

# Project 360: Preliminary report I

---

Jesse Matheson	Department of Economics, University of Leicester
Martin Koppensteiner	Department of Economics, University of Leicester
Réka Plugor	Centre for Sustainable Work and Employment Futures, University of Leicester



**This is a preliminary document covering a partial analysis of Project 360.**

This version: November 2015

## Project 360 preliminary report I

### Acknowledgements

Project 360 is funded by the Ministry of Justice and the Office of the Leicestershire Police and Crime Commissioner.

Design and implementation of Project 360 was a cooperative effort from Leicestershire Police, the University of Leicester, Leicester City Council, Leicestershire County Council and Rutland County Council.

The following participants played major roles in the implementation of Project 360:

Detective Superintendent Jon Brown	Leicestershire Police
Detective Inspector Mark Parish	Leicestershire Police
Detective Constable Mark Brennan	Leicestershire Police
Debbie Hughes	Living Without Abuse
James Fox	Leicestershire County Council
Stephanie McBurney	Leicester City Council

### Disclaimer

The authors emphasise that this is preliminary work for the purpose of updating user groups. The contents of this document should not be interpreted as a final policy recommendation. A complete analysis will follow.

Interpretation of results, suggested implications and conclusions are that of the authors and may not reflect the views of Leicestershire Police, Leicester City Council, Leicestershire County Council, Rutland County Council or the University of Leicester.

### Ethical approval

Procedures for the evaluation of Project 360 have received approval from the University of Leicester Ethics Committee under the following reference codes: mk332-5e3e; jm464-d28b; jm464-6fe8; jm464-6eb3; jm464-2301; 713-jm464-economics; 2926-jm464-economics.

## Contents

Acknowledgements	... i
Contents	... ii
Executive summary	... iii
1. Project 360 background information	... 1
2. Experimental design and evaluation	... 3
3. Interviews with engagement workers	... 5
4. Interviews with schools	... 6
5. Characteristics of the sample	... 7
6. Preliminary results from the victim survey	... 9
7. Discussion of results	... 12
8. Next steps	... 13
Bibliography	... 14
Appendix 1. Tables	... 15
Appendix 2. Engagement worker intervention flow diagram	... 20
Appendix 3. Timeline	... 21
Appendix 4. The principle investigators	... 22

### Executive Summary

The following summarizes the main findings from the preliminary analysis of Project 360.

The *integration of* secondary responders with Leicestershire police is a key feature of Project 360. This may be important for three reasons:

- **Enhanced information:** Engagement workers have access to all information previously recorded by police with respect to victims and perpetrators.
- **Rapid response:** New incidents are reported daily and this information is shared with engagement workers. The intervention often begins within 24 hours.
- **Embedding of services with police:** Victims may believe the police are better able to assist than other non-police support agencies giving extra authority to the engagement workers.

At the time of this writing 1,009 cases have been covered by Project 360. The random allocation of cases to treatment ensures that the quantitative analysis estimates a *causal effect* of the program. We report on the results of the one-month victim survey. The survey covers 214 victims (117 from the treatment group and 97 from the control group). The term “initial incident” refers to the police callout which lead to the addition of a case to the subject pool. To summarize the main findings:

- **The intervention is associated with greater victim stress in the short run.** Relative to just before the initial incident, victims in the treatment group are 31% less likely to report improved *stress levels* and 40% more likely to report worsening *stress levels*, than are victims in the control group. Victims in the treatment group are also more likely to report a worsening of *sleep*, and poorer outcomes for *life control* and *mental health*.
- **The intervention is associated with improved family life and quality of life overall.** Despite the findings for stress, measures of *quality of family life* and *quality of life overall* both significantly improve for the treatment group relative to the control group and victims in the treatment group are 22% more likely to report improvements in their quality of life.
- **Victims receiving the intervention are significantly more likely to take actions to change their situation.** Relative to the control group, the individuals in the treatment

## Project 360 preliminary report I

group are significantly more likely to have visited their general practitioner or the accident and emergency department, are more likely to have accessed a domestic violence support service since, and are 24% less likely to be in current contact with the perpetrator.

- **Police satisfaction increases for victims receiving the intervention.** 40% fewer victims in the treatment group report being dissatisfied with the police handling of the case associated with the initial incident. Victim opinion of the police overall is significantly more likely to improve and less likely to worsen as a result of the initial incident for the treatment group relative to the control group.
- **Victims receiving the intervention are significantly more likely to report future incidents.** The treatment group is 68% more likely than the control group to say their willingness to report a future incident has increased.

These survey results suggest that the Project 360 intervention has a positive effect on victim outcomes. The finding that stress increases for the treatment group is not surprising if one considers that some victims who receive the intervention will take steps to separate from an abusive partner or make other major life changes.

Although promising, we caution that at the moment we are only able to look into short term outcomes and that these results reflect *subjective* and self-reported measures from the victim survey. As such we cannot rule out the possibility that the intervention changed victim reporting without having a meaningful impact on the underlying outcomes of interest. For this reason, moving forward we will be looking at a number of *objective* outcomes such as future police reporting, filing and retraction of victim statements etc.

## Project 360 preliminary report I

### 1. Project 360 background information

In the Leicester, Leicestershire and Rutland police force area (Leicestershire Police henceforth) 17,396 domestic offences and incidents were reported in the one-year period beginning April 2013. Approximately 20% of all reports to Leicestershire Police involve repeat victims and about seven victims daily have experienced three or more reported incidents of domestic violence over a 365 day period.

