**Youth in Transition: Longitudinal**

**Comparisons of Youth Transitions in**

**the UK using Cohort and Synthetic**

**Cohort Data**

The following document provides evidence for a ten month review of the doctoral project (titleabove). This document is broken up into constituent parts. Firstly, a detailed breakdown of the doctoral proposal - exploring how the proposal will be tackled, the methodological routes of the proposal, and the themes that will be addressed. Secondly, a detailed literature review of youth in transition will be given - with specific detailed reference to school-to-work transitions (this will form the bulk of the doctoral project. Thirdly, a description and breakdown of the datasets used in this project will be given; the National Child Development Survey, the British Cohort Survey, and the British Household Panel survey and Understanding Society (the UK Household Longitudinal Survey) - the last dataset will have a discussion on the construction of synthetic cohorts. Fourthly, there will be discussions of each major theme proposed within the doctoral project - centering around the key outcome variable that has been selected via the codebooks that have been constructed around each dataset. Finally, a brief discussion on the issue of missing data within the project and how that will be addressed.

**1. THE DOCTORAL PROPOSAL**

This doctoral project will make use of existing large-scale nationally representative longitudinal datasets in order to produce multivariate statistical analyses of youth transitions. The study of youth transitions has long been a central element within the sociology of youth (Clarke 1978).Though the temporal element- the transition - has slowly emerged as a major research paradigm(Elder 1994: 4). This has allowed social scientists to engage in areas of human agency, the relation between individuals and changing society, as well as linked and interdependent lives (ibid).Young people grow up in changing social and economic circumstances (Furlong and Cartmel 1997).Transitions from education to employment, along with housing and domestic transitions, traditionally were inter-related (Coles 2005). From what we know thus far, increasing numbers of young people remain in education for longer periods (Furlong and Cartmel 2007). Living away from the parental home, and cohabitation outside of marriage are increasingly common (Mulder 2009; Murphy 2000: 52; Holdsworth and Morgan 2005; Seltzer 2004: 926). Young People now marry later, are more likely to have a first birth later, and have fewer children than in previous generations (Ermisch and Francesconi 2000; Aassve et al 2005:283).

Change is a constant. That is why the overarching theme of this doctoral project will be locating key youth transitions in the more comprehensive context of the lifecourse (Elder 1994). The work will seek to understand historical changes in the youth transitions through detailed comparative cohort analyses. The older birth cohort studies chosen for analysis, i.e. the National Child Development Study (1958) and the British Cohort Study (1970) support comparative analyses.

There is a large gap in the youth data portfolio between 1970 and the commencement of the Millennium Cohort Study (2002-2) (Gayle 2005). This project addresses this data related challenge. It will use data from the British Household Panel Survey (1991-2009) and Understanding Society(the UK Household Longitudinal Study) (2009-) to construct synthetic cohorts of youth data. Data from the older birth cohorts and data from these synthetic cohorts will be used to study the the youth transitions in a historical as well as life course context.

This doctoral project will focus on school-to-work transitions producing analyses of the various constituent parts that make up the youth transition whole. By focusing particularly upon school-to-work transitions, greater levels of analysis can be placed upon the historical and comparative contexts that make up the transition from education to the world of work. The doctoral project will focus on themes of: Risk and Stability, NEET status, non-traditional education and subsequent outcomes...

