

OUTCOMES OF EDUCATIONAL WELFARE OFFICER CONTACT WITH TEENAGERS IN ENGLAND

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ABOUT THE PROJECT



- Part of a larger project funded by the Nuffield Foundation with the aim to examine children, young people and families using social work services (and other professional support services, including Educational Welfare Officers)
- Research Team: Jonathan Scourfield (PI: Cardiff), Elaine Sharland (Sussex)
- We started with Longitudinal Study of Young People in England (LSYPE)
- British Panel Household Study (BHPS)
- Millennium Cohort Study (MCS)
- Avon Longitudinal Study of Parents and Children (ALSPAC)

BACKGROUND

- Successive government initiatives aimed at greater participation and reducing educational inequalities
- Raising of minimum school leaving age, introducing teaching assistants, EMA, FSM, and educational welfare officers
- Education welfare officers (EWOs) provide support for families and pupils with behavioural and attendance issues
- However, is educational welfare service targeted to those who most need it? What effects does EWO contact have on a young person's educational aspirations and outcomes?

ROLE OF EDUCATIONAL WELFARE OFFICERS

- Largely deals with school attendance matters
 - Encourage parents to form good relationships with school
 - Identify attendance problems and support parents and pupils to resolve them
 - Advise parents on legal responsibility for their children's enrolment and attendance at school
 - Reintegrating non-attenders: adapting timetables, acting as learning mentors, befriending pupils and collecting them to schools
- Concerned with pupils' behaviour, underachievement, health and general welfare
- Advise on child protection issues and special educational needs

TRUANCY AND RISKY BEHAVIOURS

- Risk-taking behaviour often trigger for EWO contacts
 - Heavy smoking (Hibbett & Fogelman 1990),
- Truancy and persistent absenteeism related to exclusion (Bratby 1998), youth offending (Ball & Connolly 2000), alcohol consumption (Miller & Plant 1999), lower educational outcomes and higher risk of unemployment (Attwood & Croll 2006)
- Involvement of EWO may be important to pupils' educational achievement and aspiration

ACHIEVEMENT AND ASPIRATION

- Inequalities in educational achievement: early achievement gaps (Kitchen et al. 2013); 21% poorest quintile compared to 75% richest quintile achieve five GCSEs A*-C (Chowdry et al 2010); and in aspiration (Goodman & Gregg 2010)
- Earlier achievement gaps critical to later educational decisions: Primary vs. secondary effects (Boudon 1974, Jackson et al. 2007)
- Children from more advantaged backgrounds have more ambitious educational aspirations

PREDICTORS AND OUTCOMES OF EWO CONTACT

We seek to establish both predictors and outcomes of EWO contact as a result of teenager's problem behaviour

- Using four domains in Bronfenbrenner's ecological model (Strand 2011):
 - *Structural* – parents' social class, family structure
 - *Neighbourhood* – whether **from** disadvantaged **d** neighbourhood
 - *Familial* – quality of relationships with parents, degree of parents' involvement of teenagers' schooling, parental style
 - *Individual* – ethnicity, gender, risk-taking behaviour

RESEARCH QUESTIONS

1. What (structural, neighbourhood, familial and individual) characteristics predict EWO contact among young people in England? (associative differences)
2. What *effect* does EWO contact have on a young person's educational attainment and aspiration? (causal effects of EWO contact)

DATA

- Longitudinal Study of Young People in England
- LSYPE began in 2004 when sample members were aged between 13 and 14
- 7 waves where young people and parents are interviewed
- LSYPE are linked to The National Pupil Database to capture GCSE results
- All models are adjusted for 654 school clusters

LSYPE MEASURES

- **“In the last 12 months, have you been in touch with educational welfare services because of the young person’s behaviour at home or at school? This includes both you getting in touch with them and them contacting you?”**
- For the purpose of this analysis EWO was measured at Wave 2 and 3 (ever) and outcome measures examined between Wave 3 and Wave 4

DEPENDENT VARIABLES

Logistic Regression

Ever had EWO contact from the age of 13

Treatment Model

GCSE attainment - A benchmark for government achievement and a prerequisite to progress to further study

Educational aspiration and confidence – Secondary effects are important for educational inequality (Boudon 1974; Jackson 2007)

THE CAUSALITY CHALLENGE

- The problem is that we can at most observe one of these outcomes because the unit can be exposed to only one level of the treatment
- To address the “fundamental problem of causal inference.” (Holland 1986; Imbens & Woolbridge 2009)
- Inverse-probability-weighted regression-adjusted results (IPWRA)