Domestic violence is estimated to have a direct cost to the UK public purse in excess of £5.7 billion every year and to account for 23% of public health expenditures in the UK (Walby, 2004, 2009). Beyond the direct cost of domestic violence due to police involvement, judicial procedures and health expenditure, there are indirect costs hard to quantify. These costs include the emotional trauma and the long-term effect on children in these families.

Project 360 follows the HMIC report “Everyone’s business: Improving the police response to domestic abuse” HMIC (2014). The report states that there exists a lack of expertise on the part of police in the UK when it comes to dealing with victims of domestic violence:

“Officers lacking the skills and knowledge necessary to engage confidently and competently with victims of domestic abuse” (pg. 7),

“Victims told HMIC that they did not always feel believed or that they were being taken seriously by the police” (pg. 9),

“A lack of understanding of many complex factors is, at least, in part responsible for the poor attitudes of police officers” (pg. 53).

Project 360 aims to address these concerns by using secondary responders, *engagement workers*, with an expertise in assisting victims of domestic violence. The engagement worker acts as a mediator between the initial police visit and the support services which are already available

Project 360 will potentially address several issues regarding the service offered to victims of domestic violence. First, although the intervention specifically targets repeat victims of domestic violence, the design of Project 360 does not preclude the use of the intervention more generally in all cases of domestic violence. Second, the intervention consists of a

## Project 360 preliminary report I

component specifically to support children in households which have experienced domestic violence.

The role of the University of Leicester is to provide an independent evaluation of Project 360. Assessing the effectiveness of the Project 360 intervention is complicated by the inherent difficulty in determining what an “improvement” in domestic violence looks like based on the data that we observe. To illustrate this complexity, consider interpreting an increase in reporting of domestic violence following an intervention. This may be working through one of two opposing channels: the intervention leads to an increase in abuse—as suggested in Davis, Weisburd, and Hamilton (2008)—or the intervention leads to an increase in empowerment and willingness to report abuse on the part of the victim—as suggested in Davis and Taylor (1997).

To address this, a number of different outcomes will be examined including responses to victim survey, child educational outcomes and participation in the justice system. Interviews will also be conducted with affected parties including victims, schools and engagement workers. This report documents the results of a one-month victim survey, with a discussion of some of the current extensions in Section 7.

A number of studies look at interventions in domestic violence, including notable UK studies such as Project CARA<sup>1</sup>. Project 360 is a victim targeted intervention similar to the interventions analysed in Casey, Berkman, Stover, Gill, Durso, and Marans (2007), Stovers, Berkman, Desai, and Marans (2010), Davis and Taylor (1997) and Davis, Weisburd and Hamilton (2007). Of these, only the interventions in Davis and Taylor (1997) and Davis, Weisburd and Hamilton (2007) are, like Project 360, implemented as randomized-control trials. The lack of randomization in the remaining studies means that results can only, at best, be suggestive of a program effect. Because Project 360 is a randomised-control trial, we estimate unbiased causal effects of the program on the selected outcomes (Holland, 1986).

The study of Project 360 significantly contributes to the evidence base over and above the randomized studies of Davis and Taylor (1997) and Davis, Weisburd and Hamilton (2007):

---

<sup>1</sup> CARA is a perpetrator focused intervention run by the Hampshire Constabulary.

## Project 360 preliminary report I

- **The design of the Project 360 intervention is fundamentally different** than these previously studied interventions.
- **A wide range of outcomes** will be considered. The previous studies focus on repeat police call-outs, which have an ambiguous interpretation.
- **Outcomes for children** are considered; particularly those outcomes that provide information about helping children cope in these stressful situations. Previous studies have focused only on direct victim outcomes.
- This is **the first randomized-control study of this kind for the UK**. Further, this constitutes one of the largest randomized control studies on crime.

### 2. Experimental design and evaluation

The Project 360 intervention is implemented as a randomized control trial (RCT). The strength of the RCT design for policy evaluation is that, unlike interventions that are allocated based on voluntary subject participation or need (as determined by a third party), randomization ensures that whether or not an individual receives access to the intervention is uncorrelated with characteristics of individuals that may confound our ability to analyse the effect of the program<sup>2</sup>. The treatment effects reported here can be interpreted as the causal effect of the Project 360 intervention. These are our best estimates of the effectiveness of this program if it is rolled out to the larger population.

#### **Random assignment of the intervention**

When Leicestershire police are called out to a domestic incident they record the incident and details of the household on a *Domestic Incident and Vulnerable Child Working Sheet*. The information from this working sheet is recorded into a domestic incident report in the Leicestershire Police database and assigned a case number. An automated workbook, designed by the Leicestershire Police IT services team, searches through the recorded incidents and recovers all domestic cases for which the following conditions hold:

1. The victim in the case has shown up in at least two other reports in the prior 365 days.

---

<sup>2</sup> For more details on the use of randomization in evaluation studies see Manski (2007); Angrist (2006); Holland (1986); Imbens and Wooldridge (2009).

## Project 360 preliminary report I

2. The victim in the case has shown up in fewer than seven other reports in the prior 365 days.
3. The victim has not shown up in the Project 360 subject pool previously (as either treatment or control).