**2. LITERATURE REVIEW - OVERVIEW**

The life course approach - contrasted with the temporally static approach to social phenomena -has established itself as a substantively significant research paradigm within the last few decades(Elder 1994: 4). The term ’life course’ whilst at first appearing to be an abstract and rather nebulous concept is in fact a concrete multilevel phenomenon that is defined via the social trajectories of individuals through structured pathways of given institutions that ultimately form the developmental experience of a given individual (Elder 1994: 5). These ’structured pathways’are interwoven with what Elder argued were ’age-graded trajectories’ (1994: 5). These trajectories took the form of work, family, and housing transitions. Such transitions are always historically and temporally located, thus given them specific and distinctive form and meaning (ibid).Whilst it has been stated that the life course approach has become a major research paradigm this is not in of itself a justification to employ such a paradigm within my PhD research - such a justification will thus now be given. By focusing upon the full life course of individuals analysis can extent beyond static moments in time. This allows research to be expanded both in reference to within individual and between individual analysis. A life course approach provides an analysis sensitive to the consequences of early transitions for later experiences and events (Elder 1994:5) and because as stated earlier transitions are linked to historically and temporally located trajectories, a life course perspective allows for insightful comparison across cohorts to study how such cohorts have responded differently to the consequences of their early transitions (ibid).Within the given time frame of this PhD research - starting with the NCDS in the early 1960sup to early 2000s with synthetic cohorts - the rapidly changing nature of mid-20th century Britain is one that has the potential to offer significant differences in birth cohort exposure to different historical worlds (Elder 1994: 5). By integrating a life course perspective with the methodology of birth cohorts this PhD research is actively exploring the age-graded patterns embedded in cultures, institutions, and social structures enabling a smooth comparison across over 50 years of British society.

The time period of this doctoral project provides adequate space to explore and analyse what Giddens termed ’Late Modernity’ (Giddens 1991; Beck et al 1994). The past more concrete certainties exemplified in the earlier part of the 20th century have given way to a more fluid and dynamic notion of adult identity and its development (Bynner 1998: 31). These past certainties gave rise to stability; this current dynamicism gives rise to risk. (Beck 2014).

The changing nature of identity formation and the overall life process has led some scholars to argue that the very notion of ’transition’ ought to be further problematised. No longer are individuals placed on a rigid ’train-track’ with specific diversions (Bynner 1998: 31). Instead some scholars advocate for the term ’navigation’ over that of ’transition’ (Evans and Heinz 1994) as this integrates the more fluid aspects of an individual’s life chances and choices within a cascadingly complex labour market (Bynner 1998: 31).

This doctoral project however advocates for the continued use of the term ’transition’ (mostly because it will be a real pain to get my doctoral title changed at this stage). I follow the work of Furlong (2010: 517) in their assessment (and agreement) of Brook’s work on the validity of the validity of ’transitions’ in late modernity. Transitions still critical in our understanding of key life events - like education, and entry into labour markets - they thus form a fundamental part in our understanding of social reproduction (Furlong and Cartmel 2007). To address the ’navigations transitions’debate, whilst transitions have indeed become ”protracted, have increased incomplexity and of have more routes events sequences changed” (Furlong and Cartmel 1997:3), the outcomes of these complex routes of social reproduction have largely remained highly structured (Roberts et al 1987; Bynner and Roberts 1991). Reiterating the stance of Furlong and Cartmel once more, whilst there have been radical changes within the social reproduction of individuals the underlying result has for many remained the same (Furlongand Cartmel 1997: 3). The important thing to note here is that whilst there may have been an explosion of choice and diversity in possible routes taken in late modernity, the increasing levels of risk associated with such fluidity have prompted new sources of vulnerability that need to be addressed. This doctoral project thus maintains that the term ’transition’ is an appropriate term that integrates the key structural elements of its processes - though this project will bepay particular attention to the impact more dynamic routes and event sequences (Furlong andCartmel 1997: 3) have had within a temporally defined context. Indeed, the increasing levels of complexity within the roles of social reproduction must be engaged in a critical manner to explore how individuals in particular have to engage in processes of ’reflexive modernisation’ (Beck and Giddens 1994: 5) to constantly confront oneself with the effects of risks. This emphasis on risk and uncertainty whilst breaking with tradition (Furlong and Cartmel 1997: 15) is one that neatly fits into a model of increasingly complicated processes of social reproduction and ought to be integrated into a full comparison of birth cohorts.

This ought to be done however, without falling headfirst into the individualisation thesis, as Gayle et al (2009) have mentioned previously structural factors such as social class and gender still play important social roles within an individual’s life course.

