Modelling Pathways to Entrepreneurship: A Life Course Perspective

Dr Dilani Jayawarna, Dr Julia Rouse and Prof. Allan Macpherson

ABSTRACT

We conceptualise life course pathways to entrepreneurship embedded in the resource-based view of the small enterprise. As a partial test, we propose a specific pathway structured by class and mediated by gender relations. This is operationalized employing 18 waves of the British Household Panel Survey and event history random effect logistic regression modelling. Findings suggest a primary, class-structured pathway to entrepreneurship, emergent from the inter-generational transmission of resources from family of origin. This fosters continued resource accrual in higher class (although not highly credentialed), remunerative and satisfying careers that tip into business founding as a sustained route of class privilege or, for education failures and carers with reduced entrepreneur labour capacity, a defence against downward social mobility. Lower social classes avoid entrepreneurship except as a necessity when household income is low or when labour can compensate for other resources. We suggest new research directions.

Keywords: Entrepreneurship, Life Course, Start-up, Resources, Gender, Class

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INTRODUCTION

The resource-based view (RBV) is a primary theory of the small enterprise (Lockett, et al., 2009). It conceives businesses as bundles of resources (Barney, 1991), and entrepreneurship as a process of accumulating and applying those resources to market opportunities (Penrose, 1959; Shane and Venkatarman, 2000). Associations between resource ownership and business start-up are well established. Differences in ownership across demographic groups have also been detailed (e.g. Authors1, 2011) and some explanations draw on social theory (e.g. Ram et al., 2008). There are dangers, however, in associating people with one aspect of their social positioning (e.g. their sex or ethnicity), homogenising heterogeneous demographic groups and reducing dynamic experiences of the social world to static observations.

At present, we focus on individual or firm level resources at particular points in time (Barney, 1991; Lockett et al, 2009) and rely on cross-sectional studies to measure the resources and intentions related to business start-up (for example, Davidsson and Honig, 2003). Longitudinal studies are rare (Haber and Reichel, 2007). Consequently, entrepreneurship is isolated from the evolving life context which positions people in terms of institutionalised advantages and disadvantages (Ram et al., 2008), shaping their opportunity to acquire resources (Welter, 2011; Mungai and Velamuri, 2011). We require more subtle understanding about how ability and motivation to accrue and apply resources to opportunity emerges from lifelong interactions with the complex of intersecting social relations that constitute contemporary society (Bradley, 1996). Such knowledge would enable us to say much more about how individual acts of entrepreneurship emerge from, and reproduce or change, complex patterns of social organising (Welter, 2011).

We propose that the framework and methods associated with life course analysis can support more complex conceptualisation of how entrepreneurship emerges from the environmental influences that produce life chances (Bradley, 1996). Life course analysis has been widely employed in the social sciences (Mayer, 2009), particularly to model work biographies (Heckhausen and Shulz, 1999) and transitions (Halaby, 2004). It models individual actions in the context of other social factors over time (Heinz, 2002; Mayer 2009; Reynolds, 1991), enabling us to understand how individual lives are linked between domains of action, such as family and work (Moen and Sweet, 2002), that constitute action frames (Heinz, 2002). Established methods for modelling longitudinal data have the potential to detect how common pathways of resource accrual 'tip over' into entrepreneurial action (Chen and Korinek, 2010). By drawing on knowledge about process we can interpret how pathways emerge from agents' interactions with external social relations and affect context (Welter, 2011). The complexity of pathways into, and through, entrepreneurship cannot be captured in one study and, so, different life course models should be tested. To date, however, there are few studies of how entrepreneurship emerges from different life courses (Authors 2, 2011).[i]

In this paper, we present a specific life course model of pathways to start-up[ii]. This represents a partial test of our conceptual proposition that small business entrance emerges from the application of resources accrued from an agent's lifetime experience of interacting with an external world that influences (but does not determine) access to resources and adoption of social norms. We

particularly draw on the concept of class to theorise pathways of resource accrual and application to business start-up. As the entrepreneurship literature has yet to deeply theorise entrepreneurship contexts (Welter, 2011), knowledge about the effect of class inheritance on entrepreneurship is scarce (Greenbank, 2006; Authors 1, 2011).