The workbook is automatically updated every 24 hours and randomly allocates (with a 50% probability) cases meeting the above criteria into either the *treatment group* or the *control group*. The Project 360 engagement team receives case details and victim contact information for all cases in the treatment group but no information for cases in the control group.

### ***Current procedure***

Current police procedure for domestic violence call-outs are provided to cases assigned to both the treatment group and control group. Current procedure for victims identified as medium and standard risk (according to DASH assessment<sup>3</sup>) is to provide the victim with contact information for Leicester, Leicestershire or Rutland domestic violence victim services. If a victim is identified as high risk then the officer will typically make a referral to the Domestic Abuse Support Team (DAST). DAST is an integrated team of support workers within Leicestershire police.

### ***The intervention***

The Project 360 intervention is offered to all subjects in the treatment group. The main points of the intervention are summarized here. A flow diagram describing the complete intervention is presented in Appendix 2.

Each morning engagement workers are allocated their new cases. They start by reviewing the police report and Domestic Incident and Vulnerable Children Working Sheet for each case. Further information can be gathered on the history or reported incidents and other crimes, for the victim and perpetrator, from the Police National Computer. After an initial investigation, victims are contacted, by telephone, by the outreach worker. The target for first contact is within 24 hours of the incident.

---

<sup>3</sup>DASH stands for domestic abuse, stalking and harassment. This is a standardized risk assessment tool, comprised of 27 questions, brought into use across UK police services in 2009. Assessments are classified into three risk levels: Standard (1), Medium (2), High (3).

## Project 360 preliminary report I

Once initial contact has been made, the engagement worker will offer to provide further assistance to the victim. Further assistance can take the form of:

- Letting the victim know their legal options and what support services are available.
- Providing referrals to support services the victim would like to access.
- Assisting the victim if they wish to make a statement to police.
- Helping victims construct a “planned escape” if they wish to leave the perpetrator.

The intervention lasts approximately one week (this can vary according to victim needs).

If a child is in the household, the engagement worker will contact the child’s school (head teacher). The school is informed that a domestic disturbance has taken place but is not provided with specific details regarding the incident.

### 3. Interviews with engagement workers

Face-to-face interviews were conducted with the Project 360 engagement workers. The primary purpose of these interviews was to gather information with respect to how the intervention was implemented, the impact of the programme on victims as perceived by the engagement workers, the benefits of the programme relative to existing services as perceived by the workers, and any potential changes that would allow engagement workers to more effectively assist victims.

#### *Benefits of the intervention over existing services*

Engagement workers discussed their belief that the Project 360 intervention provides an effective way of assisting victims of domestic violence over and above existing services. They cited a novel feature of the programme: the full integration of a victim-targeted secondary response with police services. Three channels through which integration of services may be important were identified:

- **Enhanced information:** an engagement worker has access to all information previously recorded by police with respect to victims and perpetrators through the Police National Computer (PNC) and other data bases. This ensures that workers can assess the danger level involved with visiting a victim before they proceed. As one worker stated: “In previous [DV] work I was trying to do my job completely blind”.

## Project 360 preliminary report I

- **Rapid response:** the team receives information on new cases updated daily. No referrals from a third party are needed and the engagement workers can take the initiative in making initial contact. This ensures that workers are aware of new cases, and can begin the intervention, within 24 hours of the initial report being made.
- **Embedding of services with police:** Engagement workers believe that introduction as working with Leicestershire Police makes victims more responsive and willing to listen relative to their previous experience working with non-police victim support agencies.

Engagement workers felt that the programme also allowed them to deliver emotional support to victims shortly after an incident occurs.

Project 360 engagement workers assist and coordinate access to services for victims as well as ensure that they are taken care of while they wait for access to be provided.

### 4. Interviews with schools

Face-to-face interviews were conducted a Designated Senior Person (DSP) in eight different key stage 2 (KS2) schools across Leicester and Leicestershire. The schools chosen for interview are large KS2 schools in areas with relatively high numbers of police call-outs for domestic intendents. All interviewed DSPs report being aware of pupils who have experienced domestic violence experience the current school year.

The primary purpose of these interviews is to gather information as to how schools might make use of the information provided by Project 360 and what other services would be useful in supporting schools in their child protection role.

#### *The role of schools in domestic violence support*

All DSPs stated that the school plays an important role in supporting children who have experienced domestic violence. All schools interviewed had policies and formal procedures in place meeting the criteria set out by city and county councils. However, many DSPs reported uncertainty about general strategies for assisting children who have experienced domestic violence. Vague terms, such as “offering pastoral care” are used to describe the support that would be given to children but few had tangible strategies. Almost all DSPs described the actual interventions that would be used to offer support as being on a case-by-case basis.

## Project 360 preliminary report I

### *Schools and interaction with domestic violence support services*

When asked about what additional services outside agencies could offer to assist schools with providing support to children, three services gaps are identified. These gaps were identified by all DSPs. 1) Information to identify pupils from households where police or other services are currently involved with due to domestic-violence. 2) Consistent follow-up information on the status of pupils for whom schools have informed an outside agency such as social services or police. 3) A consistent and named contact person whom schools can contact should they need information, guidance, or to report an incident of concern.

School interviews suggest that there is an opportunity for the Project 360 engagement worker to assist schools support pupils who have experienced domestic violence.