**Changing Times**

There is a broad consensus amongst sociologists that during the close of the twentieth century a process of radical transformation has impacted the ’traditional’ processes of transition (Gayle etal 2009). This ’Changing times consensus’ argues that a series of complex social and economic changes has prompted this transformation. This lends credence to the choice of datasets this doctoral project will be working on, the National Child Development Study explores just before and the early phases of this transformation, the British Cohort Study spans the midpoint, and the British Household Panel Survey and Understanding Society both explore the aftereffects of these changes.

The collapse of the youth labour market in the early 1980s, the education reform act 1988, the establishment of the Youth Training Scheme and modern apprenticeships etc (Gayle et al 2009) all provide historical context to such social and economic changes.

**Labour Market Stability**

**Economic Scarring due to NEET status and unemployment**

**Non-Traditional Educational Pathways**

**3. BREAKDOWN OF THE DATASETS**

This doctoral project seeks to utilise the National Child Development Study, the British Cohort Study, and the British Household Panel Survey and Understanding Society to accomplish its aims of researching youth in transition within a UK context. Each of these datasets has a breadth of information on a range of topics not relevant to the purposes of this research. Unfortunately particularly in relation to the older two datasets, a clear and concise codebook is not available. Each dataset comes with what are termed ’data dictionary’s’ that provide information on the variables, labels, and position within the dataset (among other things). Also made available are the original scanned pdf documents of the questionnaires used for the sweeps required for analysis. Combining these two important documents and for the sake open science practices(clarity above all else) I have constructed my own codebooks of each of the dataset sweeps intended to be used for analysis within the doctoral project. The purpose of this is to produce a uniform codebook style for all datasets being used in the project and to combine some essential elements of the documents provided into one cohesive whole. In particular the matching of variables to their full questions asked within the questionnaire. This enables an easier recognition of the utility of certain variables.

On extensive inspection and cross-referencing between data dictionaries and pdf questionnaires number of inconsistencies (particularly amongst the older datasets) has been found. Common clerical errors have been found in the data dictionaries - variables misnamed, type of data mislabelled etc. This could have potentially impacted variable selection and further analysis had these inconsistencies not been identified and rectified in my own codebooks.

**National Child Development Study**

The National Child Development Study (NCDS) was the second major nationally representative birth cohort study in the UK. It followed (insert figure of participants) participants all born within the same week (insert week) in 1952. The cohort had repeated contact from (insert ages contacted).For the purpose of this doctoral project the 16 and 23 sweeps are selected for intended use. The NCDS coming off the back of the first birth cohort (and its first few sweeps) mainly focused upon health related outcomes- though as the children grew older, and eventually into adults more and more data was collected on other outcomes which are inclusive to the aims of this doctoral project- primarily educational and occupational outcomes.

Post-hoc the NCDS has been harmonised on many fronts with the British Cohort Study - the third major birth cohort study in the UK - particularly along socio-economic class harmonisation. This has enabled over time the ability to compare the two datasets with relative ease. For the sake of this doctoral project this is a virtue, as much of the infrastructural groundwork has already been paved to appropriately compare these two birth cohort studies.

**British Cohort Study**

As mentioned, the British Cohort Study (BCS) was the third major nationally representative cohort study within the UK. Starting in 1970 it followed (insert number) participants born within the same week. The cohort had repeated contact with participants from 1970 to 2021. For the purpose of this doctoral project the 16 and 26 sweeps are selected for intended use. The BCS also makes use of a 21 sweep that provides information on 10 per cent of participants and adds information on key economic and educational data. For this reason, the 21sweep is also included for analysis and comparison within this doctoral project.

The BCS unlike the NCDS was not primarily created with health outcomes in mind and so has a breadth of information on a range of social, economic, political, and educational matters in relation to the individual.