Class focuses our attention on how an individual's resource accrual is shaped by the inter-generational transmission of resources from family of origin (Roberts, 2001) and, so, how social origins influence entrepreneurial destinations (Aldrich et al., 1998). A range of class theories (e.g. Weber, Bourdieu, Marx) share the contention that family transfers have a direct effect on life chances and shape an individual's capacity to accrue resources from non-family sources in adulthood by influencing the work they aspire to and can command, the networks to which they belong, and the households they form (Roberts, 2001); Giddens (1981) referred to this as a person's 'market capacities' (Atkinson, 2007).[iii] In relation to small enterprise, we explore how family of origin shapes direct ownership, and capacity to accrue, the market capacities that are the modern 'means of production': financial, human and social capital. In order to capture some of the effect that class may have on the application of resources to business opportunity, we also study how class affects entrepreneur intention and mediates pathways of resource accrual to start-up.

An important element of our proposition that life course pathways to entrepreneurship are shaped by social context is acknowledgement that society is constituted by multiple intersecting social structures (see Bradley, 1996). We begin to test this intersectionality by modelling the effect on class-structured pathways of a particular gender process (sexual division of domestic labour). This is achieved by observing the mediating effect that childcare responsibilities have on class-based pathways to entrepreneurship.[iv]

In the following section we review literature concerning the resource-based view of business start-up and develop a framework proposing pathways to entrepreneurship across the life course influenced by class and gender processes. We test our model by loading longitudinal data from 18 waves (1991-2008) of the British Household Panel Survey (BHPS) into a series of random effect[v] logistic regression models. By interpreting the findings, we present an evidence-based model of how class and gender processes influence business founding in Britain. Finally, we discuss the implications of our findings for entrepreneurship and social theory. We point to future directions in researching entrepreneur life courses.

Accrual and Application of Resources to Start-Up: A Life Course Perspective

As with the wider entrepreneurship literature, research from the resource based view has tended to focus on individual actions and neglected to theorise how resources emerge from contexts which provide opportunities to acquire resources and both guide and set boundaries on agents' actions (Welter, 2011). Thus our understanding of how resources are deployed creatively in order to identify and (re)configure opportunities towards competitive advantage (Barney, 1991) is de-contextualised. The life course perspective enables us to view the process of accumulating resources as a lifelong project, starting in childhood. The specific focus of our life course framework is to view how resource accrual is influenced by the inter-generational transmission of tangible and intangible resources from families of origin. As parents' capacity to transmit resources depends on their own life chances, both the process and effect of this inter-generational transmission can be conceptualised as a class pathway (Roberts, 2001). As our analysis is novel and exploratory, we suggest relationships worthy of investigation rather than proposing hypotheses.

We begin our analysis by modelling the effect of parental social class on entrepreneur transition; we interpret this as shaping a range of resources useful to the small business starter. Class schemas tend (possibly erroneously) to homogenise small business owners as a separate class, enabling us to analyse the inter-generational transmission of entrepreneurship itself. It is widely reported that the children of entrepreneurs have a much greater likelihood of start-up than their contemporaries (see Kim et al., 2006). The nature of this relationship is little understood, however (Sorenson, 2004; Aldrich et al., 1998). We will explore pathways to start-up by people whose parents were small business owners during their childhood and assess both their long-term resource accrual and application of resource to business founding. We explore additional class processes in terms of the inter-generational transmission of three resources crucial to business start-up: human, social and financial capital.

Human capital is the knowledge and skills acquired through formal and informal learning (education and work/life experience) that resides within individuals and relates to inter-generational transmission of knowledge and learning behaviours (Roberts, 2001). Human capital provides functional management expertise (such as operations management), as well as problem solving and innovation skills necessary to adapt to market opportunities (Penrose, 1959). The effect of human capital on the propensity to start-up in business is complex. While those with better education and experience have greater entrepreneurial intention (Kim et al., 2006), and more chance of succeeding, their opportunity cost for foregoing employment is higher. Consequently, they may only start businesses with high earning prospects (Cassar, 2006). Education also blocks risk-taking (Davidsson and Honig, 2003). Henley (2007) reports that start-up is more likely from a poor human capital base. Davidsson and Honig (2003) and Kim et al. (2006), however, found a positive relationship between education and work experience and start-up. Contradiction in the evidence base may result from weak conceptualization of how the *process* of accruing human capital, and experience of applying it in the labour market, influence start-up (Unger et al., 2011). For example, Kim et al.'s (2006) findings relate to early entrepreneurial activity and it is plausible that the well educated only persevere with start-up if high profitability is indicated. There is significant potential to research how human capital emerges from inter-generational transmission of resources and affects both labour market experience and resource application to opportunity, as part of a class process.