### **5. Characteristics of the sample**

Key features of the cases in the Project 360 subject pool are summarized here. Detailed tables are reported in Appendix 1. The main points from this section are summarized in the caption below.

#### ***Caption 1: Sample characteristics***

- The final sample consists of 1,009 cases; 529 treatment and 480 control.
- Survey response rates (22.1% and 20.2% for treatment and control) do not significantly differ between treatment and control groups.
- Observed characteristics do not significantly differ between treatment and control groups. This is consistent with the random allocation of cases between the two groups.

#### ***Sample size***

The final sample consists of 1,009 cases corresponding to unique victims (see Table 1), with 529 cases allocated to the treatment group and 480 cases allocated to the control group. The Victim Survey covered 117 victims from the treatment group and 97 victims from the control group corresponding to response rates of 22.1% and 20.2%. The difference between response rates for the two groups is not statistically significant, suggesting that the treatment group was no more likely to respond to the survey than was the control group.

Summary statistics describing the average characteristics of the treatment and control group are also analysed (see Table 2). At the time this document was written, this

## Project 360 preliminary report I

information is not populated for all observations. It is available for 216 observations in the treatment group and 178 observations in the control group. If the randomization was implemented correctly we would expect that there are no differences in observable characteristics between the treatment and control group.

### *Household, victim and perpetrator characteristics*

Victims are disproportionately likely to be female and perpetrators disproportionately likely to be male. Approximately 90% of victims and 10% of perpetrators are female in either the treatment or control groups. The average age of a victim is just over 35 years while perpetrators are 34.6 and 32.8 years in the treatment and control group. Victims are more likely to be white, with reported ethnicities for White, Asian and Black being 81.4% (84.3%), 12.3% (8.4%), and 3.7% (3.7%), in the treatment group (control group). These percentages are consistent with population counts reported by the Office for National Statistics, based on the 2011 census White, Asian and Black ethnicities make up 83.1%, 12.5% and 1.7% of the Leicester, Leicestershire and Rutland population<sup>4</sup>.

58.0% and 66.1% households in the treatment and control group have children. For households with children, the average number of children in a household is 1.99 and 1.89.

Finally, the average number of police call outs in the previous 365 days (including the most recent) is 3.5 for both the treatment and control groups. The average DASH<sup>5</sup> assessment is 1.28 and 1.24 for the treatment and control groups respectively.

Consistent with expectations, differences in characteristics between the treatment and control group are not statistically significant<sup>6</sup>. However, there are few differences between the treatment group and the control group that are worth noting. Specifically, the proportion of Asian households is 3.8 percentage points higher and proportions of households with children is 8.1 percentage points lower in the treatment group relative to the control group. Police call-outs and the DASH assessments are almost identical between groups. This suggests that there is not a significant difference in the severity of domestic violence within the average household between groups. Therefore, any differences we see

---

<sup>4</sup> Census values are taken from reference table KS201UK, available at <http://www.ons.gov.uk/ons/datasets-and-tables/index.html?pageSize=50&sortBy=none&sortDirection=none&newquery=population+ethnicity>

<sup>5</sup> Provide a brief description of the DASH assessment here.

<sup>6</sup> Statistical significance is evaluated at a 95% confidence level.

## Project 360 preliminary report I

in post-treatment outcomes between groups should reflect the treatment itself, rather than a spurious correction attributable to household or victim characteristics.

In the majority of reported cases the perpetrator and victim had a close relationship. In 75% and 78% of cases, for the treatment group and the control group, the victim and perpetrator are either partners or ex-partners. In another 20% and 19% of cases, the victim and perpetrator are a sibling or a parent/child.

### 6. Preliminary results from the victim survey

As part of the analysis a victim follow-up survey was designed to solicit information from victims in both the treatment group and the control group. The survey is administered by the Leicestershire Police Service Improvement Department. There is an initial one month survey (selected results reported in Table 3) and a four month follow up survey. The survey is designed to roughly cover three different types of outcomes: victim's perceived well-being, actions the victim has taken since the incident, and satisfaction with the police handling of the incident. The main findings from the victim survey are summarized in Caption 2.

#### *Survey design and implementation*

The Victim Survey was designed by Leicestershire Police and the University of Leicester specifically for the evaluation of Project 360.

Results from selected questions are reported in Appendix 1, tables 3, 4 and 5. Each table documents average responses for the treatment group, average responses for the control group and the difference between the two. Questions that refer to an improvement or a worsening are framed relative to before the incident which triggered selection into the study pool. The *Difference* column reports the difference in response averages between the treatment group and the control group, with the corresponding t-statistic reported in parenthesis<sup>7</sup>. An asterisk indicates that outcomes for the treatment group and outcomes for the control group are statistically different at a 95% confidence level.

---

<sup>7</sup> The t-statistic corresponds to the null hypothesis that there is no difference between average responses for the treatment and the control groups.