IPWRA

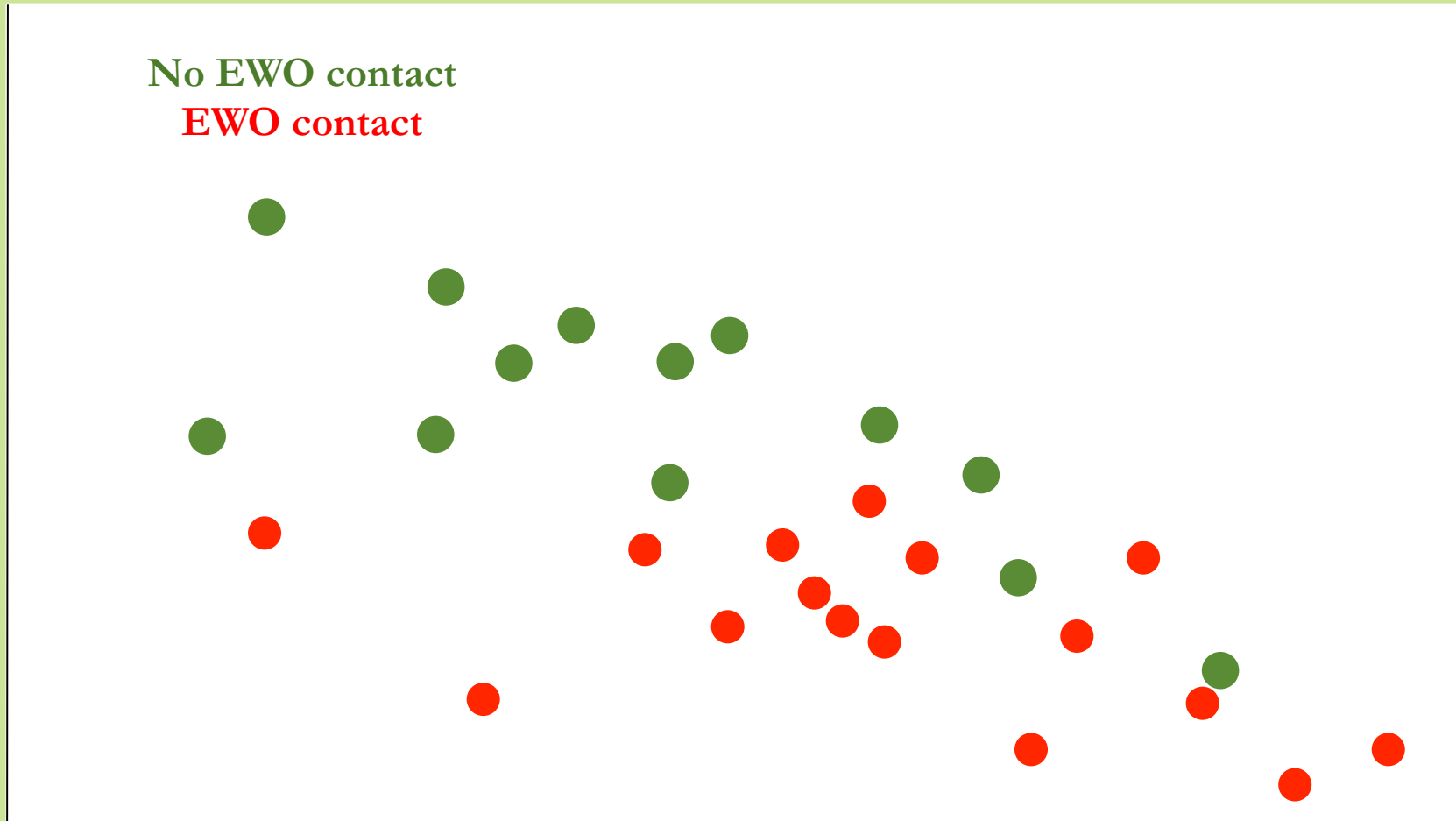
- IPWRA is a doubly robust estimator (Wooldridge 2010): it estimates two models:
- **The treatment status model** predicts the likelihood of the young person to have EWO contact
- **The outcome model** we are interested in the young person's educational outcomes and aspirations. And we can input a number of dependent variables that we know to influence the outcome.

IPWRA

- POM: Potential Outcome Mean which measures the average linear GCSE score for those with EWO contact and the average linear GCSE score for those with no contact.
- ATE: Average Treatment Effect
$$\text{ATE} = E(Y^1 - Y^0)$$
where Y is the outcome of interest (0/1)
- ATET: Average Treatment Effects on the Treated
$$\text{ATET} = E(Y^1 - Y^0 | D=1)$$
where Y is the outcome of interest (0/1) and D is the treatment status (0/1)