Social capital is the individual's capacity to extract value from their social networks (Davidsson and Honig, 2003). For entrepreneurs, social networks provide access to human and financial capital resources (Nahapiet and Ghoshal, 1998), wider bridging networks, and intangible resources, such as acting as a sounding board and providing emotional support (Hanlon and Saunders, 2007). Networks are not of equal value, however, and their usefulness depends on the structure and content of the relations they embody (Brush et al., 2008). They may provide role models for business start-up or cultural norms that hinder entrepreneurial acts (Lerner et al, 1997). We know that higher social class networks hold greater inspiration, advice and support (Brush, 1992). Middle class or elite networks also own, or are able to bridge into, the most valuable tangible resources and provide role models that help an entrepreneur to enact a professional business (Ram et al., 2008; Lee and Jones, 2009). Gaining access to value-rich networks depends on perceived legitimacy, the resources an entrepreneur has to exchange, their ability to bare the transaction costs involved in networking (Hanlon and Saunders, 2007) and skills in creating quality engagement (Lounsbury and Glynn, 2001; Holt and Macpherson, 2010). It thus relates to social class in terms of

access to finance (as an exchange good and means of paying for entrepreneur labour) and in relation to the embodiment of class-appropriate practices in networking behaviour. Start-up is particularly likely if networks include a parent with entrepreneurship experience (Henley, 2007), but the value of a family's networks relates to its class position (Anderson and Miller, 2003). While the literature on social capital and entrepreneurship is rich, we know little about how the process of accruing social capital across the life course forms part of a class-structured pathway to start-up, making this a valuable area for research.

Financial capital is also required by almost all new businesses to create the basic infrastructure of a business and provide working capital. While investment needs vary widely, low financial resources restrict the type and scale of enterprises started (Authors, 2006) and can result in survival self-employment (MacDonald, 1996). Under-capitalisation also seems to disrupt early entrepreneurial activity which, unlike start-up itself (Holtz-Eakin et al., 1994), is largely unaffected by wealth (Kim et al., 2006; Henley, 2007). This is probably due to unperceived resource constraints (Henley, 2007).

Private finance - including personal savings and gifts from family and friends - is the most commonly used and, often, the primary source of finance at start-up (Fraser, 2004) due to liquidity constraints (Kim et al., 2006). The wealthy have most ready access to personal finance and, consequently, their start-up rates are higher and, for men at least, receiving a windfall such as an inheritance can trigger start-up (Georgellis et al., 2005; Burke et al., 2002). The impact of wealth and windfalls decreases with greater wealth accrued (Georgellis et al, 2005; Burke et al, 2002) because the wealthy may favour investment to the effort of business ownership (Kim et al., 2006). They may be particularly motivated to fund businesses started by children not achieving labour market success and so threatened with downward mobility (Western and Wright, 1994). Most business owners do not report direct mobilisation of an inheritance at start-up (Aldrich et al., 1998), but family transfers might take on the more subtle form of savings, property or investments made via earlier family transfers, gifts, soft loans or investments that have yet to be researched. As part of a wider class process, the privileged may also accrue wealth in adulthood through privileged labour market rent (Western and Wright, 1994). Henley (2007) found that business founders did not save immediately prior to start-up, but this might be explained by business expenditure. We will investigate further the pathways of financial resource accrual associated with start-up. The small amount of analysis so far has focused on household wealth (Kim et al., 2006). Class pathways are affected by 'households of destination' (see Bihagen, 2008), particularly in terms of the divisions created by dual career, occupationally privileged couples compared with work-poor households (Bonney, 2007). However, we know little about the capacity of the entrepreneur to draw on household finance. Our analysis will investigate the effect of personal *and* household wealth on start-up. It is our contention that financial resources may have varyings effect on different entrepreneur pathways: it may reproduce privilege, defend against downward mobility or be employed as a route of mobility.