**Caption 2: Victim survey results**

The Victim follow-up survey is conducted one-month following the initial police callout. It is designed for the purpose of analysing Project 360 and implemented by Leicestershire Police. Initial results suggest:

- **The intervention is associated with greater victim stress in the short run.** Relative to just before the initial incident, victims in the treatment group are 31% less likely to report improved *stress levels* and 40% more likely to report worsening *stress levels*, than are victims in the control group. Victims in the treatment group are also more likely to report a worsening of *sleep*, and poorer outcomes for *life control* and *mental health*.
- **The intervention is associated with improved family life and quality of life overall.** Despite the findings for stress, measures of *quality of family life* and *quality of life overall* both significantly improve for the treatment group relative to the control group and victims in the treatment group are 22% more likely to report improvements in their quality of life.
- **Victims receiving the intervention are significantly more likely to take actions to change their situation.** Relative to the control group, the treatment group are significantly more likely to have visited their general practitioner or the accident and emergency services, are more likely to have accessed a domestic violence support service since, and are 24% less likely to be in current contact with the perpetrator.
- **Police satisfaction increases for victims receiving the intervention.** 40% fewer victims in the treatment group report being dissatisfied with the police handling of the case associated with the initial incident. Victim opinion of the police overall is significantly more likely to improve and less likely to worsen as a result of the initial incident for the treatment group relative to the control group.
- **Victims receiving the intervention are significantly more likely to report future incidents.** The treatment group is 68% more likely than the control group to say their willingness to report a future incident has increased.

***Preliminary results******Self-reported well-being***

The first set of questions broadly refers to self-reported perceived well-being (see Table 3). The results suggest that victim safety (Q10), family life (Q15) and quality of life overall (Q16) are more likely to have increased for the treatment group relative to the control group (only quality of life overall is statistically significant). A respondent in the treatment group is 8.7 percentage points more likely to say that their quality of life has improved overall than is a respondent in the control group. On the other hand, life control (Q11), stress level (Q12), quality of sleep (Q13) and mental health (Q14), have all worsened for the treatment group relative to the control group (only stress level is statistically significant). A respondent in the treatment group is 15.5 percentage points less likely to say their stress levels have improved than a respondent in the control group.

***Victim engagement***

The second set of questions broadly describes actions taken by the victim (see Table 4). Non-trivial differences exist between the treatment group and the control group. Victims in the treatment group are 13.1 percentage points less likely to report being in current contact with the perpetrator (Q17) than are victims in the control group. Victims in the treatment group are 12.5 and 5.6 percentage points more likely to report having visited their general practitioner or accidents and emergency (Q20a, Q20b) as result of the incident, than are victims in the control group. Although there is not a significant difference in reported confidence in accessing services (Q21), victims in the treatment group are 8.3 percentage points more likely to report having accessed at least one domestic support service (Q24) than are victims in the control group.

***Police satisfaction***

The next set of questions is categorized as describing police satisfaction of the victim (Table 5). The results here are quite stark. For victims in the treatment group relative to the control group, satisfaction with police handling of the case increases 6.8 percentage points (not statistically significant) while dissatisfaction decreases 8.3 percentage points, relative to reporting neither satisfied or dissatisfied. Relative to no change in opinion of police, a

## Project 360 preliminary report I

respondent in the treatment group is 6.4 percentage points more likely to report an improved opinion and 4.9 percentage points less likely to report a worsened opinion than is a respondent in the control group. Finally, the survey asked whether there was a change in willingness to report future incidents to the police as a result of the most recent incident. Relative to “no change”, a victim in the treatment group is 21.4 percentage points more likely to report an increase and 6.0 percentage points less likely to report a decrease in willingness to report than are victims in the control group.

### 7. Discussion of results

These survey results suggest that the Project 360 intervention has a positive effect on victim outcomes. The finding that stress increases for the treatment group is not surprising if one considers that some victims who receive the intervention will take steps to separate from an abusive partner or make other major life changes.

As this is a preliminary report, we are hesitant to draw any strong conclusions or make policy recommendation based on our findings. However, some broad results are worth pointing out. First, 71% of victims contacted accept help from an engagement worker. Considering that engagement workers cold-call the victims, and that victims are often negatively viewed as being uncooperative or unwilling to support police action<sup>8</sup>, this is a notable take-up rate. Second, based on survey results victims receiving the intervention report a) worsening stress, b) better quality of life overall, c) higher overall satisfaction with police services, compared to victims who did not receive the intervention. Further, victims who received the intervention are less likely to report being in contact with the perpetrator and more likely to report having visited their GP as a result of the incident.

This final result is particularly important, as under-reporting is a serious concern for both police and domestic violence support agencies. As part of their report, the HMIC conducted an on-line survey of victims of domestic violence and found that 46% of survey respondents had never reported domestic abuse to the police. Of these, 30% of survey respondents state that the reason is due to “lack of trust or confidence in the police” (HMIC, 2014; p.31). The

---

<sup>8</sup> In their victim survey the HMIC reports that in 56% of 600 reviewed cases, victims did not support police action (HMIC, 2014; p.52).

## Project 360 preliminary report I

preliminary findings suggest that the service provided by an engagement worker may significantly improve this outcome.

It is important to be cautious about the interpretation of survey results. In particular, we need to consider the possibility that the intervention may influence survey responses without influencing the latent outcome. For example, a victim in the treatment group may feel like they are letting down the engagement worker if they truthfully report they are still in contact with the perpetrator. A victim in the control group will not have this specific incentive to miss-report their perpetrator contact. If this is the case, we would incorrectly conclude that the intervention lead to victims breaking contact with the perpetrator. However, it should be noted that several measures in the surveying process have been taken to minimize the potential for such a bias.

### 6. Next steps

There are a number of next steps currently taking place in the evaluation of Project 360. Details of the timing for the full analysis can be found in Appendix 3.

