' category. This meant that comparison between those where exposure to domestic violence was conclusive either way had hindered statistical strength given the inclusion of such a large, essentially 'control' group. This is particularly due to only five participants confirmed as certainly *not* experiencing a turbulent home life. It would be interesting to incorporate a larger sample from this category to assess for a relationship between home-life situations and compliance with a programme such as LINX. However, it is important to note the difficulty in achieving such a sample where this intervention itself is principally built for those from a violent background. This is the case for LINX which is not a 'catch-all' programme for all young people with behavioural difficulties or involvement in the criminal justice system. The potential antecedent of domestic abuse cannot be assumed as the sole risk factor for adolescent difficulties. However, the majority of this opportunity sample had

experienced a disrupted home-life. Therefore it is inferred that domestic violence had some negative influence prior to the attendance of the LINX programme, as previous literature had also suggested (Bedi and Goddard, 2007, p.68).

Beyond practical sampling issues and the impact that this may have had, it is notable that this research is open to further analysis which could accommodate potentially causal reasons *why* a young person has attended the LINX Programme, beyond assumptions based purely around the impact of domestic violence. With many variables established as reasons for poor behaviour or low self-concepts when the young people are assessed for LINX, research could then benefit from a regression analysis to confirm the strength of the domestic abuse variable and thus give an indication of causality.

In praise of the consistency of the intervention, both males and females assessed by the survey scales and targeted in the educational programme are shown to have improved in general in both self-concept and behaviour conditions. Table 2 succinctly shows the average scores across the genders and it is apparent that females have a higher mean improvement and thus may have benefited slightly more from the LINX Programme in both conditions, particularly for behaviour where the average change is 0.4082. However, while there are these minor variances there is no statistical difference between the scores of males and females which implies that the programme has done well to adapt for the inclusion of males in recent years. The literature previously reviewed suggests that females suffer more from lowered self-concepts as a result of domestic violence, while males are more likely to externalise symptoms through enacting violence (Mullender and Morley, 1994, p.230). However the present research does not find such clear-cut distinctiveness. Instead, it has helped make meaningful the uncertainty explained by Fantuzzo and Mohr (1999, p.28), finding that there are no significant categorical differences in the effects of violence exposure. These effects *are* instead subject to individual resiliency within both genders as a whole, and reduced according to personal compliance with the LINX Programme.

The findings according to age differences are particularly informative, with an outcome that sits neatly within a variety of desistance explanations, all critically discussed by Mulvey et al (2004). As shown in Table 3 both for self-concept and behaviour variance, participants within the twenty-one age group have shown most positive change following the LINX Programme. While this could be due to a natural desistance from anti-social behaviour and a growth in maturity, it is possible that the educative elements of the intervention have appealed to this older age group and helped induce the natural process of desistance. Engaging with the young people to become more responsible for their actions may have been more effective with participants who are psychologically and physiologically more developed to accept this adult demand. Conversely, the youngest participant at only eleven years old had the weakest self-concept, with this actually declining following the programme. Unfortunately as the sample numbers at the extreme ends of the age spectrum are so small, this result is liable to be down to random chance. However, it is certainly an observation worth further investigation with larger samples and a more even age distribution; whereas in the present research the vast majority of young people were between the ages of twelve and fourteen years. Despite the examples given of extreme positive and negative changes by age as highlighted in blue in Table 3, no statistical significance was found across the ages as a whole. It appears that the LINX programme should continue to broadly target all ages within the adolescent life-stage. There is no age whereby, at least in this sample, the programme is far more beneficial than for any other.

The most unique contribution of this research is its ability to draw comparisons regarding the success of the LINX Programme across four counties in Southern England. Research previously reviewed, such as Mullender (1994), has predominantly focussed on one shelter-based intervention which thus uses a consistent programme coordinator and facilitators. Whereas the present study has assessed for regional differences in the improvement of the self-concepts and behaviours of young people and can therefore make inference regarding the impact of the facilitators on the development of these individuals. However it is worth

noting that, as shown in the pre-programme surveys, the young people all came into the programme with very different levels of self-concept and behaviour problems. This is apparent in Graph 1, where the Isle of Wight has far lower mean scores than the other counties. Therefore it could have been more challenging for some facilitators than others if they, for example, have particularly disruptive or uninterested young people in their group. The surveys could not assess for this and, had the scope of the research been based on a facilitator's experience rather than a quantitative evaluation from the point of view of the young people, an interview approach would have worked very well.

