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Not participating in education, employment or training (NEET): Hope to mitigate new social risks in the UK?

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Abstract

Young people not participating in education, employment or training (NEET) are a key policy concern in Europe. We examine whether hope, as a form of life course agency, plays a protective role against the risk of being NEET in the context of the British welfare state. Hope is conceptualised as multidimensional: being a temporally embedded, agentic mentality comprised of one's sense of adaptive decision-making in the present and pathways thinking towards the future. Longitudinal estimations based on the latest Understanding Society microdata (2009-2018) indicate a direct association between higher-hope modes, on average, and a lower likelihood of being NEET. Further, our study assesses whether hopeful agency is moderated by the experience of parental worklessness. Findings indicate that while hope is not more important for those who experienced disadvantages in upbringing, hopeful agency is shown to be equally important in the face of past and present NEET risks. For the UK, building young peoples' adaptive, agentic mentality towards their future in education or employment over the long-term, may prove one cost-effective policy approach.

Keywords: Hope; life course agency; parental worklessness; NEET; youth inactivity.

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1. Introduction

The exclusion of young people from participation in any education, employment or training (NEET) has been a key policy concern in Europe for the last two decades. Annual NEET rates among young people aged 16-29 in the UK sat well over 10% between 1992 and 2015 (Holmes, Murphy and Mayhew, 2019). The term NEET describes a state of youth vulnerability wherein young men or women can be unemployed or be economically inactive along a continuum of labour market or educational withdrawal (Eurofound, 2012).

Youth in post-industrial societies face a series of 'new social risks' – particularly young parents – attempting to accommodate family care roles and low-wage, insecure employment. Whereas Nordic welfare state policies help vulnerable groups actively combat risks, weaker liberal policies such as those found in the UK or US largely eschew state protections; self-reliance is emphasised to those most affected by new social risks (Bonoli, 2007: 497). A social risk in the British welfare system which has escalated since the 1980s is that the modal state of workless households with children is now inactive rather than unemployed, and these households, at a time of widespread employment, are most likely to experience welfare dependency and poverty (Gregg, Scutella and Wadsworth, 2010).

In discussions of youth inactivity, UK policy makers often come close to blaming the most vulnerable in society for their disadvantaged backgrounds, implicating welfare-dependent parents instilling either an aversion to work in their children or alternatively encouraging their familiarity and comfort with inactivity – an intergenerational 'culture of worklessness' (MacDonald *et al*., 2014; Zwysen, 2010). Family background determines much of a young person's educational attainment and later-life class positions (Bukodi and Goldthorpe, 2013), but it may not offer a full explanation of variation over the life course (Erola, Jalonen, and Lehti, 2016; Schoon and Lyons-Amos, 2016).

An interesting conjecture forwarded by Zuccotti and O'Reilly (2018) but left untested in their study of family background and ethnicity for NEET transitions is that differences in attitudinal dispositions between ethnic groups may underlie residual risk differentials (Zuccotti and O'Reilly, 2018: 14). Prior evidence suggests individuals more susceptible to being NEET in the UK diverge not in displaying less motivation to seek work, but rather in displaying more negative perceptions of themselves vis-à-vis work, i.e., their valuation of self, where self-assessed employability and optimism about doing well trump any valuation of work (Goldman-Mellor *et al*., 2016). Relations between mental well-being and training or job outcomes have less frequently been approached from the angle of how the psychological affects the socio-economic outcome, rather the focus tends to be on the reverse (Samuel, Bergman and Hupka-Brunner, 2013). Moreover, recent research has illustrated the positive and protective effects of individual agency and psychosocial resources for successful educational and employment outcomes (Duckworth and Schoon, 2012; Hitlin and Johnson, 2015; Mirowsky and Ross, 2007; Schoon, 2014).

This leads us to pose the study's overarching question, which asks: what role – if any – does hopeful agency play in mitigating NEET risks among young people in the UK? The paper aims to advance life course research which seeks empirical understandings of the potential for individuals' dynamic mental modes to buffer certain intergenerational and structurally embedded disadvantages. As Emirbayer and Mische (1998) point out:

> "while human agency represents the possibility for imaginative distancing from (and communicative evaluation of) received structures, agentic processes themselves assume diverse empirical forms (Emirbayer and Mische, 1998: 1004)".

In this paper we argue that hope constitutes a form of agentic orientation which warrants more attention in the sociological literature. Bringing together and building on the work of Snyder (2002; 2007), Hitlin, and Johnson (2009; 2015; 2017) in particular, we conceptualise hope as

a multidimensional cognitive process comprised of two thought-paths, with temporality a key part: one is a 'way' which is clarity of thought on linked goals or a future; the other is self-perceived 'will', a confidence in moving forwards to the future. Hopeful individuals are defined as those who can envision a future positively, adapt to and deal with problems that arise along the way (in the present) and adjust (routes) accordingly, all the while maintaining their self-belief in moving forward.

We use the latest representative panel data from Understanding Society (UKHLS 2009-2018) to explore the important conditionality of associations between hopeful agency, NEET risks and family background; the current study attends to parental work status during a person's upbringing for it is 'new social risk' and critical marker of disadvantage in the UK context at the household level, and for individual well-being (Bonoli, 2010; Richards and Paskov, 2016).

Our contribution is a new empirical operationalization of hopeful agency for an emerging body of quantitative research incorporating 'internal states' (Vaisey, 2010) into the sociological literature by testing and situating critical interdependent relations between (social) psychological understandings of mentalities and educational and labour market vulnerability.

2. Theoretical Background

2.1 Hope: agentic mentality and a future dimension

It is important to study how young peoples' future orientations, psychosocial resources, or what has been referred to more broadly as individual agency influence successful navigation of complicated transitions (Schoon, 2014). Hope is operationalised here as a series of cognitive processes, and not (primarily) emotional ones. Being hopeful is not considered biologically ingrained but rather learned behavior which draws on two distinct but interrelated cognitive components (Bailey *et al*., 2007; Snyder, 2002; Webb, 2007). One component is seeing a future 'way': defined as a person's ability to envision and carve out pathways towards a goal or the

future. The second component is a moving 'will' in the present: hope in this sense involves self-referential beliefs in one's capability of dealing with issues and uncertainties which arise in moving towards a goal or the future.