In summary, the literature informs us that human, social and financial capital are important resources in creating and developing a small enterprise. Resources tend to be treated as static (Hanlon and Saunders, 2007). We argue that resource acquisition is a longitudinal process that relates to the life course of the entrepreneur. Analysis is required of how start-up is resourced by direct transfers of resources from family of origins and how the inter-generational transmission of resources influences the capacity to acquire resources – from networks, in the labour market, and

through household formation – as part of a wider class process. The model we present is groundbreaking in operationalizing calls to theorise entrepreneur contexts (Welter, 2011). It measures capital resources owned in childhood and at a foundation stage in adulthood some years prior to start-up.

Mediating Effects: Recent Labour Market and Household Experience

The decision to commit resources to a new enterprise is a process that takes time to unfold (Mazzarol et al., 1999) and is influenced by emerging position in the labour market and family circumstances (Rauch et al., 2005; Rouse and Kitching, 2006). Life course modelling enables us to test the effect of intervening events on the direct relationships under study (Mayer, 2009; Vondracek and Profeli, 2002). We seek to analyse how a person's ability to continually develop and apply their capital resources to a small venture is mediated by the on-going effect of class relations in shaping career trajectories and household income and gender processes that affect entrepreneur labour capacity (Rouse, 2010).

Our understanding of how labour market experience affects propensity to start-up is currently confined to knowledge of macro factors. The labour market can effectively 'push' people into business ownership by providing too few employment opportunities in the whole economy or particular occupations or areas (Stanworth and Stanworth, 1997, MacDonald, 1996). However, we clearly need to explain entrepreneurial careers in terms beyond macro economics (Carter et al, 2003). Evidence to date tells us that entrepreneur transitions are most commonly made by people satisfied with their jobs (Henley, 2007; Schjoedt and Shaver, 2007), despite the opportunity costs created by positive labour market status (Cassar, 2006). Thus, Minniti and Bygrave (2004) report that, in a non-recessionary period, four times as many Americans started ventures for life enhancing opportunities rather than low employment prospects. Positive labour market experience may involve exposure to niche business ideas and the resources needed to exploit these and, so, have a mediating effect on the relationship between early resource ownerships and business practice (Rauch et al., 2005). Labour market success may also create wealth that supports business investment and fund household expenses while a business is established. In class-structured societies, privileged labour market positions often emerge from inter-generationally transmission of both resources and normative practices (Naylor et al., 2002). We currently have little understanding, however, of how labour market experience acts as a mediating influence on the relationship between early resource ownership and start-up. We model the mediating effect of job satisfaction, labour income and incidents of economic inactivity on the application of resources to entrepreneur transition.

Another criticism of the entrepreneurship literature is the construction of the entrepreneur as an individualised 'mythical hero' (Ahl, 2006) when, in fact, entrepreneurship is a social phenomena (Fletcher, 2007; Dodd and Anderson, 2007) embedded in the family (Jennings and McDougald, 2007; Hamilton, 2006; Aldrich and Cliff, 2003). As a consequence of strong gendering processes that create sexual divisions in household roles (Bradley, 2003), this effect is gendered (Rouse and Kitching, 2006). Domestic roles reduce women's entrepreneur labour capacity and enhance men's breadwinning motive. This effect varies within individual lives and across the household life course (Ekinsmyth, 2011; Rouse, 2010). Thus far, there has been no systematic attempt to test how resource accrual and application to entrepreneurship is mediated by household roles. This is despite evidence that gendered family responsibilities play a significant mediating role in institutional

careers (Castelman et al, 2005; Hostetler et al, 2007). We model the effect that relative freedom from childcare has on class-structured pathways to entrepreneurship and employ this analysis to comment on how class and gender processes interact to create specific entrepreneurship pathways. We also model how household income mediates class-structured pathways and, so, begin to explore how family wealth isolated to the entrepreneur's household in the years immediately prior to start-up affects class-based pathways to entrepreneurship.

The Effect of Entrepreneur Intention

Small business ownership is a long-held aspiration for some people. Entrepreneur intention does not mechanistically lead to, nor is it a necessary condition for, starting a business, however. Many people with entrepreneurial intention do not start a business (Henley, 2007) and many business founders do not have a pre-existing entrepreneurial intention (Henley, 2007). Alternative start-up triggers include market opportunity (Segal et al., 2005), constrained employment prospects (MacDonald, 1996) and desire to organise care and work differently (Rouse and Kitching, 2006). Nevertheless, entrepreneurial intention makes people more likely to respond to environmental changes by applying resources to a small enterprise (Henley, 2007). Entrepreneur intention is also influenced by social background, particularly for young people whose parents have been successful in self-employment (Mungai and Velamuri, 2011). Thus, it is embedded in family life courses.