**British Household Panel Survey and Understanding Society**

The British Household Panel Survey (BHPS) and Understanding Society (US) were originally two independent datasets that were later harmonised after participants in the BHPS after sweep 18 were asked if they would join the larger and more comprehensive US. Those that did joined in sweep two of US in the 2010-11 period. Neither the BHPS nor US are birth cohorts meaning that unlike the NCDS and BCS respondents were not recruited from birth within a certain week. For the desired ability to contrast and compare between the datasets there is a demand to create synthetic cohorts for this doctoral project. Within BHPS individuals are born between 1904 and 1985. Whilst it would at first seem best to take these birth years as individual cohorts, this would cause problems, biggest of which being taking a yearly approach would leave for an underwhelming sample size per year. Thus, this doctoral project proposes to combine these synthetic cohorts into 5 year periods. This will provide for a satisfactory sample size per synthetic cohort ranging from 400+ to 1500+. This is however leaving out the first few proposed synthetic cohorts (those that were born between 1904 and 1914) these don’t have a substantively significant number of observations to begin with.

**4. KEY THEMES**

**Stability and Risk**

**Economic Scarring**

**Non-Traditional Educational Pathways**

**...**

**5. MISSING DATA**

Missing data is an essential component of any longitudinal data analysis. The various factors that account for sample attrition in the datasets outlined above has the potential to present real issues as it relates to comprehensive data analysis. See below to see the patterns of missing data for each dataset mentioned - note there is a breakdown of missing data that details if said data is missing due to death, emigration, or rejection to continue the study. For the purposes of analysis those that exit the sample due to death or emigration are considered ’natural’ exists from the original sample. Those however that either cannot be found, reject continued participation etc are individuals that we hold partial data on - being able to utilise this partial data within my analysis could be beneficial. In the following section I discuss the potential of utilising various techniques to tackle the potential issue of missing data, finally settling on the promotion of the use of Multiple Imputation in order to first test the original sample and its ability to holistically analyse the data, and secondly if this is not the case, to present an imputed sample that can.

**6. Results (Thus Far)**

To Reflect slightly on the application of what has been written thus far, the following section includes a short (not at all comprehensive) data analysis that constructs two models using two of the datasets mentioned (NCDS and BCS). This section concerns itself with young people remaining in education.

Table 1 suggests some interesting findings in reference to the NCDS cohort. It appears that once exams are over with (1974m6) we see that around 30% of individuals stay in school, with around 55% going straight into work and around 8% going on to higher education. Unemployment remains steady at around 2%. Comparing this to the BCS cohort in Table 2 we see around 80% going straight into work and around 5% going on to higher education. Unemployment of around 4%, with part time employment at 9%. Comparing this with our previous dataset there are some rather obvious differences here. Most notably the significant proportion of people in work. Though something to note is that thus far\* we are comparing current (so 26-year-old economic activity) with the first 12 months of economic activity from the NCDS dataset (This needs to be changed).

The NCDS cohort raises the question as to why so many people went straight from school-to-work, not to mention the 8% of those individuals that decided to go on to post-secondary education. From here on out, I seek to explore the context behind these numbers to understand how gender, ethnicity, and fathers’ social class all aid in shaping youth transitions.

As Gayle et al (2009) state, qualifications remain important- with young people that have high attainment more likely to stay within the bounds of education. This is true of both the NCDS and BCS cohorts (though the latter less apparent than the former) see Table 3 and Table 4 for details.

This logistic regression model one in Table 5 depicts those individuals who are in Education have 6.4 times the odds of those that are not in Education of obtaining 5 or more O-level passes. Plotting the coefficients (Uberti 2022) looking at Table 6 on average, 74 out of 100 people in education obtain 5 or more O-Level passes, while only 3 out of 100 do so who are not in education (predictive margins). Accordingly, looking at Table 7, being in education increases a person's likelihood of having obtained 5 or more O-Levels by 43 percentage points. Now onto the more complex models that include covariates such as sex, ethnicity, fathers’ social class.