Young people in high-hope mode are expected to be decisive, continually constructing paths given uncertainty (Snyder, 2002). While it shares with some conceptualisations of 'mastery' and 'locus of control' the idea of learning how to think through problems, it contrasts with 'locus or sense of control' constructs in that hopeful agency is not anchored by assessments of responsibility regarding outcomes (Mirowsky and Ross, 2007: 1342). Hitlin and Johnson (2015: 1459) found that the 21% of adolescents in their sample categorised as hopeful did not necessarily display high mastery or control beliefs.

Likewise, the concept of optimism is not equivalent to hopeful life course agency, especially treatments of a 'born optimist' line. Hope theory and optimism theory are both future orientated. However, optimism theory expects that invariant positive outlooks to future outcomes direct individual agency (Scheier and Carver, 1985). For example, Kaniel and colleagues' (2010) study of US students' job search conceived of optimism as a personality trait by which people held fixed beliefs that good things happen to them more often than do bad things; they found optimists were 1-2% more likely to be offered the job that they had wanted, and got their desired job by having searched for jobs more selectively (Kaniel, Massey and Robinson, 2010).

Our definition of hopeful agency precludes invariant personal orientations about future outcomes rooted in 'personality' types, though hope and optimism can be referred to in such terms in the literature. Conceptually, we see hope and agency as adaptive – the idea being that there are feedback loops built into these cognitive paths (Hitlin and Johnson, 2015; Hitlin and Long, 2009; Snyder, 2002). Snyder (2002) distinguishes between 'agentic' and 'pathways' cognition, however since iteration in cognitive processes is also inextricable from some

sociological agency concepts (Emirbayer and Mische, 1998), they are treated here as working in tandem to make up one's hopeful agency. In Snyder's treatment, hope taps into a capacity to 'succeed' on a path (Magaletta and Oliver, 1999). Whereas, in this paper hopeful agency revolves around pathways-thinking exclusively; it is both a belief in a future pathway and a belief not in one's capacity to succeed – the outcome element of Snyder's – but only on a time-based sense of path-making decisions. A 'high-hope' person might envision a future for themselves getting a particular qualification or job; being hopeful means the person focuses on *adaptable paths* towards their future. We argue that hopeful agency is not the same notion as peoples' fixed expectancies of good outcomes, and in contrast with 'locus of control' or 'optimism' it is not the outcomes that are the primary force but rather the present-day path cognition which incorporates a positive but changeable future (Bailey *et al*., 2007; Mirowsky and Ross, 2007; Snyder, 2002).

It is only fairly recently that sociological scholarship has placed temporal dynamics centre stage in conceiving of agency, and this has drawn from (social) psychology's long history of elucidating how individuals make sense of their feelings about the present and future (Elder, 1994; Emirbayer and Mische, 1998; Hitlin and Long, 2009; Schoon, 2014**).** Two recent studies used Snyder's construct of hope in connection with educational attainment in the US (Dixson *et al*., 2017) and employment outcomes in Switzerland (Hirschi *et al*., 2015) and Israel (Kasler, Zysberg and Hare, 2017). This research demonstrated positive relations between individuals' hope and successful educational and employment transitions, but was not based on large-scale, representative survey data.

We contribute to the literature on hope by focusing on NEET vulnerability among young people, and conceptualising hope as a multidimensional agentic mentality which deals with how individuals simultaneously hold a contemporaneous sense of self and of their future prospects (see Hitlin and Johnson, 2015).

2.2 Past and present NEET vulnerability: new social risks in the British welfare state

Context is important in exploring the role of hopeful agency. This study does not tackle issues of shared 'climates' of hopefulness or for hopelessness across regions (e.g. Morselli, 2017). Yet the UK as a whole provides a suitable country case to study young peoples' psychological orientations. Young people in the UK face great difficulties in accessing stable employment or identifying appropriate routes which might lead them with ease from school into high quality jobs, further education or training (Keep, 2012). Initially identifying a way forward after compulsory-schooling may be hardest for young people most vulnerable to risks of becoming unemployed or inactive (Yates *et al*., 2011). A study of youth destinations in England found that NEETs were more likely to have thought the decision of what to do with their future at the end of secondary school 'fairly difficult' or 'very difficult'; this contrasted with youths continuing in education or employed, for whom this decision regarding their future had seemed easier (Maguire and Rennsion, 2005: 196).

The prominent NEET risk factors which we can address here with our microdata relate to family processes subject to 'new social risk' policy development in the British welfare system. One is an intragenerational family process – that of parenthood as a young adult – and the other is intergenerational risks borne of family background. Disadvantages in upbringing, by which we mean a young person's exposure to living in 'workless' households during adolescence, heighten youth vulnerability to exclusion from education or labour market participation (Bonoli, 2009; Eurofound, 2012).

Employment levels have been high in Britain since the 2000s, but worklessness has increased and been shown to be a concentrated phenomenon among families with children and single adults without children. Notably, more workless households are now 'inactive' households, where they were more likely to house 'unemployed' individuals in the 1980s –

which may be partially attributable to insecurity built into a flat system of (poor) welfare and low-wage, dead-end jobs in the service economy (Gregg, Scutella and Wadsworth, 2010).

An 'intergenerational culture of worklessness' argument favoured by policy makers in the UK can resort to inadvertently blaming welfare-dependent parents for instilling an aversion to work in their children. Studies that have examined intergenerational processes of work propensities have shown associations mainly between father's and sons' likelihood to be working from one generation to the next or educational attainment (Mooi-Reci *et al.*, 2019). Studies have attributed it to different mechanisms, from accounts of individuals' familiarity with, and lower suffering from, worklessness (Zwysen, 2013: 25), different maternal and paternal 'work ethics' and children's changed values (Mooi-Reci *et al.*, 2019), adherance to gender roles (Berloffa, Matteazzi and Villa, 2017), or that sons of workless fathers in the UK are those most vulnerable to worsening (local) labour market conditions as opposed to any individual withdrawal (Macmillan, 2014: 15).