Our model measures entrepreneurial intention in a 'pre-enterprise' phase[vi]. We do not treat entrepreneurial intention as static but test how it affects prospects of start-up in a proximal career period. Specifically, we test the effect that entrepreneur intention has on a class-structured process of resource accrual towards entrepreneurship and measure how this effect is mediated by positive labour market experience in the same period. This analysis informs us about whether entrepreneur intention has a different effect on more or less privileged pathways to entrepreneurship.

<center>**RESEARCH FRAMEWORK**</center>

We have demonstrated an initial evidence base supporting the RBV. In this paper we embed the resource acquisition process in the unfolding life course of the entrepreneur and propose that it is shaped by class and gender relations. As knowledge about the nature of these life course effects is limited, we offer an exploratory model rather than specific hypotheses. First, we predict a positive relationship between resource ownership, emergent from the inter-generational transmission of resources in childhood (T0) and at an adulthood 'foundation stage' (T1) [vii], to business founding (T3)[viii], our dependent variable.

We also propose that, at a 'pre-enterprise stage' (T2)[ix], three displacement factors - pre-enterprise labour market returns, household income and childcare responsibilities – affect motivation and capacity to apply resources to start-up and, so, act as mediators to the individual pathways. Similarly, we predict that entrepreneur intention at T2 increases the chances that resources will be applied to resources at T3 and, also, that this relationship will be mediated by positive labour market experience. This model represents a partial test of our conceptual propositions; other theoretical models could (and should) be developed.
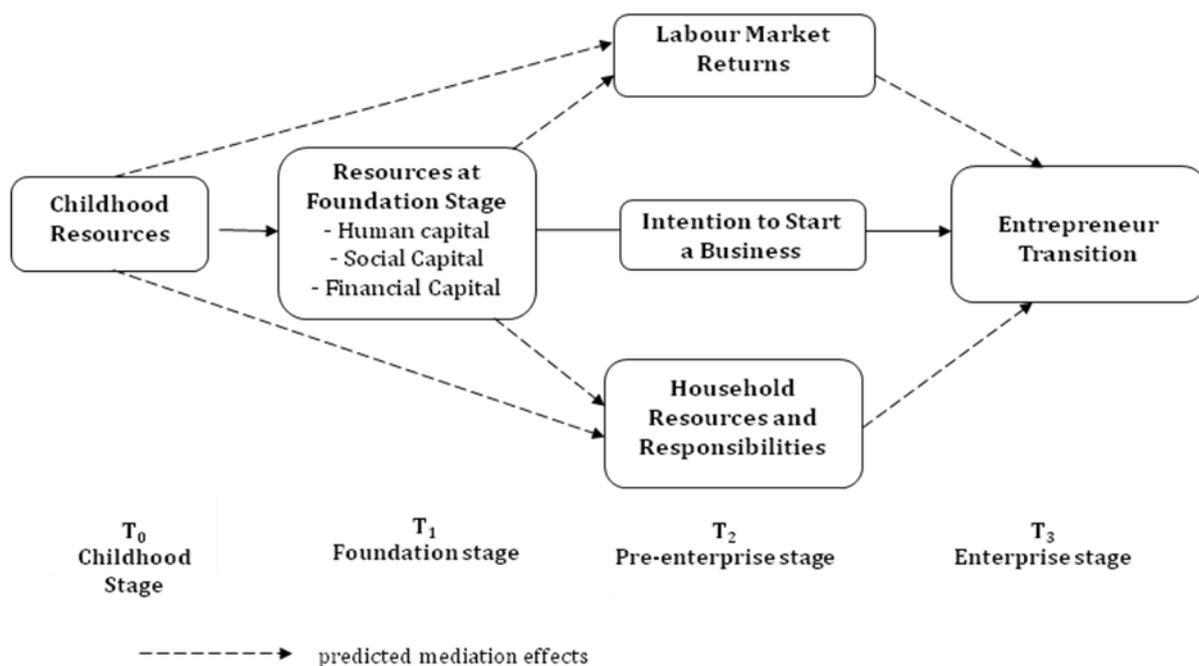
Figure 1. Resource-based Life Course Model of Entrepreneur Transition.