Some very interesting findings have become apparent following the statistical analysis. Firstly, in terms of behavioural change following the LINX Programme, there is very little variance across the regions and every county has shown improvement in survey responses based on this variable. This highlights that a consistent educative approach has been employed, with the further likelihood that facilitators had been adequately and equally trained; this is certainly worthy of commendation. On the other hand, the scores for self-concept change are highly diverse across the counties and while there is no statistical difference, the  $p$  value of 0.087 shows that the scores were very close to being significant at the 95% confidence interval. Gloucestershire and the Isle of Wight proved to be the two extremes in the post-hoc test, with the former yielding most improved self-concepts and the latter actually showing a slight decline for this variable following the LINX Programme. As previously stated, this result could be due to the Isle of Wight having participants of particularly low levels of self-concept and many aggressive behaviour issues at the outset. Whereas Gloucestershire had young people who on the whole had fairly reasonable self-concepts and behaviour scores, prior to the LINX Programme. Therefore such intervention may have been better received simply due to this, rather than subject to varying competencies of the facilitators or consistencies in programme delivery.

Looking at Graph 2 for self-concept scores, some revealing interpretation can be drawn with regards to certain counties doing particularly well or poorly in

specific areas of these very broad themes. It is visually clear that Gloucestershire and Hampshire have received the most remarkable improvements in terms of self-concept in their programmes. From establishing the specific statements where the LINX Programme has achieved most development, the county co-ordinators can work together and share best practice to try and bring more equality across the counties. For example, it is clear that there is an increase in the belief of the statement “It is hard for me to make friends” in Devon and the Isle of Wight, whereas in Hampshire this has declined with the young people conversely claiming they now find it easier to make friends. While with an absence of statistical significance across the counties this could be down to chance, it may still be worth further analysis regarding how Hampshire could have achieved such a high level of improvement in this area compared to other counties. There is clear discrepancy in many of the statements with Gloucestershire also scoring exceptionally well in terms of the statement, “My friends respect me”. On the whole, while there is great variance in every county across the statement scores, Hampshire seemingly has achieved the most consistency for self-concept.

However, as shown in Appendix 9, there appears to be more uniformity across the behaviour statements. This suggests that each county has targeted aspects of the programme equally well for each aggressive act examined over the preceding 30 days. However, it is realistic to suppose that as a young person reduces one behaviour trait the other related behaviours may naturally follow suit. Therefore a broad educational focus on the behavioural aspects of the LINX Programme appears to cognitively apply to each statement of action to an equal extent. These more specific areas of the two themes of self-concept and behaviour are certainly open to further analysis for complete confirmation of the assumptions made.

The re-offending data displayed in Table 5 superficially shows limited support for the LINX Programme as it is clear that two young people who have completed the intervention still committed criminal offences either six months or a year after. On the other hand half of those who had not started the programme

were not caught for any criminal offences in the past year. However, it is noteworthy that those who had not started the LINX Programme tend to have far more frequent convictions. These young people, according to this small selection of data, were also more likely to continue offending 12 months after the initial LINX assessment. Despite the drawback of such a limited sample of reoffending data, it provides slightly more support for the long-term success of the programme.

## **5.2 Strengths and Limitations**

A key strength of this research is its longitudinal nature, which assesses the progress of young people across a 12 week period rather than at a snapshot in time where mood and other factors may have acted as confounding variables. It is also non-retrospective surveying adolescents at the time of their exposure to domestic violence, rather than years later when research would have been affected by temporal bias. As shown by Fantuzzo and Mohr (1999, p.30), this is crucial in order to obtain a close indication of the causal impact of domestic violence. The sample size of 100 participants in total is also very respectable given the sensitive nature of the research and the topics covered; this is undoubtedly due to the relationship established with the Hampton Trust. A final beneficial and unique aspect of the research which worked remarkably well is the access to data regarding young people from four different counties.