Across OECD countries, the parents of NEET youth have substantially lower levels of education, on average, than those in education, employment or training (Carcillo *et al.*, 2015: 23). One of the suggested mechanisms of higher educational attainment is that higher educated parents use their knowledge of the system to help their children navigate educational institutions (Bukodi and Goldthorpe, 2013). Easier navigation of the education system, extended to parental networks of employment (O'Reilly *et al*., 2015), is not confined to young people drawing on prior exposure or informational resources. Young people from lower socio-economic backgrounds are disadvantaged in their greater reliance on being granted public provisioning of reliable transport, quiet spaces, libraries, computers or internet, which constitute valuable resources accessible to young people whose parents can afford their private provision. Freedom (financial) made possible by parental work incomes which aid participation in education or employment may offset potential adverse effects for youth due to a lack of

public provisioning in a given region; and the weaker the welfare support in providing general amenities, the more these materialise unequally across households.

In terms of value systems and mental well-being, studies have repeatedly demonstrated how persistent the value of work is for individuals – even for those entirely removed from the labour market (MacDonald *et al*., 2014; Gallie, 2019) and that psychological harm effects of being out of work is not ameliorated by knowing that those in your region are similarly unemployed (Oesch and Lipps, 2013). Nevertheless, 'culture of worklessness' rhetoric potentially dampens the impetus for policies to address structural drivers of concentrated youth inactivity in Europe (O'Reilly et al., 2015).

A necessity for identifying any role for hope in mitigating NEET risks is looking at the potential 'disconnects' between individuals in the extent to which they have the room to exercise their individual agency (Hitlin and Long, 2009) given their (dis)advantaged circumstances, and moreover, how much this actually matters between sub-groups. Acting in high-hope mode and envisioning your future paths within the education system or to stable employment may either be particularly difficult for those most vulnerable to becoming NEET and/or be particularly meaningful. It could be that young people in the UK brought up in households where their parents were out of work are least likely to 'enact' hope daily (Dixson *et al.* 2017), but that when they do, it is more strongly associated with lower NEET risks – whereby hope represents a 'manageable form of future thinking' for the most disadvantaged (Bryant and Ellard, 2015: 493).

Schoon and colleagues' extensive body of research using British data highlights the power of agency in combating adversities young people encounter when transitioning between school, employment, unemployment and inactivity (e.g. Schoon, 2014; Schoon and Lyons-Amos, 2016). Looking specifically at NEET risks for two representative birth-cohorts in the UK, Duckworth and Schoon (2012) found that among disadvantaged youth, school motivation – a

young person's own wish to stay on in school at age 16 – was one of the more powerful protective and preventative factors against being NEET at age 18 (Duckworth and Schoon, 2012: 47).

Johnson and Hitlin's (2017) novel study of a school cohort in Minnesota and intergenerational transmission of (dis)advantage regarding life expectations distinguished between general (absolute) and comparative (relative to parents) 'life expectations'. Two crucially inter-related results were: 1) that youth from disadvantaged family backgrounds were less likely to hold positive expectations about their future; 2) that reported beliefs about how well their life would turn out across work, family and health domains, did help alleviate the negative association between adolescent socio-economic disadvantage and years of education, as well as a range of employment outcomes (Johnson and Hitlin, 2017: 1011). They find rather weak effects of parental life outcomes and children's optimism about the future. As such, youth from low socio-economic backgrounds may form lower expectations in higher numbers than youth from high socio-economic backgrounds, but there are still a high number who think their lives will be more rewarding than their parents.

In sum, this paper seeks to evaluate individual agency, i.e. hope, and youth vulnerability by testing associated force size for two cognitive components of hope operationalised as clarity of thought in 'seeing the way' and 'having the will' for young peoples' risks of not participating in any education, employment or training. Our first general expectation is that there is a non-negligible, negative association between hopeful thinking and being NEET, separable from family background (*hypothesis 1*). Our second expectation is that in the context of the British welfare state, exhibiting higher hope will be particularly important among young people who make up 'new social risk groups', the case of having experienced parental worklessness (*hypothesis 2).*

3. Data and Methods

3.1 Data and sample

The analyses are based on nationally representative panel data from nine available waves of *Understanding Society*, the UK Household Longitudinal Survey (UKHLS), spanning the years between 2009 and 2018. We draw from the UKHLS general population samples (GPS) as well as the ethnic minority boost sample (EMBS). In the first wave of data collection close to 26,089 individuals across the UK were interviewed in GPS and 4,080 in EMBS. Our sample is comprised of men and women aged between 16 and 29 who answered questions on mental well-being from the self-completion questionnaires in either wave 1, wave 4, wave 7 or both, and observed across a minimum of two survey waves. Young people are a narrower age-bracket of 15-24 in UK policy terms. However, the wider age-range aligns our research with European statistics and the wider literature on NEET 'youth' inactivity (Eurofound, 2012).

The sample of person-waves is further reduced by requiring valid retrospective data from adolescence on parental education (which was only asked in wave 1 and 2 but not subsequent waves), and parental work activity. Cases with missing information on other relevant indicators and control variables were dropped. The final analytical sample is made up of 4,902 individuals, with a slightly higher female count of 2,843 women and 2,059 men[1]. The average age in our dataset is 23.98 (*SD* 3.55) and of these, 1,307 individuals are ever observed as not in education, employment or training (NEET). Full sample statistics are reported in Table A1 in the appendix.

3.2 Measures and analytical strategy

NEET status

To create our dependent variable individuals are categorised as being either in a form of education, employment or training (EET), or not (NEET), based on their (self-reported) current

economic activity in waves 2-9. The EET category thus covers those on maternity leave, and those unemployed but partaking in a government training scheme are considered EET. Samples from waves 2, 3 and 4 are joined with measures of hope from wave 1; a second sample from waves 5 and 6 are joined with measures of hope from wave 4; and waves 8 and 9 with hope measures from wave 7. These are combined for a pooled analysis, so the first wave is excluded as a risk time-point.