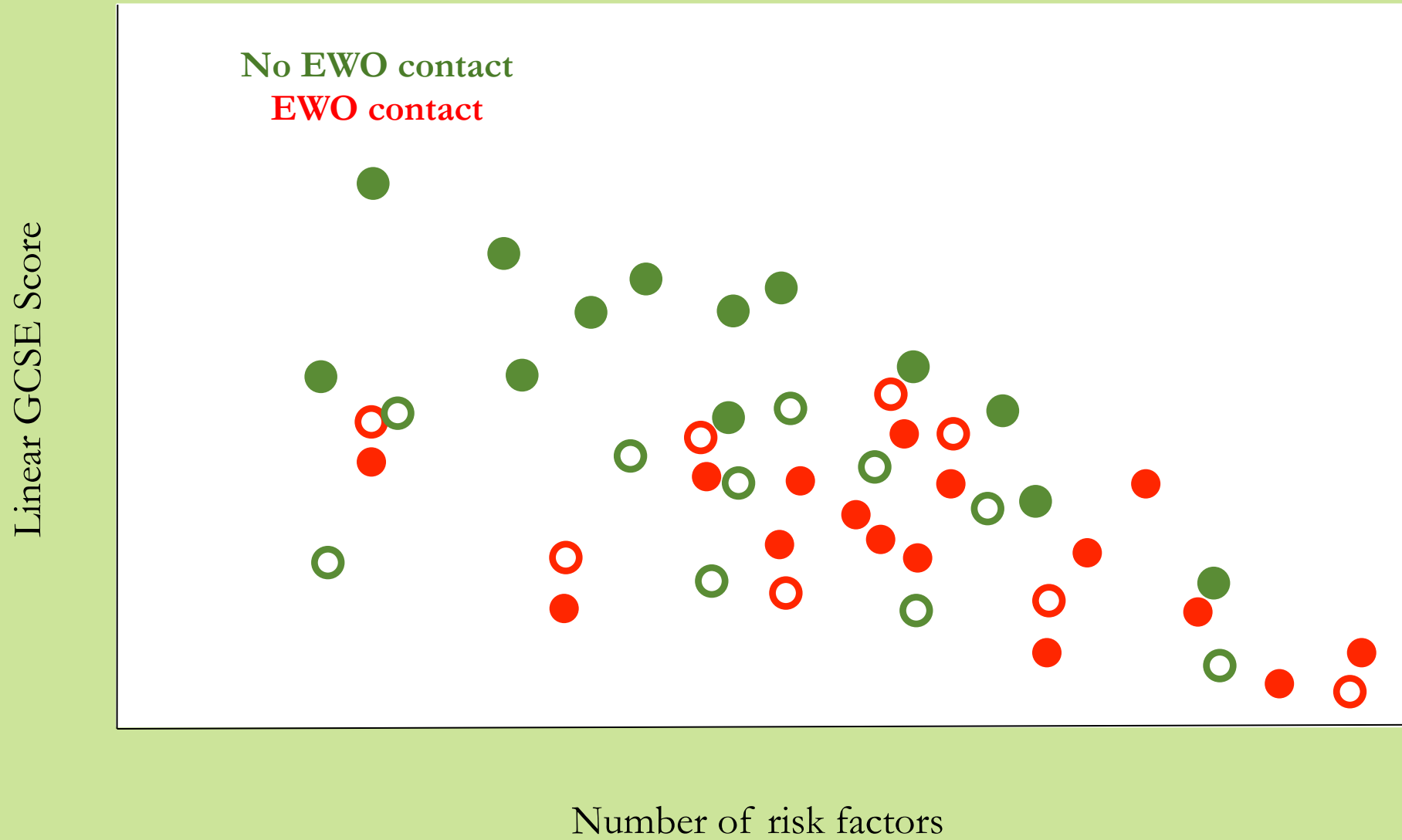
Regression Lines for the Observations

Linear GCSE Score

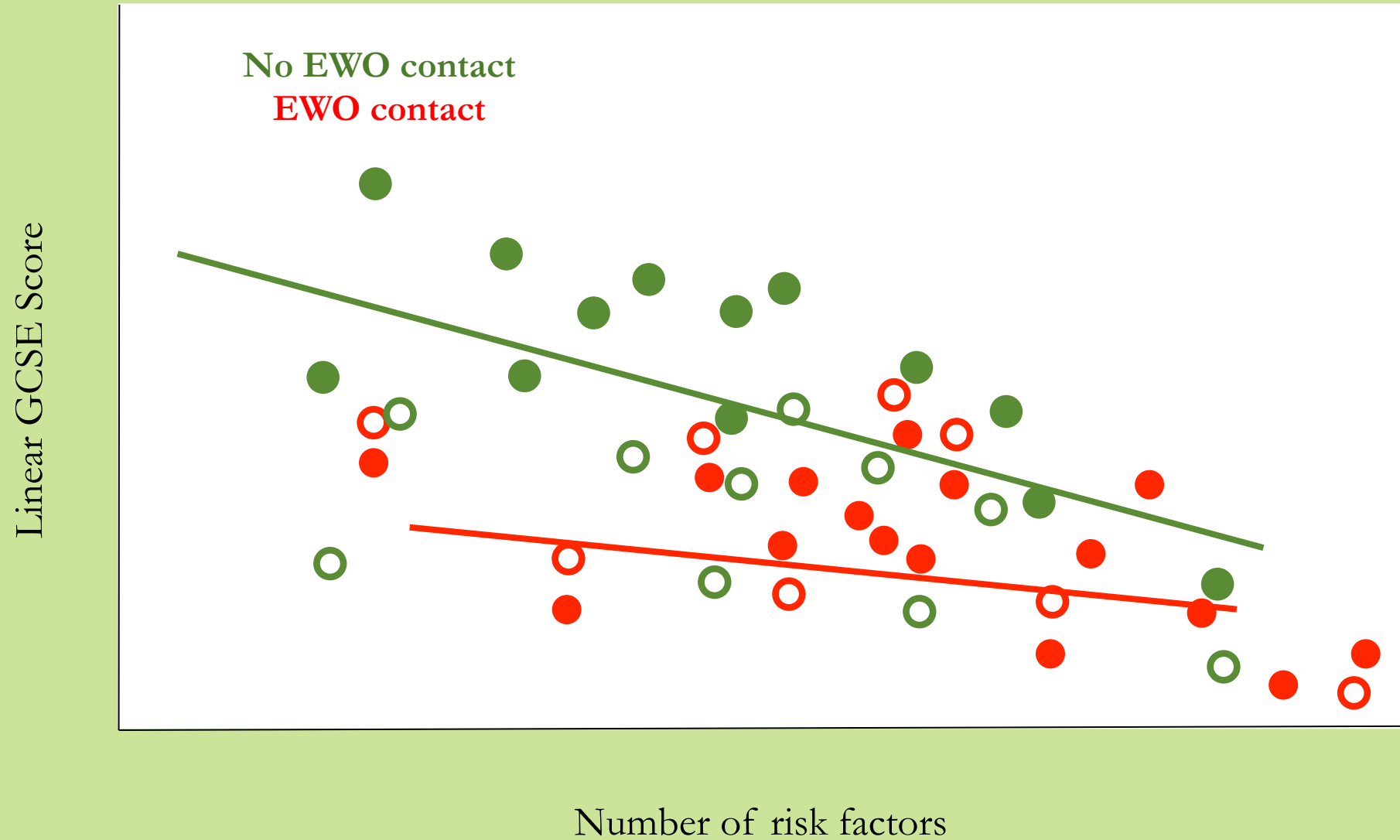


Number of risk factors

Regression Lines for the Observations

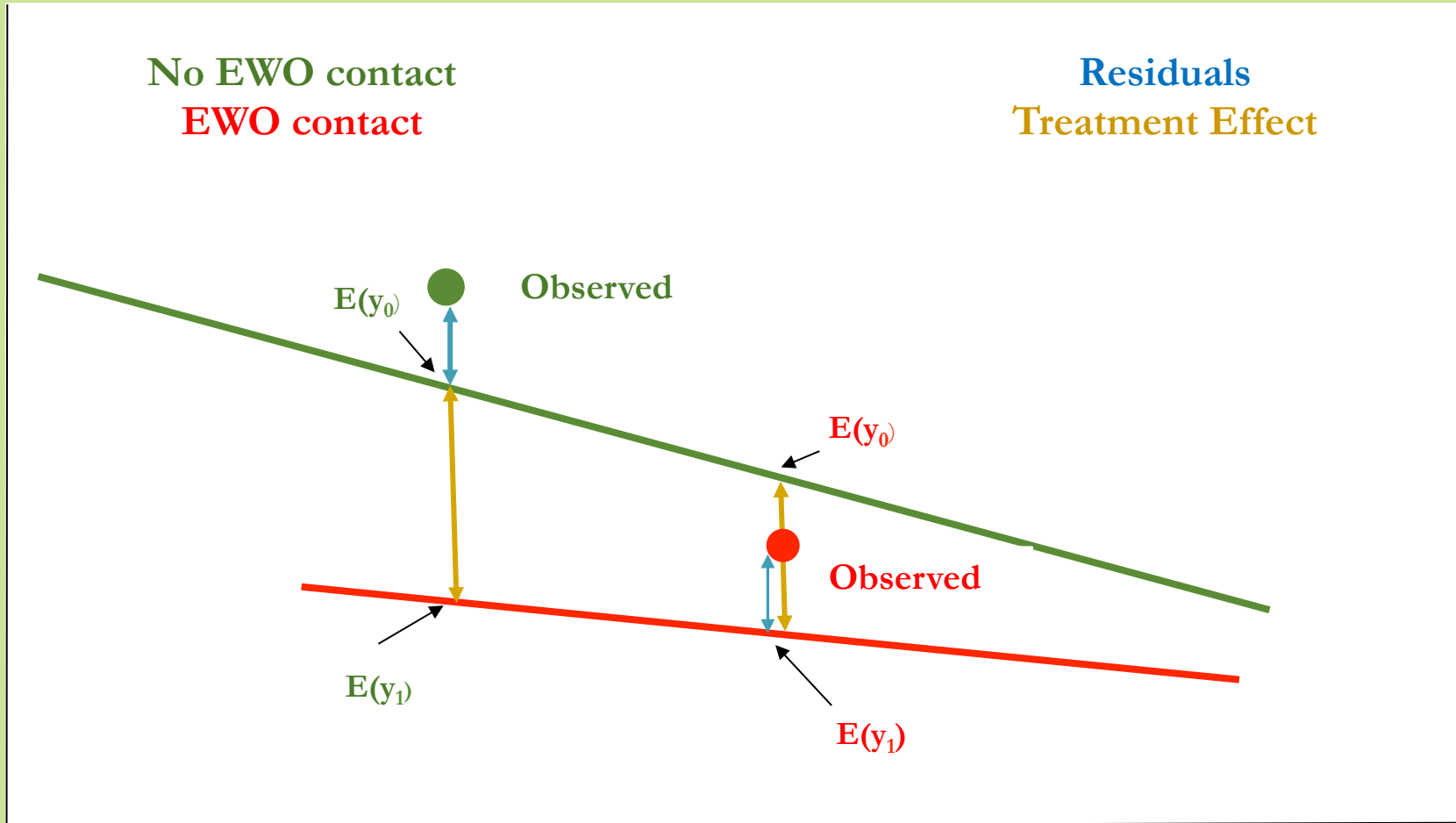