RESEARCH DESIGN

We test our research framework employing longitudinal analysis drawing on a secondary data source, the BHPS. Household panel data enables rigorous exploration of the contextually sensitive questions raised by life course studies (Halaby, 2004). The BHPS employed stratified random cluster sampling to develop its initial sample to be representative of British households. In its first year (wave 1) a total of 10,264 were interviewed, covering 5,505 households. Each year, the original sample, and new members of the original sample households, are questioned via a telephone or postal questionnaire. Sample attrition rates in the BHPS are low (Uhrig, 2008); for more information see http://www.iser.essex.ac.uk/bhps.

Data is taken from waves 1 to 18 of the BHPS, covering 1991 to 2008. Our sample is selected on five criterion. First, booster samples employed periodically within the BHPS are excluded to promote complete data across waves. Second, proxy interviews are excluded to avoid a large amount of missing data. This leaves a starting sample of 9,613 cases. Third, only individuals of working age (aged 18-65 in wave 12), but not retired by 2008, are included. This reduces the sample by 28.5%, leaving 6,874 cases. Fourth, to ensure business founding is compared to employment careers, individuals with no economic activity during Time 3 are excluded, reducing the sample size to 5,157. Fifth, to ensure modelling of entrepreneur transition, the 365 respondents in business two years prior to first reporting entrepreneurship in the observed career period are excluded. The final sample is 4,801.

Model Estimation

We used event history analysis in its discrete time version (Allison, 1984) to estimate the direct and mediating effects of resources/intention and displacement factors on the probability of

entrepreneur transition. The logistic specification follows the principles of random intercept modelling that accounts for unobserved heterogeneity at the individual level. The model estimation used Full-Information Maximum Likelihood Method, as implemented in the package STATA 11, using Gaussian quadrature with the number of evaluation points in the Hermite integration formula set to 30[x] (Butler and Moffitt, 1982). The data was reorganised to change the unit of analysis from person to person-years[xi]. The dataset included both time constant and time-varying variables. Baron and Kenny's (1986) recommended conditions were used to establish mediation.

The underlying model in its general specification can be written as follows:

$$\log\left[\frac{Y_{it}}{1-Y_{it}}\right] = \alpha + \sum_{g=1}^{G} \beta_g . X_{it} + \sum_{k=1}^{K} \gamma_k . Z_{it} + \theta P_{it} + \sigma . Q_i + \varphi . R_i + \omega_i$$

where Y_{it} is the conditional probability of an individual entering into entrepreneurship at time (in years) t =1...., T for the individual i=1......N, α is a constant, X is a vector (size G) of time-varying and static resource variables measured at T_0 and/or T_1 for individual i at time t, Z is a vector (size K) of time-varying and static labour market return variables and/or household resource and responsibility variables measured at T_2 for individual i at time t. Variables age (Q) (time invariant measured at the beginning of T_2) and sex (R) (a dummy variable) were included as controls for every individual i. P is a time-varying dummy variable for intention to start a business for individual i at time t measured at T_2. β, γ, θ σ and φ are the parameter estimates for the impact of the relevant explanatory variables on the probability of being a business founder. ω_i is the individual level random residual to measure the unobserved heterogeneity which is assumed to be iid[xii] according to a multivariate normal distribution with $E(\alpha_i) = 0$; $Var(\alpha_i) = \tau^2$ and independent of all other explanatory variables in the model.

Model Design and Operationalization

We have focused on variables most frequently cited in the literature. As we relied on a secondary source, ideal measures and scales were not always available. We used some single item measures (relating to control variables, entrepreneurial intention and entrepreneur status) and a number of reflective multi-item measures (relating to human capital, social capital, financial capital, labour market returns, household income and childcare responsibilities). In general, the variables were structured such that higher scores indicate greater amounts of human, social and financial capital, higher entrepreneurial intention, better labour market returns and household income and care responsibilities thought to be more favourable to running a business (i.e. higher household income and few or no childcare responsibilities).

Measures
Dependent variable:
Our dependent variable is transition to self-employment/business ownership. Career trajectories of every individual in the selected sample were studied for over five years (2004-2008) to detect entrepreneur career transition. For those who have made employment to self-employment/business ownership career transition during the five year period were coded 1 and 0 otherwise.