Hope: 'way' and 'will' modes

The construct of hope is operationalised using four self-completion questionnaire items from the rotating *'Mental Well-Being'* survey module in UKHLS, measured in waves 1, 4, and 7. Were we to model hope modes and N/EET status (psychological states and life events) simultaneously, the potential for bias to arise would be acute, thus information from these questions is matched such that respondents' recorded levels of hope always precede any risk period by at least a year up to three years prior to N/EET status (*t-1, t-2, t-3*).

Respondents were asked to complete questions that tap into 'way' modes, whether they were: *(1) "feeling optimistic about the future"; (2) "thinking clearly"*; as well as 'will' modes: *(3) "dealing with problems well"; (4) "able to make up own mind".* Appropriate for a construct in which assessment in terms of temporal-units is crucial, these answers were rated on a 5-point likert scale from *(0) 'None of the time'* to *(5) 'All of the time'*. Though not originally conceived in terms of our Hope construct, and as such not without limitations, the above questions and their answer formats resemble Snyder's validated 'State Hope' and 'Children's Hope' scales. An example is the question: *"When I have a problem, I can come up with lots of ways to solve it"*, rated on a 6-point Likert scale ranging from "none of the time" to "all of the time" (Snyder, 2002: 275). We generated our hope scale by averaging responses to each of these four questions to create a composite score that yielded a reliable scale of high internal consistency over the three time-points (Cronbach's alpha: 0.77; 0.78; 0.79).

Family background: parental education and parental work status during adolescence

The social risk of 'household worklessness' is measured using questions which asked respondents to recall their parents' work situation when they were 14 years of age[2]. Mother's and father's work status is distinguished for the household parental work activity (Mooi-Reci *et al.*, 2019). Highest level of education among respondents' parents is controlled for using retrospective data collected in the first two survey waves. Father's education is recorded according to three levels of attainment (compulsory or no education, upper secondary and tertiary level qualifications); maternal education is controlled according to a university degree. Collinearity threats were tested and disconfirmed. An additional control for absent parent in household during adolescence is included.

Parental status

Here we distinguish between being a parent or not, and a parent to two or more dependent children in a household – given that difficulties for young parents in balancing care and work/education may become more acute the more childcare that is required. We also control for marital status since these processes have been shown to matter for care attitudes[4] and their situational adaptations (Khoudja and Platt, 2018).

Control variables

A self-reported general health (satisfaction) scalar variable and a dummy for having ill health/disability are modelled. Each of our models control for other documented correlates of NEET risks for young people: we include dummies for being female (Holmes et al., 2019); for holding O-level or GCSE qualifications which is equivalent to compulsory secondary education in other systems (Eurofound, 2012), white ethnicity (Zuccotti and O'Reilly, 2018; Khoudja and Platt, 2018) a linear control for age and 12 regional dummies. To try to capture material deprivations that may mean a young person is more disconnected from educational or employment participation, models also control for having ever reported no internet access at

home or anywhere. A control for residence in a rural or urban area loosely proxies for local labour market opportunities (Macmillan, 2014).

3.3. Model specification

As our dependent variable is a binary outcome of individual *i* at time *t* being either EET (coded 0) or NEET (coded 1), the estimation method used is logistic regression. The general equation is given as:

$$logit(\pi_i) = \log\left(\frac{\pi_i}{1-\pi_i}\right) = \beta_0 + \beta_1 x_i + \beta_2 x_i + \beta_k x_k + \varepsilon \quad (1)$$

For ease of interpretation hope effects and self-rated health satisfaction scales are transformed into z-scores, centred on sample means, and post-estimation, all coefficients are transformed into average marginal effects. Marginal effects can be compared across models, and groups for identical models, side-stepping problems accompanying non-linear modelling: namely, variance generated by altered error distributions rather than any 'true' effects on an outcome of interest (Breen, Karlson and Holm, 2018).

Limitations and robustness of estimation method

Individuals can enter into the regressions more than once, and contribute on average four data points. The resulting interdependency of observations within persons is corrected for using Huber-White standard errors, and we also include year dummies to cancel out cyclical trends in NEET incidence (Carcillo *et al*., 2015). Though we follow standard practice in pooling waves and estimating transition risks using logistic regression techniques, serious issues remain. Potential threats to correct inferences due to selection bias arise from issues of state dependence, endogeneity and unobserved heterogeneity[4]. The present data requirements mean our sample may be less likely to contain those who are long-term NEETs, given that those inactive may be less likely to continue to respond to surveys over time. No panacea exists to fully eliminate positive selectivity threats for our longitudinal estimation technique.

Consequently, inferences made throughout the paper are solely developed on the basis of patterns of associations repeated over time, and not causal relations.

Our hope scale is measured at different time-points to N/EET status and we checked the robustness of our results using different samples in terms of paired transition dynamics and found near identical results. Also negating threats that attrition bias could drive findings, our results hold with samples of only one year prior, or two, or three separately. As a temporality theory would suggest, we find that the closer in time to transition state (e.g. *t-1*), the stronger the effect size of our agency variable; modelling hope states from only one year prior to the transition helps guard against endogeneity bias following those who might have dropped out of college, or lost their jobs reporting being less hopeful.

Single items making up the hope scalar were additionally tested alone, and each item had similar, significant negative associations with being NEET. The greatest link to lower predicted NEET risks was reporting a higher score on the item of "feeling optimistic about the future".

Joint models of men and women constrain individual slopes and intercepts to not vary across groups. To check the robustness of our results by gender, we first interacted female with the hope indicator, the sign for the interacted term was again negative and of similar size, but statistically insignificant. Associated effects by gender were further tested by estimating a fully unconstrained model for a split-sample analysis of men and women (shown in figure 2). We additionally estimated a set of linear probability models, and the stability of hope effects found using these lend support for the chosen model specification for a binary outcome.

4. Results

4.1. Descriptive results

The average proportion of men and women in our sample experiencing NEET status in any given year is 16%. On a scalar range of 0 denoting lowest to 5 denoting highest, mean levels

of hopeful thinking among young people stand at 3.6 (non-standardised scale, *SD 0.69*). Table 1 reports differences in hope modes first by our outcome of interest, NEET status, and second, by potential disadvantage in the context of the British welfare state: family background, specifically parental worklessness and being a parent before age 29.