Regression Lines for the Observations



Regression Lines for the Observations

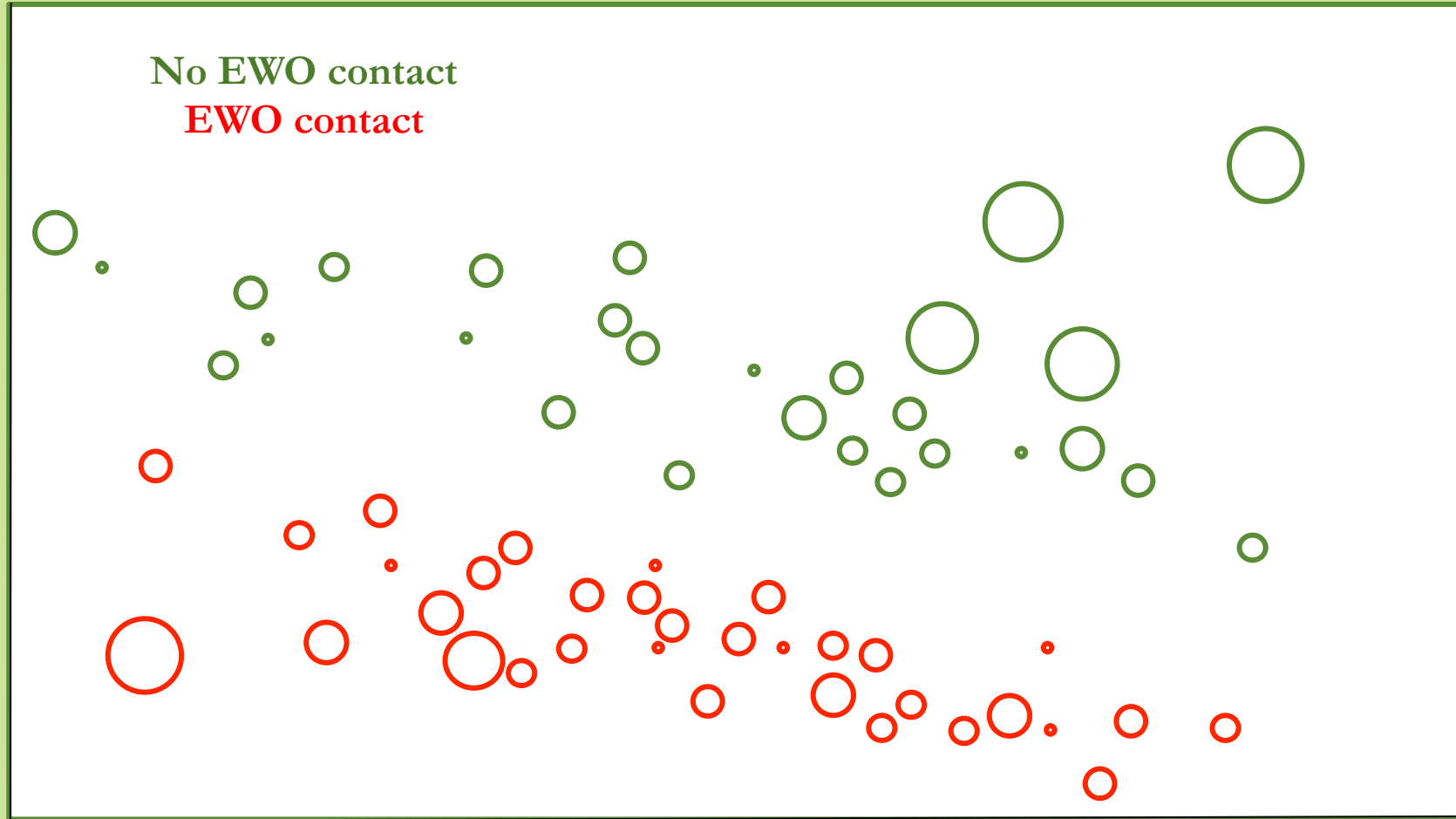
Linear GCSE Score



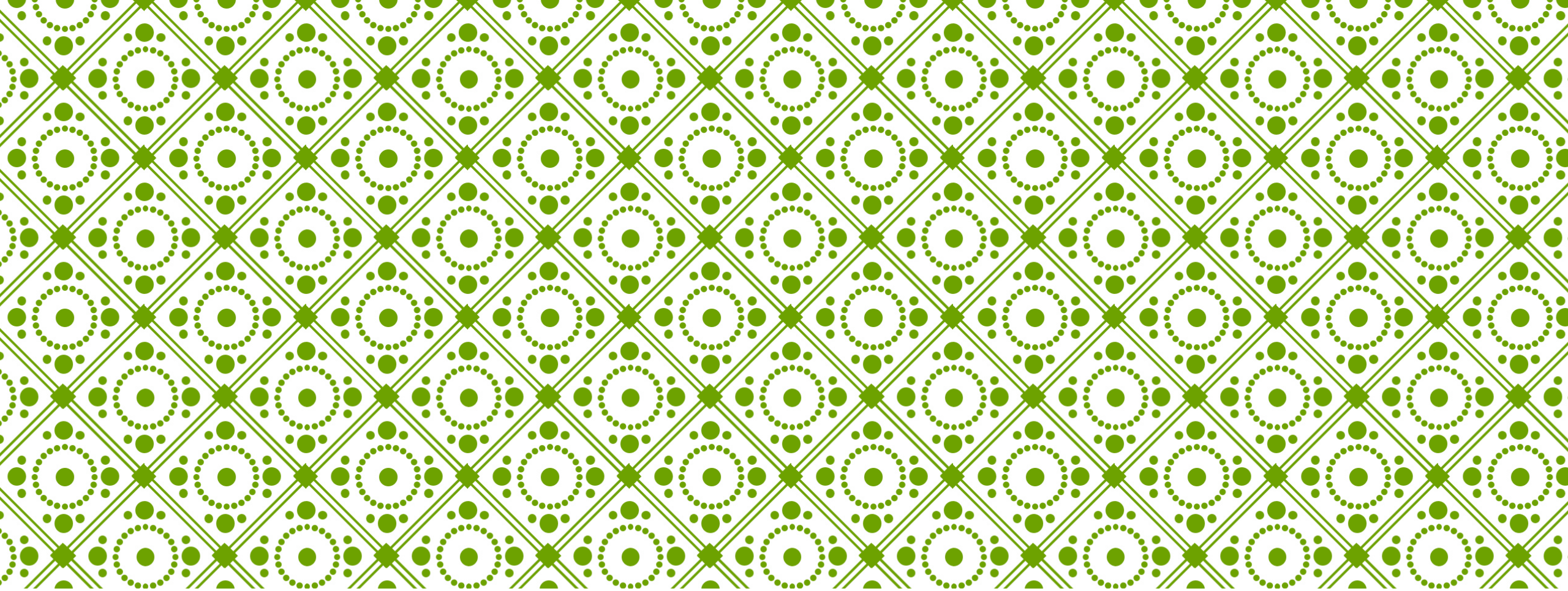
Number of risk factors

Inverse Probability Weights

Linear GCSE Score



Number of risk factors



FINDINGS



THE TREATMENT MODEL

What social factors predict EWO contact among young people in England, including structural, neighbourhood, familial and individual factors characteristics?