Independent variables:

Childhood resources were measured using three indicators: parental social class, school level education and financial resources in childhood. **_Parental social class_** was measured using a reduced version of the Goldthorpe scale (Vandecasteele, 2010) with six categories: higher professional managerial, lower professional managerial, routine non-manual, skilled manual, unskilled manual and self-employed. The measure related to the father's social class, as is the convention, but the social class of the mother was used where the father was absent. **_School level education_** was measured using two indicators: "school leaving age" and "possession of a listed school qualification" (1- yes, 0- no). **_Financial resources in childhood_** were measured using a proxy of type of school attended. A nine category variable was recoded to create a dummy variable with 1 = fee paying school and 0= otherwise.

Most measures relating to the foundation and pre-enterprise phases were collected annually during the determined five year periods and, so, are time varying[xiii]. Human capital at T_1 was measured using three indicators: highest academic qualification, on-going training and work experience. To measure **_highest academic qualification_**, the eight category BHPS question was re-coded into three categories following Vandecasteele (2010): (1) no/low formal education (including lower secondary education) (2) medium education (including higher secondary education), 3) High level of education (university degree/higher degree). Receipt of **_on-going training_** was a binary measure (1=yes) in the BHPS which asked if respondents received any training (job related or other). **_Employment experience_** was measured by aggregating number of years in employment (including self-employment) and calculating this as a percentage of total years in T_1 (5 years if no missing values).

Social capital at T_1 was measured using two indicators: adulthood social class and social participation. **_Adulthood social class_** was measured using the aforementioned six categories of the Goldthorpe scale but in relation to the respondents' own occupational status. An indicator of **_social participation_** was composed of two items: social and interest group activity (4 measures) and social and interest group membership (4 measures). Participants responded on a yes/no scale and the 'yes' responses were summed over the foundation year period. Financial capital at T_1 was measured using three indicators: savings, income and home ownership. **_Savings_** was a dummy variable relating to whether the respondent made savings. **_Total income_** was measured by summing a number of income sources measured in the BHPS. The value was log transformed to induce normality. **_Home ownership_** was a categorical measure indicating type of accommodation: rented, mortgaged, and owned outright.

Start-up intention was a single item measure on a binary scale. Every wave during T_2, respondents were asked if they would like to start a new business in the future; respondents who said "yes" were coded 1 and 0 otherwise.

To measure pre-enterprise labour market returns, three indicators were used: job satisfaction, labour income and economic activity. **_Job satisfaction_** was measured using five-item, five-point Likert scale measures and a single factor was derived to estimate job satisfaction for each year. A **_labour income_** variable was generated through log transformation of total labour income. **_Economic activity_** was measured using the BHPS question "current economic activity". Those who reported being in paid employment or in self-employment[xiv] were treated as economically active for that year and others as inactive.

Household resources and responsibilities were measured using two indicators: household income and freedom from childcare. A ***household wealth*** measure was created by calculating household income per adult. This measure was log transformed to induce normality. ***Freedom from childcare*** was measured employing a BHPS question that asked "who is responsible for childcare?" with possible responses of 1- mainly responsible to 4- someone else is responsible. This was re-coded to allow three categories: (1) respondent takes the main childcare responsibility; (2) share responsibility; and (3) someone else take responsibility/no children. Sex (male =0; female =1) and age (in years) were used as controls.

RESULTS

We report results from the random effect logistic regression specifications (see table 1) used to measure direct and mediation effects proposed in Figure 1. Models 1 and 2 test the effect of resources in childhood (T_0) and at the foundation stage (T_1), respectively, on business founding at T_3[xv]. In Model 3, intention to start a business was added to the resource variables in Model 2. Models 4-9 incorporate the mediation effect of labour market returns, household income and childcare responsibilities at T2 on the effect that childhood resources at T_0 (models 4 to 6) and adult resources at T_1 (models 7 to 9) have on business founding at T_3[xvi].

According to model 1, entrepreneur transition is significantly related (at least at $p<0.01$) to childhood resources. Having parents with higher professional managerial occupations is positively associated with business. The lower a parents' occupational class, the lower the chance of making an entrepreneur transition. Respondents with self-employed parents, however, are more likely than children from any other occupational class to enter entrepreneurship. Childhood human capital (having a school qualification and higher school leaving age) and financial capital (having a family wealthy enough to fund attendance at a fee paying school) are also highly significant determinants of start-up ($p<0.000$).