Percentage breakdowns and bivariate mean difference tests show us that hopeful thinking is significantly more pronounced among EET young people compared with NEET young people, NEETs exhibiting a lower hope mode and greater standard deviations. Likewise, if we look at average levels of hope according to young peoples' experience of parental work/worklessness, we see lower hope modes among those who reported their parents were out of the labour force at a point in their adolescence (i.e., at age 14). Put in real terms of the temporal answers of our hope scale: those who experienced parental worklessness at some stage of their upbringing are closer to hope-mode *"some of the time"* (hopeful, 3) at 3.43 (*SD* 0.81) compared to 3.66 (SD 0.65) closer to *"frequently"* (hopeful, 4), among young people whose parents were working. A strip plot with median, quantiles is given in appendix Fig. A1.

Hope modes are on average also lower among parents, compared with those without child responsibilities before age 30 in our sample, though the differential is low. The descriptive results tentatively point to some indirect effects on young people's hopeful thinking which may be operating through parental work activity experienced during adolescence or by parenting responsibilities, or that those most at risk of being NEET are those whose hopeful agency is most curtailed. However, the magnitude of variation is, at face value, rather low on average.

Table 1. Descriptive sample mean differences in hope modes by risk sets

Social risk sets	Hope mean	SD	*N*
Parent(s) working	**3.66**	0.65	*10,278*
Mother OLF, Father working	**3.56**	0.73	*3,019*
Father OLF, Mother working	**3.49**	0.65	*441*
Parent(s) OLF	**3.43**	0.81	*1,196*
Without dependent child	**3.63**	0.68	*11,345*
With dependent child	**3.57**	0.70	*3,589*
EET	**3.65**	0.66	*12,499*
NEET	**3.44**	0.77	*2,435*
Totals	3.62	0.69	*14,934*

Source: UKHLS 2009-2018 unweighted data; own calculations. *Notes*: **Bold** indicates significant group mean differences. OLF shorthand for out of the labour force.

4.2. The effect of hopeful agency on NEET risks

The key question is what kind of direct net role – if any – hopeful thinking plays for NEET outcomes among young people in the UK. Our first general expectation is for hope to have a substantial, statistically significant negative effect on the likelihood of being NEET. To test this relationship we estimate equation (1), where our dependent variable is the overall risk of being observed NEET (*Pr*(NEET=1*), t2-t9*) between 2011 and 2018.

The hope scale has been standardised and transformed into z-scores to allow for ease of interpretation, though models tested with an unstandardised scalar variable for hope produce identical substantive results. A one unit change in hope mode as displayed thereby translates into one standard deviation from the mean score of the total sample. Table 2 presents odds ratios alongside average marginal effects for our nested models, computed as discrete changes in probability averaged across the values of our key independent variables and full set of socio-

demographic and regional controls. Calculating average marginal effects allows us to compare the average conditional effect of each variable on the likelihood of being NEET across our models, a point we revisit later[3]. In terms of the overall risk of not participating in any education, employment or training the results of Models 1 and 2 in Table 2 confirm hypothesis 1 of hopeful agency being associated with lower NEET risks in general.

The first model (Table 2, M1) controls for several individual, socio-demographic and regional differences, and the second model (M2 Table 2) adds the key family background indicator of (household) worklessness, i.e. parental work activity in adolescence. Fitting the complete logit models (M2), we see that a one standard deviation in a person's hopeful thinking is associated, all else equal, with a 2 percentage point (p.p.) reduced risk of being observed NEET.

While we do see a clearly non-negligible, independent effect for increases in hopeful agentic orientation, parenthood and family upbringing effects predicting NEET are substantial (see Table 2, M2). Among young people in the UK, the impact of having either a mother or father who was out of work during adolescence is, on average, approximately three times that of the effect of a one standard deviation change in an individual's hope mode on NEET status. All else equal, having a household of both parents (or a 1 headed parental household) out of work during adolescence – as compared to growing up with working parent (s) – heightens the propensity of being NEET the most, on average by a magnitude of 9 p.p. Such a striking disadvantage for individuals whose upbringing was (at some point) less structured around parents working supports prior research establishing strong links between family background and heightened NEET risk (Curry et al. 2019; Schoon, 2014). Similarly, having two children is associated with a NEET risk as high as 34 pp. compared with having no children, corroborating findings of a long-standing relation between young parenthood and the composition of NEETs in the UK (Holmes et al., 2019).

Table 2. Risk of being NEET: Logistic regression on likelihood of not participating in education, employment or training

	M1		M1		M2		M2	
	Odds Ratio	[95% CI]	AME	S.E	Odds Ratio	[95% CI]	AME	S.E
Hope	**0.85**	[0.79-0.90]	**-0.019**	(0.004)	**0.86**	[0.81-0.92]	**-0.016**	(0.003)
General health (satisfaction)	**0.88**	[0.84-0.93]	**-0.014**	(0.003)	**0.89**	[0.84-0.94]	**-0.013**	(0.003)
(ref: Parent(s) working)								
Father OLF, Mother working					**1.84**	[1.53-2.19]	**0.070**	(0.011)
Mother OLF, Father working					**1.39**	[0.96-2.00]	**0.035**	(0.022)
Parent(s) not working					**2.17**	[1.68-2.81]	**0.093**	(0.018)
Female *(ref: Male)*	**1.32**	[1.32-1.54]	**0.031**	(0.009)	**1.30**	[1.12-1.52]	**0.029**	(0.008)
Has dependent child in HH (*ref. None*)	**3.94**	[3.21-4.82]	**0.179**	(0.016)	**3.97**	[3.23-4.87]	**0.177**	(0.016)
Has two or more children in HH	**9.03**	[7.18-11.35]	**0.344**	(0.022)	**9.07**	[7.20-11.41]	**0.339**	(0.022)
Pseudo R-squared		0.2				0.2		
Additional controls		*Yes*		*Yes*		*Yes*		*Yes*
N				*14,934*				

Source: UKHLS 2009-2018, own calculations unweighted data. .

Note: bold **p** <0.05, *p <0.10. Hope scale and general self-reported health are mean centred (standardised); Models also control for absent parent, mother's education, father's education, age, long-standing ill health/or disability, nativity, ethnicity, educational qualification (o-levels), marital status, disconnected (internet), rural area of residence, country/region, years; robust standard errors in parentheses. OLF is shorthand for out of the labour force.