- ***Four-month follow-up victim surveys.*** Surveys will be administered 4-months following the initial police call-out. This information will be used to look at whether the results reported here are still prevalent in the medium-term.
- ***Analysis of administrative police data.*** Administrative data from Leicestershire Police is being collected. Specific variables of interest include: repeat call-outs for domestic violence and other crimes; victim statements and withdrawal of statements; charges laid against perpetrators.
- ***Analysis of administrative schooling data.*** Leicester City, Leicestershire County and Rutland County will be providing data on schooling outcomes for children in households of our subject pool. This will allow us to test if the intervention had a measurable impact on: school attendance; expulsions and other disciplinary actions; academic performance.
- ***Victim and school administrator face-to-face interviews.*** Further face-to-face interviews will be conducted with school administrators and victims to further understand the mechanisms through which this intervention works.
- ***Cost analysis.*** The total cost of the Project 360 intervention will be documented, including any costs (or savings) arising from an increase (or decrease) in police callouts.

## Bibliography

- Angrist, J. 2006. "Instrumental variable methods in experimental criminological research: what, why and how" *Journal of Experimental Criminology*, 2, 23-44.
- Casey, R.L., Berkman, M., Stover, C.S., Gill, K., Durso, S., Marans, S., 2007. "Preliminary results of a police-advocate home-visit intervention project for victims of domestic violence", *Journal of Psychological Trauma*, 6, 39-49.
- Davis, R.C., D., Taylor, B., 1997. "A proactive response to family violence: The results of a randomized experiment", *Criminology*, 35, 307-333.
- Davis, R.C. Weisburd, D., Hamilton, E.E., 2007. "Preventing repeat incidents of family violence: A randomized field test of a second responder program in Redlands, CA", *Journal of Experimental Criminology*, 6, 397-418.
- Davis, R.C. Weisburd, D., Taylor, B., 2008. "Effects of second responder programs on repeat incidents of domestic violence: A systematic review", Campbell Collaboration.
- Early Intervention Foundation, 2014. "Early intervention in domestic violence and abuse"
- Heckman, J. 2010. "Building bridges between structural and program evaluation approaches to evaluating policy" *Journal of Economic Literature*, 48(2), 356-398
- HMIC (Her Majesty's Inspectorate of Constabulary) 2014. "Everyone's business: Improving the police response to domestic abuse"
- Holland, P., 1986. "Statistics and causal inference", *Journal of the American Statistical Association*, 81, 945-960.
- Imbens, G.W., Wooldridge, J.M., 2009. "Recent developments in the econometrics of program evaluation". *Journal of Economic Literature*, 47, 5-86.
- Lloyd, S., Farrell, G., Pease, K., 1994. "Preventing repeat domestic violence: A demonstration project on Merseyside," Crime Prevention Unit Paper 49. London: Home Office.
- Manski, Charles, 2007. *Identification for Prediction and Decision*, Harvard University Press, Cambridge MA.
- Stover, C.S., Berkman, M., Desai, R., Marans, S., 2010. "The efficacy of a police-advocacy intervention for victims of domestic violence: 12-month follow-up data". *Violence Against Women*, 16(4), 410-425.
- Walby, S., 2004. *The Cost of Domestic Violence*. Women and Equality Unit (DTI).
- Walby, S., 2009. "The cost of domestic violence: Up-date 2009" working paper available at <http://www.lancs.ac.uk/fass/sociology/profiles/34/>

### Tables

Table 1: Sample size by month and treatment

	Treatment		Control	
	Total	Surveyed	Total	Surveyed
November	107	15	113	20
December	122	20	102	14
January	93	25	95	17
February	60	20	61	19
March	91	26	61	18
April	56	11	48	9
<b>Total</b>	<b>529</b>	<b>117</b>	<b>480</b>	<b>97</b>
Percent surveyed	22.1%		20.2%	
95% CI	(20.0%, 24.2%)		(18.5%, 21.9%)	

95% CI reports the 95% confidence interval for the percent surveyed for each of the two groups.

## Project 360 preliminary report I

In Table 2 mean value of various characteristics for the treatment group (Treatment) and the control group (Control) is presented. In the final column of the table (Difference) the difference between the values for treatment and control groups is reported. The t-statistic corresponding to the hypothesis that this difference is equal to zero (i.e. the reported means for the treatment and control group are the same) is reported in parenthesis.

Table 2: Summary statistics for treatment and control groups

	Treatment	Control	Difference
Victim sex (proportion female)	0.896	0.910	-0.014 (0.279)
Perpetrator sex (proportion female)	0.097	0.107	-0.010 (0.488)
Victim age	35.919	35.152	0.767 (0.392)
Perpetrator age	34.588	32.800	1.788 (0.973)
<i>Ethnicity</i>			
White	0.810	0.843	-0.032 (0.668)
Asian	0.123	0.084	0.038 (1.841)
Black	0.037	0.039	-0.002 (0.167)
Other	0.026	0.017	0.009 (0.947)
Proportion of households with children	0.580	0.661	-0.081 (1.830)
Number of children in household (for households with children)	1.993	1.887	0.106 (1.014)
Police call outs in 365 days <sup>†</sup>	3.542	3.509	0.033 (0.247)
DASH (responding officer)	1.276	1.235	0.041 (0.580)

*T-statistics corresponding to the hypothesis that the difference is 0 reported in parenthesis.*

*\* indicates difference is statistically significant at a 5% level of significance.*