Looking back to Table 4, model two, the logistic regression model depicts that individuals who are in Education has a 5.3 times the odds of those that are not in Education of obtaining 5 or more O-level passes when controlling for all other covariates, Those that are Men are 0.8 times the odds compared to women of obtaining 5 or more O-level passes, ethnic minorities are not statistically significant. Interestingly there is a very apparent trend looking at father’s social class. There is a significant downward trend when comparing professional social class to others that shows those on the lower end of the social class hierarchy have worse odds in comparison to the sons of professionals in obtaining 5 or more O-level passes. This downward trend has been graphically visualised in Figure 1.

Now reflecting upon the BCS cohort using Table 8, This logistic regression model depicts that individuals who are in Education has a 1.5 times the odds of those that are not in Education of obtaining 5 or more O-level passes. Using Table 9 on average, 66 out of 100 people in education obtain 5 or more O-Level passes, while only 55 out of 100 do so who are not in education (predictive margins). Accordingly using Table 10, being in education increases a person's likelihood of having obtained 5 or more O-Levels by 10 percentage points. Now onto the more complex models that include covariates such as sex, ethnicity, fathers’ social class.

Going back to Table 8 model two, this logistic regression model depicts that individuals who are in Education, men, and ethnic minorities are not statistically significant. Interestingly there is a very apparent trend looking at father’s social class. There is a significant downward trend when comparing professional social class to others that shows those on the lower end of the social class hierarchy have worse odds in comparison to the sons of professionals in obtaining 5 or more O-level passes. For example, at the two extremes, In comparison to fathers social class I, II has a 0.53 times the odd of obtaining 5 or more O-level passes. Now looking at the comparison between fathers’ social class I and V, V has a 0.08 times the odd of obtaining 5 or more O-level passes. Again, this downward trend is graphically visualised in Figure 2.

This data analysis is by no means comprehensive, there are problems (for example taking econ activity straight out of school and comparison with econ activity in current state etc) however this analysis is meant to act as a placeholder and a demonstration of the direction this PhD project intends to go in.

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**Appendix**

**Table 1 Main Activity From March Following Last Year of Mandatory Schooling by NCDS Cohort (%)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1974m3 | 1974m4 | 1974m5 | 1974m6 | 1974m7 | 1974m8 | 1974m9 | 1974m10 | 1974m11 | 1974m12 | 1975m1 | 1975m2 |
| Full Time Employment | 2.16 | 9.61 | 38.83 | 51.00 | 55.80 | 56.74 | 57.33 | 57.64 | 58.00 | 58.24 | 58.65 | 58.65 |
| Part Time Employment | 0.06 | 0.19 | 0.59 | 0.71 | 0.60 | 0.38 | 0.35 | 0.33 | 0.35 | 0.33 | 0.32 | 0.32 |
| Education | 0.02 | 0.05 | 0.34 | 1.33 | 8.11 | 8.62 | 8.57 | 8.49 | 8.46 | 8.33 | 8.17 | 8.17 |
| School | 97.06 | 89.04 | 54.80 | 33.29 | 30.89 | 30.52 | 30.21 | 29.86 | 29.35 | 29.15 | 28.96 | 28.96 |
| Unemployment | 0.14 | 0.31 | 1.61 | 4.33 | 2.86 | 2.43 | 2.23 | 2.33 | 2.45 | 2.56 | 2.38 | 2.38 |
| Out of Labour Force | 0.57 | 0.80 | 3.82 | 9.35 | 1.74 | 1.32 | 1.32 | 1.36 | 1.39 | 1.39 | 1.52 | 1.52 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

**Table 2 Current Main Activity by BCS Cohort (%)**

|  |  |
| --- | --- |
|  | Current Econ Activity |
| Full Time Employment | 80.39 |
| Part Time Employment | 8.82 |
| Education | 4.80 |
| Unemployment | 3.77 |
| Out of Labour Force | 2.23 |
| Total | 100.00 |