4.3. Contingencies by risk sets: hopeful agency against 'new social risks'

Having found a significant negative relation between higher hope modes and the likelihood of being NEET, our secondary aim is to probe how such a pattern may differ by these categories of social risk sets in the UK. Do the strength of associated effects vary significantly according to parental work status during adolescence, or is the relation between hopeful thinking and NEET status in fact explained largely by family background? Is hopeful agency particularly beneficial among those who may have faced difficulties in upbringing (parents out of work) or those trying to balance work or education alongside parenting responsibilities (with dependent children)? Tentative answers are provided in the simulated predictions based on full models which additionally include interaction terms for parental work activity and hope, presented in Figures 1a and 1b. To show any deviations by gender, Fig.1a depicts effects from separate models estimated for men and women. Fig.1a again underscores the main effects for hope from M2 (Table 2), but gender differentials become apparent for parenthood and for opposite-gender parental work activity.

A second expectation *(hypothesis 2)* was that hopeful agency would matter most strongly among young people more vulnerable in the UK context for having experienced important social risks, i.e. parental worklessness. Looking at Figure 1b, for every one unit increase in hopeful agency among young people whose parents were out of the labour force at a stage during their upbringing, there is close to a 3 p.p. lower likelihood of being observed NEET over time. Whereas, among young people whose parents were working during their upbringing, the role of hope shrinks closer to 1p.p. However, as can be seen in Fig.1b there is imprecision in the estimates, with overlapping confidence intervals between the groups of hope modes by family background in the models; as such, we bypass over-emphasising a heterogeneity of effect magnitudes. Interaction effects for hope by family from main logistic regression models

are insignificant, meaning the evidence to support the idea that being hopeful is especially important for those whose parents were inactive during their upbringing is rather weak.

Turning to present circumstances which may make young people vulnerable as a new social risk group in the British welfare state context – being a young parent – Fig 1b shows predicted average marginal effects of hope by parental status. Here we see an unambiguous significant moderating role of hope among parents compared to young people with no childcare responsibilities in their household. Between not being a parent, hope averaging just over 1 p.p. lower NEET risk, and being a parent to two children, averaging over 3 p.p. lower NEET risk, there is a differential of 2 p.p.

Overall, what emerges from our analysis is that being more hopeful is a potentially protective force across the board, associated with lower NEET risks driven by *intergenerational* vulnerabilities in the UK, as well as those driven by *intragenerational* life course events in early adulthood (e.g. parenting).

Robustness checks

To what extent the effect of hope shown as reducing the probability of being observed NEET operates net of family background requires further checks that test for spurious effects. The KHB decomposition method circumvents any comparability issues of rescaling and confounding across our set of non-linear nested models. That is, the khb calculations parse out how much change is attributable to 'true' change in effects between models (Karlson, Holm, and Breen, 2012). Utilising the khb technique and inputting the same variables from the full model (Table 2, M2) a coefficient effect of -0.17 (0.03, standard error) at *p=0.00* for hope is only slightly reduced to a coefficient effect of -0.15 (0.03, standard error) and stays a significant predictor of lower *Pr*(NEET) at *p=0.00,* correctly accounting for parental work activity.

Figure 1a and b. Interaction models for any moderating role of parental work activity

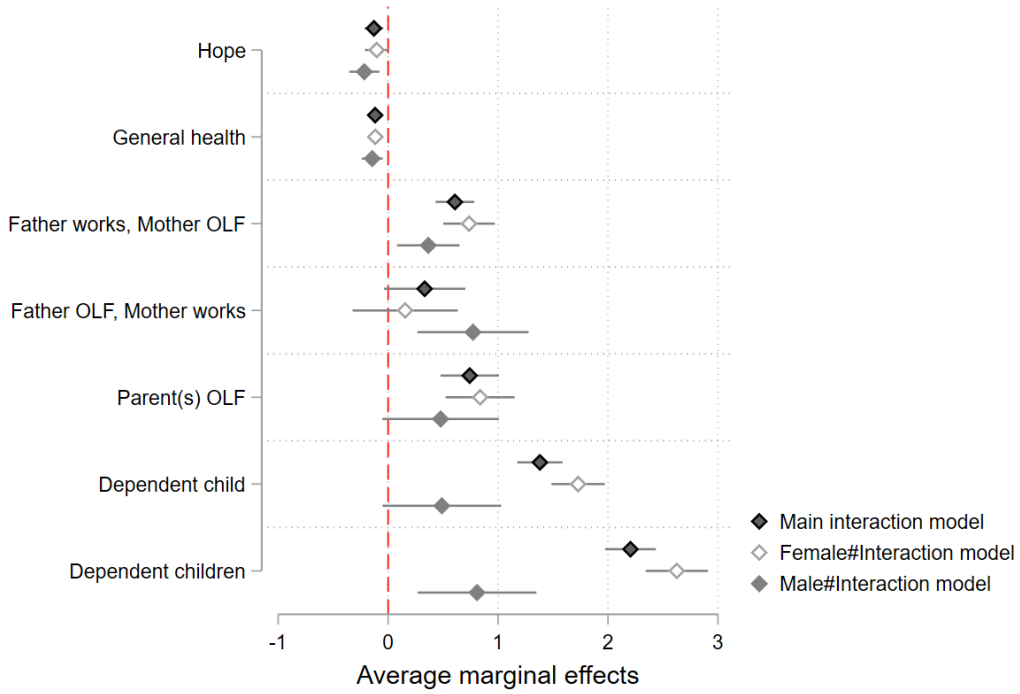

Figure 1a Main hope effects relative to family risk sets in the interaction models