*<sup>†</sup> Police call outs for domestic violence in which the same victim is listed in the responding officer report.*

## Project 360 preliminary report I

Table 3: Victim survey, selected questions for *perceived wellbeing*

	Treatment		Control		Difference	
	Improved	Worsened	Improved	Worsened	Improved	Worsened
Q10. Personal safety	0.581	0.077	0.526	0.062	0.055 (1.284)	0.015 (0.936)
Q11. Life control	0.521	0.137	0.588	0.124	-0.066 (1.536)	0.013 (0.596)
Q12. Stress level	0.350	0.274	0.505	0.196	<b>-0.155*</b> (4.040)	<b>0.078*</b> (2.667)
Q13. Quality of sleep	0.274	0.265	0.299	0.186	-0.025 (0.799)	<b>0.079*</b> (2.781)
Q14. Mental health	0.274	0.222	0.289	0.216	-0.015 (0.479)	0.006 (0.204)
Q15. Family life	0.474	0.103	0.423	0.186	0.051 (1.312)	<b>-0.082*</b> (3.600)
Q16. Quality of life overall	0.478	0.157	0.392	0.155	<b>0.087*</b> (2.241)	0.002 (0.079)

Observations: 107 (treatment), 97 (control). T-statistics corresponding to the hypothesis that the difference is 0 reported in parenthesis.

\* indicates difference is statistically significant at a 5% level of significance.

"Improved" or "worsened" is relative to before the incident that triggered selection into the study.

## Project 360 preliminary report I

Table 4: Victim survey, selected questions for *actions taken*

<i>Proportion of affirmative answers</i>	Treatment	Control	Difference
Q17. Currently in contact with perpetrator	0.426	0.557	<b>-0.131*</b> (3.210)
Q20a. Visited GP as a result of incident	0.404	0.278	<b>0.125*</b> (3.116)
Q20b. Visited A&E as a result of incident	0.087	0.031	<b>0.056*</b> (3.774)
Q21. Feel confident accessing services <sup>†</sup>	0.856	0.888	-0.032 (0.626)
Q24. Accessed one or more service since <sup>†</sup> the incident	0.642	0.560	<b>0.083*</b> (1.996)

*T-statistics corresponding to the hypothesis that the difference is 0 reported in parenthesis.*

*\* indicates difference is statistically significant at a 5% level of significance.*

*<sup>†</sup> Services broadly defined as any services available in Leicestershire to assist victims of domestic violence.*

## Project 360 preliminary report I

Table 5: Victim survey, selected questions for *police satisfaction*

	Treatment		Control		Difference	
	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied
Q27. Satisfaction with police handling of case <sup>†</sup>	0.789	0.123	0.722	0.206	0.068 (1.384)	<b>-0.083*</b> (3.442)
Q30/Q31. My opinion of police has <sup>‡</sup> ...	Improved 0.325	Worsened 0.096	Improved 0.260	Worsened 0.146	Improved <b>0.064*</b> (2.296)	Worsened <b>-0.049*</b> (1.975)
Q32. My likelihood of reporting a future incident has <sup>‡</sup> ...	Increased 0.526	Decreased 0.0965	Increased 0.313	Decreased 0.156	Increased <b>0.214*</b> (6.447)	Decreased <b>-0.060*</b> (2.247)

*T*-statistics corresponding to the hypothesis that the difference is 0 reported in parenthesis.