However, an unfortunate setback is that the participant numbers from each county were unequal; were there more surveys from young people in Hampshire and Gloucestershire a statistical significance across the counties may have become clear. Without a greater sample size it cannot be conclusive, though it can be inferred, that the LINX Programme had benefitted from consistent delivery. As the majority of participants were male, with regards to gender it is possible that consistency of the programme might not be the actual reason for the absence of statistical significance; a larger sample of females would have helped to confirm or discount the reality of this assumption. Furthermore, while the limitations of the

survey method have been covered, they may be particularly salient in this group of young people. With the survey being exactly the same at two time intervals, there was the potential for participants to become aware of the research aims. Therefore there is a vulnerability to social desirability bias, particularly in the post-programme survey. This may principally be the case due to the original survey copies requiring full names of the participants for the purposes of the Hampton Trust. At this early stage prior to the present research the young people were not protected by anonymity and may have been concerned about the use of their data and the potential implications it could have for them.

Ultimately this research is an open project which has gained some useful data of a high quality - a potential stepping-stone to even more thorough analysis. Interventions like the LINX Programme will continually require academic evaluations and recommended future research directions are proposed in the following conclusion.

## Conclusions

### **6.1 Main Research Conclusion**

This quantitative investigation has answered the main research question by statistically showing that the LINX Programme has been beneficial for the majority of participants in both the behaviour and self-concept conditions. Despite the fact that these improvements could be down to other processes or changes in the development of the young people, there is a 95% confidence that this intervention has been a key component of this change. Therefore it is conclusive that the LINX Programme has been a positive experience for the majority of young people, at least on a quantitative level.

In summary, the key findings for the subsidiary research questions are as follows:

- There is a slight positive, but insignificant correlation between self-concept improvement and behaviour improvement
- The domestic violence variable had no statistical impact on the compliance of the young people with the LINX Programme in terms of the effects on their behaviours and self-concepts
- Gender, age and regional variables highlighted the consistency of the intervention as they showed no statistical significance

This research has added an original contribution to the relatively wide knowledge gap surrounding interventions which actually embrace the agency of young people to control their own destinies. While there is now a relatively substantial acknowledgement that exposure to domestic abuse could be just as psychologically damaging as direct victimisation, this research has added to a

somewhat weaker recognition of the roles played by Institutions built to help such vulnerable individuals.

## **6.2 Future Directions**

This evaluative project has been a contribution to an evolving process due to its applicability to real and existing issues. It can be continuously developed with both quantitative and qualitative research taking different approaches to the analysis of the LINX Programme or similar interventions.

While qualitative studies in this area have been discussed in the literature review as far more frequent than statistical research methodology, one area that has been rarely touched upon is studies involving programme staff. The views of the young people who attend the LINX programme are undoubtedly indispensable; however these individuals do not work with the scheme on a daily basis whereas the facilitators will have their own perspectives regarding the success of LINX. A qualitative interview approach with programme staff has the potential to create some very rich and informative data. This will contribute to a thorough mixed-methods evaluation of LINX when added to the results of the current study which is based directly on the young people themselves.

Secondly it would be very interesting if future research could survey or interview past participants of the LINX Programme some time after their own experience with it. This would give an impression of how temporally successful the intervention is depending on whether self-concepts and behaviours are still positive up to months or even years later. The present research has made some advancement on this objective by using re-offending data which identifies criminal behaviour up to a year after the completion of LINX. Nevertheless it would be particularly helpful if an individual's data can specifically match up to that individual's previously completed pre-programme and post-programme surveys. Therefore in the next six months the re-offending data of the current participants could be compared to their own survey responses.

### **6.3 Recommendations for LINX**

Following the results of this evaluation some suggestions can be made for the future delivery of the LINX Programme. Most notably the value of ensuring equal and consistent programme delivery in each county is emphasised. This can enable each young person to get the best that they possibly can from the experience. It is also recommended that purely for future research purposes, there is a more definitive knowledge of those who have experienced exposure to domestic violence, as the 'unknown' category in this study is very large. However, it is appreciated that with such vast quantities of young people coming into the programme, keeping the database completely up-to-date with every detail can be very challenging. With LINX being in such high demand, this in itself evidences the need for further funding for a member of staff to potentially work solely on the database system and have the time and resources to avoid any inaccuracies.

Despite these subtle suggestions for alterations, the programme has been undeniably successful. It is also clearly and consistently applicable to both genders, across the adolescent age spectrum. Therefore it is unnecessary to offer any major recommendations to change this intervention. Instead, the results are extremely promising and it is hoped that more young people are given the opportunity to attend the LINX Programme, so that it can further help to combat the cycle of violence.

Word Count: 10,824 words

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