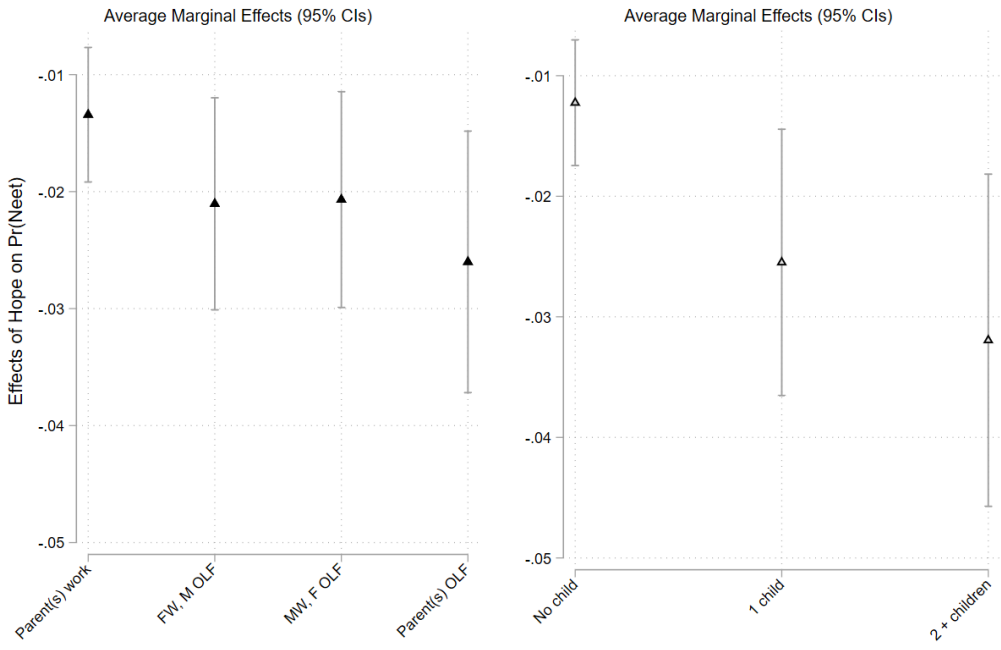

Figure 1b Family related 'new social risk sets' and predicted hopeful agency effects

Additionally, we estimated models using only transitions from one year to the next, with baseline values of all indicators, such that we estimated T_0 to T_1 NEET risk, as well as reducing our analysis to only consecutive waves to the hope measure questionnaires (i.e., waves 2, 5 and 8). These checks returned the same size estimates of standard deviation change of hope being significantly associated with a 2p.p. lower observed NEET likelihood.

These modelling strategies provide sophisticated breakdowns of variance, but reverse causation cannot entirely be ruled out. Thus, the weighting of hope found to be significantly associated with a reduced NEET risk as a stand-alone factor in each of our aforementioned longitudinal estimations provides us with suggestive evidence that fostering higher hope may at least hold the potential to lower NEET incidence in the UK.

5. Conclusion

The question posed at the outset of this paper was whether hope, conceptualised as a form of individual agency, plays a meaningful role for NEET risks among young people in the UK. In this paper hope connotes learned, adaptable pathways cognition. The category of 'NEET youth' casts a wide net over young peoples' vulnerability to workforce or educational exclusion – one more broadly than do unemployed counts. The novelty of our empirical approach was to utilise longitudinal, nationally representative data to examine the extent to which a multidimensional concept of hope functions given NEET risks, while simultaneously considering vulnerability borne of family background circumstances known to place households at risk of persistent poverty in the British welfare system.

We have taken a life course approach of attending to critical links between temporal agentic modes, intergenerational relationships and life events such as parenthood at a stage of young adulthood, from age 16 into the late 20s (Elder, 1994). Our results lend further weight to claims that agency, and the future orientations of young people, partially explain diverging trajectories

in education and the labour market – especially in a national context wherein youth are faced with problematic, non-linear paths and structural hoops to jump through (Schoon and Amos-Lyons, 2016).

The estimations reported in the current paper preclude causal interpretations. This study has several limitations revolving around non-random selection into states, as endogeneity issues present particular challenges to longitudinal analyses such as ours. Future research could establish and separate out for whom hopeful agency may prevent NEET state entry, or, promote NEET state exit. Here we first simply demonstrate that individual's hopeful agency plays a role in mitigating NEET risks in the liberal market context of the UK.

The study contributes new findings to a growing literature that foregrounds young peoples' future orientations and mental well-being modes. In line with calls in the social sciences for sensible strategies to engage with debates on intergenerational 'cultures', structure and the place of mental orientations, our aim has been to empirically gauge whether a buffering effect of hopeful agency potentially varied in 'dialogue' with the experience of parental worklessness (Curry, Mooi-Reci and Wooden, 2019; Vaisey, 2010).

Analysing the potential for upbringing to fully explain or moderate associations between hope and being NEET, we found the relation between being more hopeful and being less likely to be NEET, holding other covariates constant, to be a direct one and significant. The models predicted raising hopeful agency by one unit, for example where a young person switches from *"rarely"* being hopeful to being hopeful *"some of the time",* would mean, on average, a 2 p.p. lower NEET likelihood.

A key contribution of the present study is, however, to place such effects in relative terms; life course agency pales before family processes related to 'new social risks' in the British welfare state system: the past kind of risks of having grown up in a household where parents were out of work and the current kind or risks related to juggling parenthood and education or

work before age 30. We show these past and current risks to be associated with a heightened probability of being observed NEET of between 9p.p. reaching up to 34p.p, respectively for young people.

Yet our findings indicate a significant separable relation between hope and NEET risks among young people vulnerable to inactivity in the UK. One enabling – and cost-effective – policy intervention tactic may be the provision of mentorships which properly attend to the mental processes and well-being of young people in attempts to help them navigate their educational or employment tracks over the long-term. Hope is shown as being slightly more important among parents than for those without parental responsibilities, up to a 3 p.p. lower likelihood of being NEET for a one unit rise in hopefulness. However, while a higher-hope mode is equally as important among young people whose upbringing included parental worklessness as for other family backgrounds, it is not shown to be significantly more important in our data – chiming with a recent study in the US (Johnson and Hitlin, 2017).

Better institutional configurations manifest far fewer inactivity threats for youth (Brzinsky-Fay, 2017). Policy initiatives to encourage a young person's linked-up thinking *on* their future must therefore simultaneously improve national welfare conditions *in* their future: alongside affordable quality childcare for young parents, what is required is a viable range of pathways between educational institutions and secure employment, and jobs with advancement possibilities across all sectors of the UK labour market.