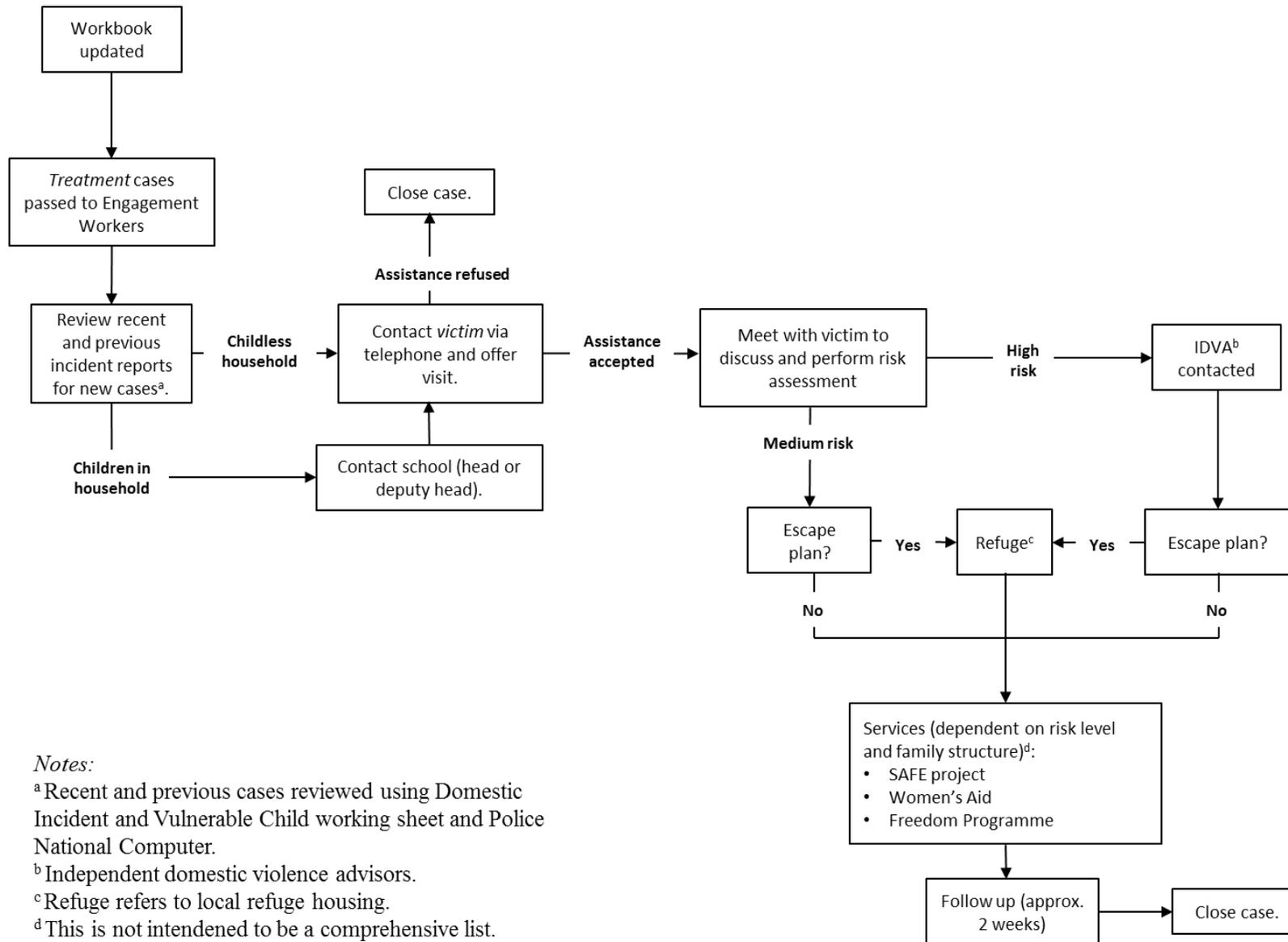
\* indicates difference is statistically significant at a 5% level of significance.

<sup>†</sup>Relative to "neither satisfied or dissatisfied".

<sup>‡</sup>Relative to "remained the same".

## Project 360 preliminary report I

### Appendix 1. Engagement worker intervention flow



## Project 360 preliminary report I

### Appendix 2. Timeline

											Completed					Yet to complete						
2014-2015	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
<i>Project 360</i> intervention																						
University ethics																						
<b>Project scope</b>																						
Scope of research: <i>Project 360</i> team and PIs																						
Identify data needs																						
<b>Data and Analysis</b>																						
Data assurances (Police, City, County)																						
Police survey (1-month)																						
Police survey (4-month)																						
Collect data (City and County)																						
Quantitative analysis																						
Engagement worker interviews																						
School interviews																						
Household interviews																						
<b>Write-up</b>																						
Research paper																						
Policy brief																						
<b>Dissemination</b>																						
Early debrief with <i>Project 360</i> team																						
Final debrief with <i>Project 360</i> team																						
Dissemination workshop																						

**Appendix 3. University of Leicester researchers**

Jesse Matheson and Martin Koppensteiner are lecturers in the Department of Economics at the University of Leicester. They both have an expertise in quantitative policy analysis. Réka Plugor is a research associate with the Centre for Sustainable Work and Employment Futures, University of Leicester.

Jesse Matheson received his PhD in economics from the University of Calgary, joining the University of Leicester in the fall of 2011. Matheson has published papers in internationally recognized, peer-reviewed, journals in the fields of economics and public health. His research spans consumer choice, addictive behaviours and household poverty, with a focus on quantifying the effect that public policy has on these issues. Matheson has experience producing and publishing research with highly sensitive data (in work with Statistics Canada) and disseminating complex research results to a broad audience (in work with the Canadian Institute for Advanced Research).

Martin Koppensteiner received his PhD in Economics from Queen Mary University of London, joining the University of Leicester in 2011. His research focuses on impact evaluation of public policies in middle and low income countries. He has evaluated programmes and policies on education, crime and health. Koppensteiner has expertise in the use of large administrative and sensitive datasets from the Brazilian Ministry of Education and the Ministry of Health. He has worked with the Secretariat of Public Defence in the Brazilian state of Minas Gerais and is a consultant for the Inter-American Development Bank.

Réka Plugor has been with the University of Leicester since 2009 working in various research roles and she received her PhD in Labour Market Research from the University of Leicester in 2014. She has a broad range of research interests located mainly within sociology of work, education and youth. She conducts research on these topics from both theoretical and applied perspectives using qualitative, quantitative or mixed methods. Plugor has experience in working with large and complex datasets as well as highly sensitive data from narrative and life history interviews. She has published her work in Hungarian, Romanian and English in policy reports, books and peer-reviewed journals.

At the University of Leicester Matheson and Koppensteiner teach modules and workshops, at the undergraduate and post-graduate level, on quantitative methods for impact evaluations and are co-directors for the *Health and Public Policy Evaluation Network*.

More information and contact details can be found at:

Jesse Matheson: <http://www2.le.ac.uk/departments/economics/people/jmatheson>

Martin Koppensteiner: <http://www2.le.ac.uk/departments/economics/people/mfkoppensteiner>

Réka Plugor: <http://www2.le.ac.uk/colleges/socsci/research/research-centres/cswe/staff/reka-plugor>