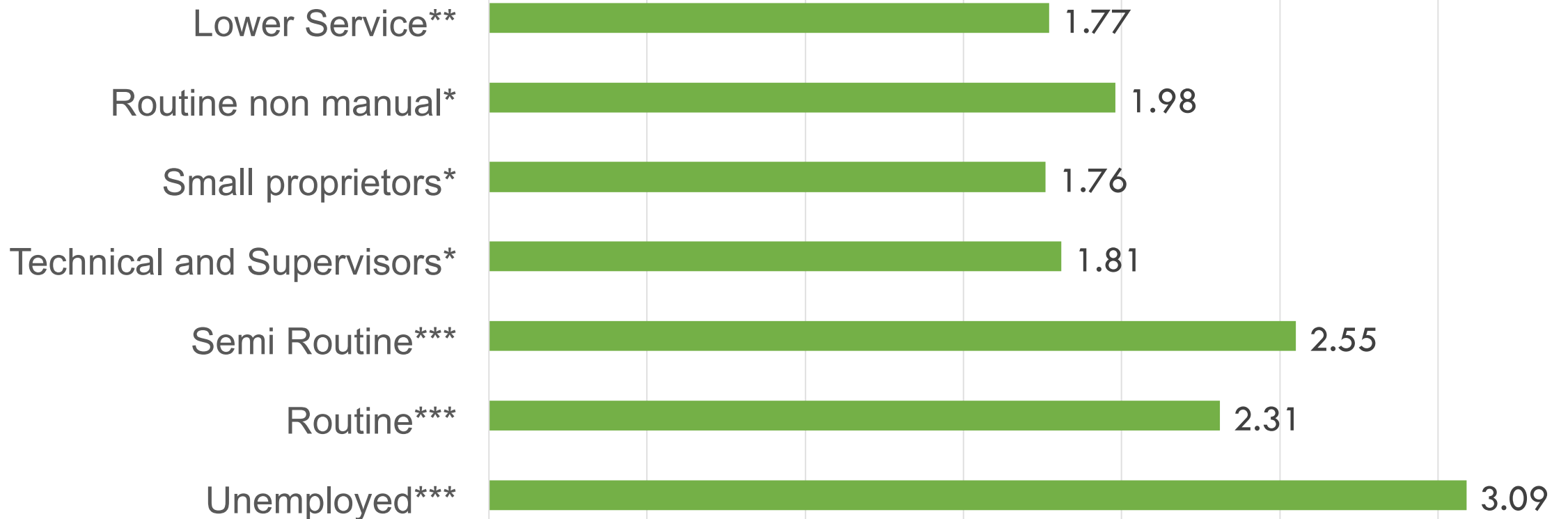
ANALYTIC FRAMEWORK

- Following the analytic strategy of Bronfenbrenner (1977,1979) human action should be considered through the lens of multiple nested influences
- Strand (2007) identified four broad domains using the LSYPE data including:
 - Structural
 - Neighbourhood
 - Familial
 - Individual

WHO HAS EWO CONTACT?

STRUCTURAL

[Ref: Higher Service Class]



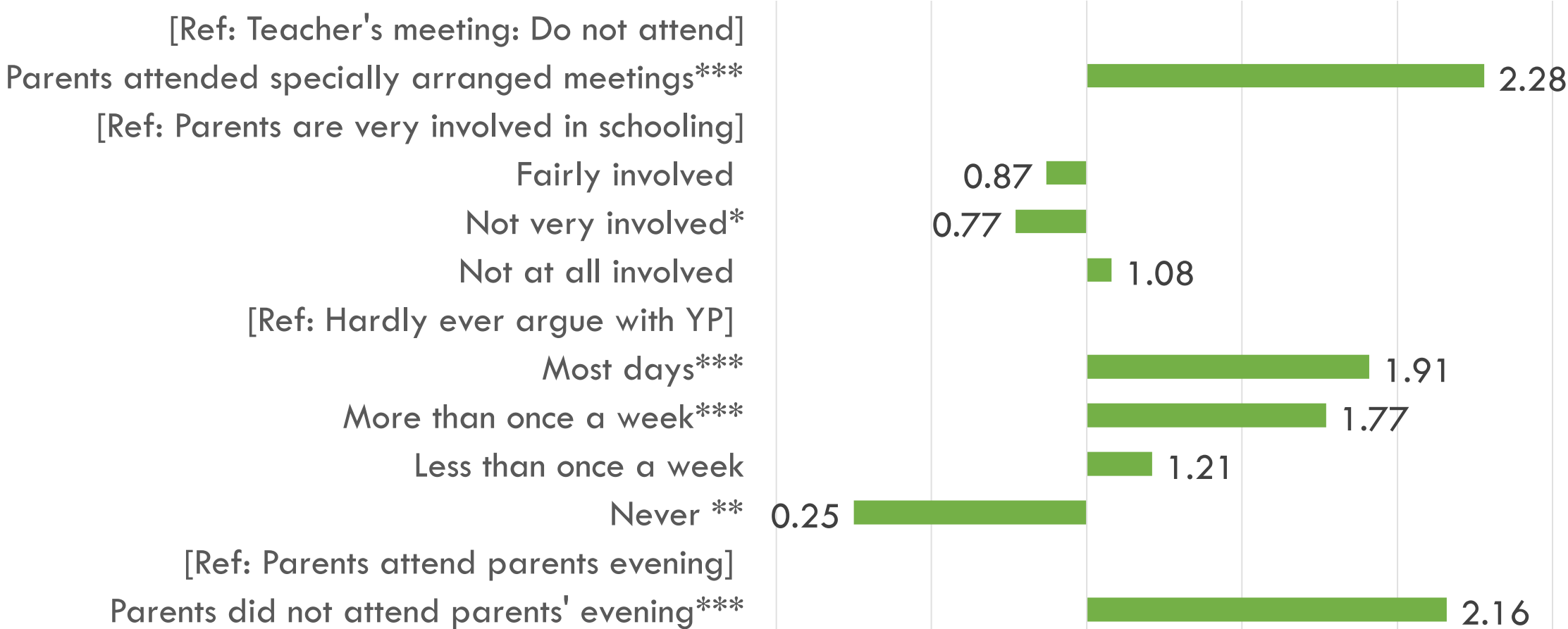
WHO HAS EWO CONTACT?