Notes

1. Female response rates for the UKHLS are higher. Additionally, more women filled out the 8-minute self-completion questionnaires at each time-point (Buck and McFall, 2011).
2. Comparisons of effects across (nested) non-linear probability models, such as logits, are highly problematic; for a comprehensive discussion of issues see Breen, Karlson and Holm (2018).
3. Prior research used different UK data sources to examine threats from unobserved heterogeneity as opposed to a relation between parental activity status and psychological well-

being, where unobservable factors were found not to negate the contribution of family background (see Richards and Paskov, 2016).

4. Results remain the same for hope and NEET outcomes in models (not shown) where attitudes to responses for "a pre-school child suffers if their mother works" were controlled.

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Appendix

Figure A1. Hope scale by family background: quantile data distribution plots, with median and means (in red) indicated

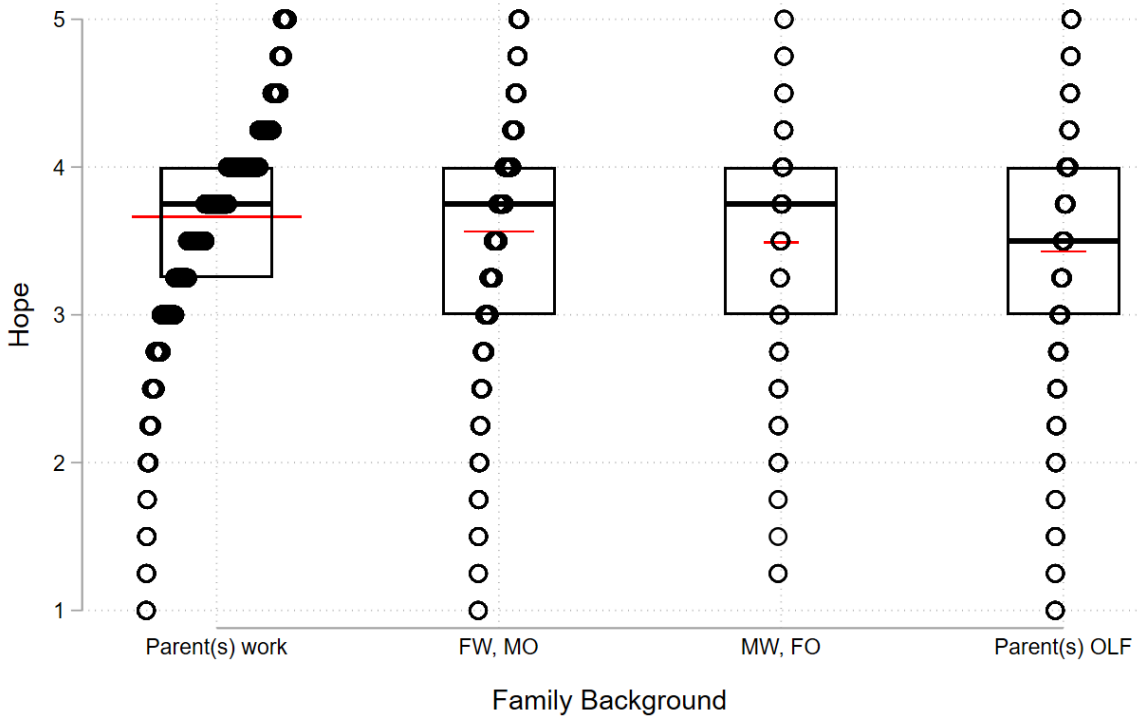

Table A1. Sample Summary Statistics

Variable	*N (Frequency)*	Mean *(% of sample)*	SD	Range
NEET	*2,435*	16.3		0/1
Female	*8,703*	58.2		0/1
Hope scale *(t-1 | t-2 | t-3)*	14,934	3.62	0.69	1/5
Standardised hope scale *(t-1 | t-2 | t-3)*	14,934	0.00	1.00	-3.81/2.01
Absent parent during adolescence	*1,044*	7.0		0/1
Mother's education: university degree	*2,759*	18.5		0/1
Father's education				1/3
Low/basic education	*2,956*	19.8		
Medium/some post-secondary education	*8,966*	60.0		
High/tertiary education	*3,012*	20.2		
Parental work when respondent aged 14				1/4
Parent(s) working	*10,278*	68.8		
Mother not, Father working	*3,019*	20.2		
Father not, Mother working	*441*	3.0		
Parent(s) not working	*1,196*	8.0		
Age	14,934	24.2	3.5	16/29
Ethnicity: White	*11,571*	77.5		0/1
Nativity: First generation immigrant	*1,908*	12.8		0/1
Health: Long-standing ill health/impairment (self-reported)	*2,387*	16.0		0/1
Health: General health satisfaction (sample mean centred)	14,934	0.0	1.0	-2.44/1.24
Health: General health satisfaction (self-reported scale)	14,934	5.0	1.6	1/7
Partnership: Single and never married/civil relationship	9,381	62.82		0/1
No dependent child in HH	*11,345*	76.0		0/2
Dependent children in HH (1)	*1,856*	12.4		
Dependent children in HH (2+)	*1,733*	11.6		
Educational qualification: O-levels or less	*4,984*	33.37		0/1
Disconnected: Ever reported no internet access at home | or elsewhere	*2,030*	13.59		0/1
Area of residence: rural	*2,486*	16.65		0/1
Region (government office)				1/12
North east	*541*	3.62		
North west	*1,777*	11.9		
Yorkshire and the humber	*1,369*	9.17		
East midlands	*1,180*	7.9		
West midlands	*1,308*	8.76		
East of England	*1,207*	8.08		
London	*2,253*	15.09		
South east	*1,878*	12.58		
South west	*1,081*	7.24		
Wales	*681*	4.56		
Scotland	*987*	6.61		
Northern Ireland	*672*	4.5		
Ever reported NEET episode (*N* individuals-waves)	*5,741*	38.44		
Years: survey wave (entered as categorical dummies in models)	14,290	4.49	2.21	

Source: UKHLS 2009-2018 unweighted data; own calculations. OLF shorthand for out of the labour force.