**Table 3 O-Level attainment by NCDS cohort (%)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Education | |  |
| No. of O-Level Passes | Not In Education | In Education | Total |
| <5 | 97.63 | 2.37 | 100 |
| 5 or More | 86.53 | 13.47 | 100 |

**Table 4 O-Level attainment by BCS cohort (%)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Education | |  |
| No. of O-Level Passes | Not In Education | In Education | Total |
| <5 | 96.19 | 3.81 | 100 |
| 5 or More | 94.27 | 5.73 | 100 |

**Table 5 Logistic Regression Models using NCDS – In Education O-level effects (odds ratio)**

|  |  |  |
| --- | --- | --- |
|  | (1) | (2) |
| VARIABLES | Model 1 | Model 2 |
|  |  |  |
| In Education | 6.42 \*\*\* | 5.32\*\*\* |
|  | (0.55) | (0.63) |
| Male |  | 0.79\*\*\* |
|  |  | (0.04) |
| Non-White |  | 0.93 |
|  |  | (0.17) |
| II |  | 0.38\*\*\* |
|  |  | (0.05) |
| III NM |  | 0.22\*\*\* |
|  |  | (0.03) |
| III M |  | 0.11\*\*\* |
|  |  | (0.01) |
| IV NM |  | 0.09\*\*\* |
|  |  | (0.02) |
| IV M |  | 0.08\*\*\* |
|  |  | (0.01) |
| V |  | 0.05\*\*\* |
|  |  | (0.01) |
| Constant | 0.45 \*\*\* | 3.48\*\*\* |
|  | (0.01) | (0.43) |
|  |  |  |
| Observations | 12,510 | 7,379 |

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05

**Table 6 Margins Predicted Possibility of Positive Outcome using NCDS**

|  |  |
| --- | --- |
|  | (1) |
| VARIABLES | Margins |
|  |  |
| Not In Education | 0.31\*\*\* |
| In Education | (0.00)  0.74\*\*\*  (0.02) |

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05

**Table 7 Contrast at Margins using NCDS**

|  |  |
| --- | --- |
|  | (1) |
| VARIABLES | Margins |
|  |  |
| In Education vs Not In Education | 0.43  (0.02) |
|  |  |

Chart, box and whisker chart

Description automatically generated

Figure Estimates of Being in Education (O-Level attainment, Gender, and Ethnicity Effects)

**Table 8 Logistic Regression Models using BCS – In Education O-level effects (odds ratio)**

|  |  |  |
| --- | --- | --- |
|  | (1) | (2) |
| VARIABLES | Model 1 | Model 2 |
|  |  |  |
| In Education | 1.5 \*\*\* | 1.58 |
|  | (0.23) | (0.38) |
| Male |  | 1.07 |
|  |  | (0.10) |
| Non-White |  | 0.86 |
|  |  | (0.27) |
| II |  | 0.53\*\*\* |
|  |  | (0.10) |
| III NM |  | 0.41\*\*\* |
|  |  | (0.09) |
| III M |  | 0.19\*\*\* |
|  |  | (0.04) |
| IV |  | 0.18\*\*\* |
|  |  | (0.04) |
| V |  | 0.08\*\*\* |
|  |  | (0.03) |
| Constant | 1.2 \*\*\* | 4.35 \*\*\* |
|  | (0.04) | (0.77) |
|  |  |  |
| Observations | 4,280 | 2,187 |

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05

**Table 9 Margins Predicted Possibility of Positive Outcome using BCS**

|  |  |
| --- | --- |
|  | (1) |
| VARIABLES | Margins |
|  |  |
| Not In Education | 0.55\*\*\* |
| In Education | (0.01)  0.66\*\*\*  (0.03) |

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05

**Table 7 Contrast at Margins using NCDS**

|  |  |
| --- | --- |
|  | (1) |
| VARIABLES | Margins |
|  |  |
| In Education vs Not In Education | 0.10  (0.03) |



Chart, box and whisker chart

Description automatically generated

Figure Estimates of Being in Education (O-Level attainment, Gender, and Ethnicity Effects)