NEIGHBOURHOOD

None of the neighbourhood characteristics are significant, over and above the structural, familial and individual characteristics.

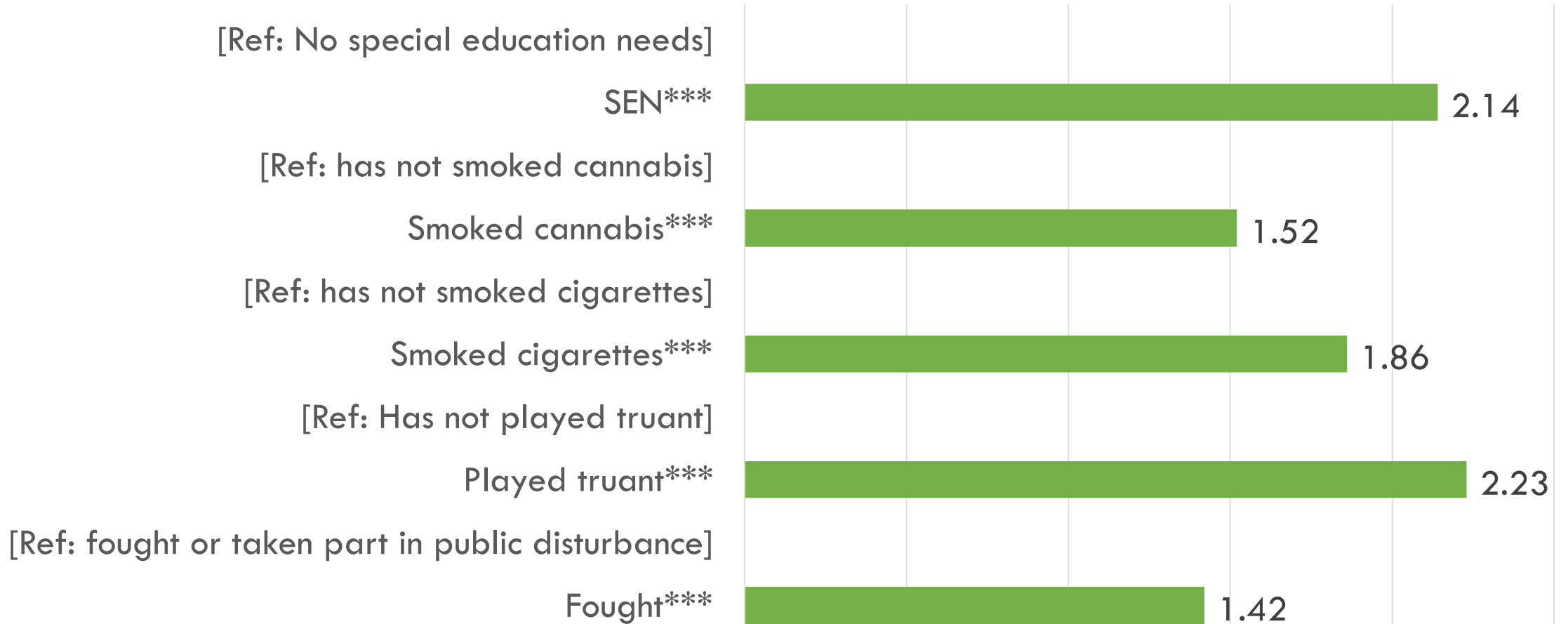
WHO HAS EWO CONTACT?

FAMILY



WHO HAS EWO CONTACT?

INDIVIDUAL



(THE OUTCOME MODEL)

What *effect* does EWO contact have on a young person's educational outcomes?

IPWRA: GCSE

Model 1: Linear GCSE score			Model 2: Five GCSEs A*-C (inc English & Maths)		
Reference Category: No educational welfare contact			Reference Category: No educational welfare contact		
Educational Welfare Officer Contact ATE	-62.49***	(7.20)	Educational Welfare Officer Contact ATE	0.88***	(0.03)
Educational Welfare Officer Contact ATET	-73.36***	(5.38)	Educational Welfare Officer Contact ATET	0.90***	(0.01)
Observations	10,328		Observations	10,328	

COMPARISON: OLS AND LOGISTIC REGRESSION

	OLS GCSE score		Logistic Regression 5 A*-C GCSEs	
	β	SE	OR	SE
Educational Welfare Officer Contact	-95.27***	(5.17)	0.34***	(0.04)
Constant	510.85***	(4.26)	5.36***	(0.41)
Log Likelihood	-		-6918.68	
R ² /Pseudo R ²	0.33		0.17	
Number of observations	10,328		10,328	

IPWRA: UNIVERSITY ASPIRATION

Model 3: Likely to apply to University			Model 4: Likely to be accepted if apply to University		
Reference Category: No educational welfare contact			Reference Category: No educational welfare contact		
Educational Welfare Officer Contact ATE	0.93**	(0.02)	Educational Welfare Officer Contact ATE	0.93**	(0.02)
Educational Welfare Officer Contact ATET	0.95**	(0.02)	Educational Welfare Officer Contact ATE	0.92**	(0.02)
Observations	10,328		Observations	8,900	

COMPARISON: LOGISTIC REGRESSION

	Logistic Regression Aspire to University		Logistic Regression Confidence in being accepted	
	OR	SE	OR	SE
Educational Welfare Officer Contact	0.49***	(0.05)	0.44***	(0.06)
Constant	14.31***	(1.23)	51.07***	(6.99)
Log Likelihood	-6442.74		-3132.86	
R2/Pseudo R2	0.14		0.12	
Number of observations	10,328		8,900	

CONCLUSIONS

All else being equal, the following characteristics significantly associated with an **increase** in the odds of EWO contact:

- Lower social class background
- Parents attending specially arranged meetings
- Arguing with parents frequently
- Not attending scheduled parents' evening
- Special Educational Needs (SEN)
- Smoking cannabis, truanting, fighting and smoking cigarettes

CONCLUSIONS

All else being equal, the following characteristics significantly associated with a **reduction** in the odds of EWO contact:

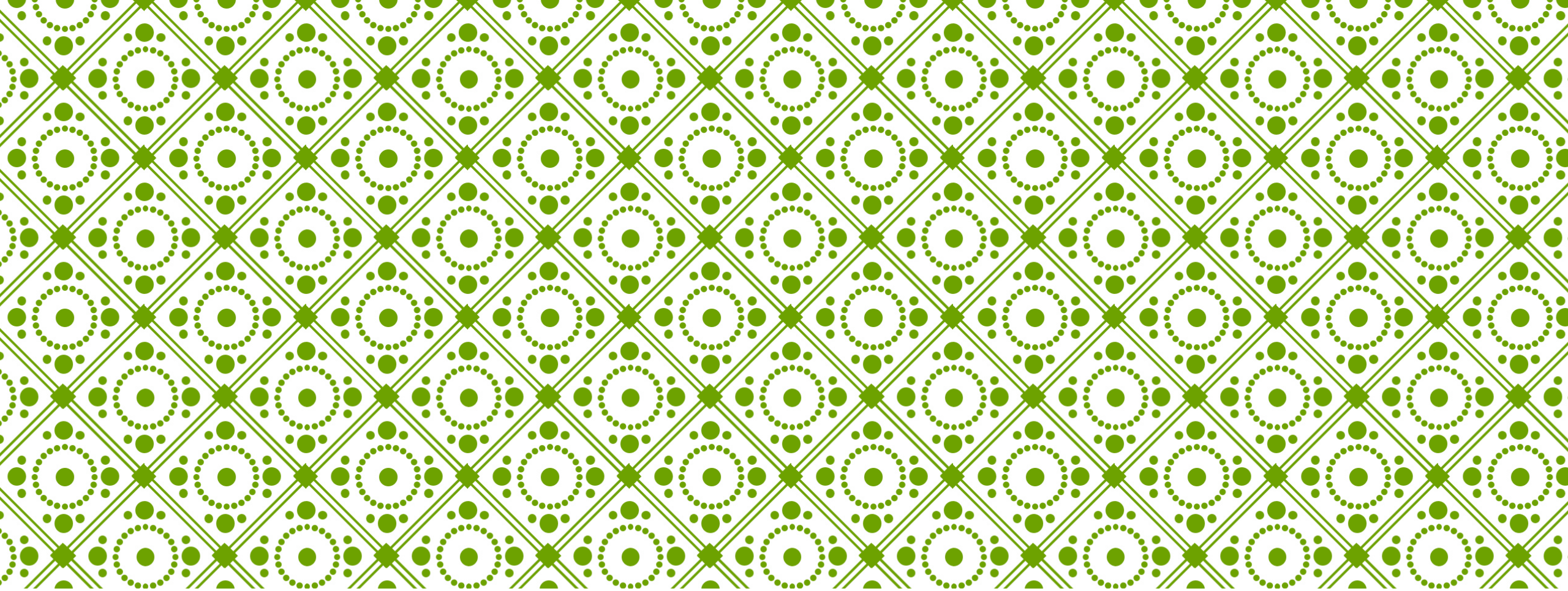
- Parents who report feeling not very involved in their child's schooling (relative to being very involved)
- Never arguing with parents

CONCLUSIONS: ATET & ATE EFFECTS

- GCSE - EWO contact lowers the odds of achieving five GCSEs A*-C (and the GCSE scores) significantly
- UNIVERSITY CONFIDENCE AND ASPIRATION - There is no difference in the odds for the 'treated' and 'untreated' for aspiration to apply to university, however the odds of confidence in being accepted if they apply are lower for those who receive EWO contact (at 5% sig. level)

EXPLANATIONS

- Unobserved characteristics which distinguish EWO recipients from the rest (e.g. adverse childhood experiences)
- Labelling theory
- Learned helplessness
- Poor quality EWO and not enough use of effective help
- Or beneficial effects cannot be experienced in the short-term
- Limitation of data: Measure of EWO contact does not tell us the nature of this contact



*SUGGESTIONS,
COMMENTS & QUESTIONS*

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