Adulthood social class at T1 (model 2) is, like childhood social class, positively associated with business founding; each rung of the occupational level increases the chance of start-up. Prior entrepreneur experience is even more strongly related to new business founding.[xvii] In terms of social capital, social group membership, but not activity, is significantly associated ($p<0.05$) with entrepreneur transition. Only one human capital measure, work experience, is a significant determinant of start-up; having higher qualifications, and receiving on-going training is unrelated to business founding. Ownership of all forms of financial capital is positively associated business entry: high income ($p<0.01$), being a saver ($p<0.01$) and outright home ownership ($p<0.05$).

The effect of entrepreneurial intention on business founding, tested in model 3, is positive ($p<0.05$). However, inclusion of this variable does not significantly affect the influence of the capital resource variables.

Models 4 to 9 test the mediation effect of labour market returns, household income and childcare responsibilities on the relationships between resources at T_0, T_1, and intention at T_2, on entrepreneur transition. For this we followed the conditions of mediation suggested by Barron and Kenny (1986).

Condition 1 is largely supported for all childhood resources (model 1), most resources held in the foundation stage and entrepreneur intention at the pre-enterprise stage, as outlined above. Condition 2 is also strongly supported by significant relationships between most resource and intention variables and the mediators (results are not shown).

Table 1: Random effect logistic regression models for the effect of resource, labour market returns and household resources and responsibilities

Variables	Measures	Main Effect Models			Mediation Effect Models					
		Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**	**Model 8**	**Model 9**
CONTROL VARIABLES										
Age		0.088***	0.089***	0.092***	.098***	.104***	.084**	0.091***	0.102***	0.091***
Sex	Female	-2.814***	-2.041***	-2.057***	-2.828***	-2.996***	-2.849	-1.669***	-2.193***	-2.150***
EXPLANATORY VARIABLES										
Childhood Social Class- T_0	Low professional managerial	-0.333			-0.119	-0.367	-0.285			
(Ref: High professional managerial)	Routine non-manual	-0.939*			-1.114*	-0.927*	-1.033*			
	Skilled manual	-1.045**			-1.137**	-0.984**	-1.087**			
	Unskilled manual	-1.685***			-1.761***	-1.544***	-1.762***			
	Self-employed	1.198*			1.054^	1.266*	1.017^			
School Leaving Age - T_0		0.085**			0.068*	0.066*	0.057*			
Listed School Qualification - T_0	Yes	1.176***			1.146***	0.858**	1.192***			
Financial Resources- T_0	Fee paying school	1.828***			1.866***	1.849***	1.751***			
Resources at Foundation Stage (T_1)										
Highest Academic Qualification – T_1 *(Ref: High)*	Medium		-0.278	-0.279				-0.164	-0.276	-0.321
	Low		-0.604	-0.586				-0.667	-0.701^	-0.668
On-going Training - T_1			-0.043	-0.051				-0.191	-.058	-.125
Experience - T_1			0.127*	0.123*				0.102^	0.113^	0.122^
Adulthood Social Class- T_1	Low professional managerial		-0.146	-0.149				-0.038	-.052	-0.163
(Ref: High professional managerial)	Routine non-manual		-0.979**	-0.981**				-1.218**	-0.953*	-1.060**
	Skilled manual		-1.112**	-1.121**				-1.409**	-0.989*	-1.052*
	Unskilled manual		-1.276***	-1.291***				-1.705***	-1.216**	-1.139**
	Self-employed		3.488***	3.512***				3.512***	3.256***	3.900***
Social group activity- T_1			-0.010	-0.016				-0.055	-0.002	-0.023
Social group			0.171*	0.175*				0.129	0.143	0.154

membership - T_1										
Savings - T_1	Yes		0.312**	0.333**				0.372**	0.315*	0.335**
Total Income (log)- T_1			0.362**	0.339**				0.469**	0.358**	0.351**
Home Ownership – T_1 (Ref: Rented)	Mortgaged		0.059	0.106				0.198	0.072	0.068
	Owned outright		0.729*	0.744*				0.767*	0.816*	0.812*
Intention to Start a Business (T_2)										
Intention - T_1	Yes			0.487*				0.432*	0.512*	0.499*
Labour Market Returns (T_2)										
Job satisfaction - T_2					0.172*			0.128*		
Labour Income (log) - T_2					0.271**			0.221**		
Economic activity - T_2					0.017**			0.034**		
Household Responsibilities (T_2)										
Childcare Responsibilities - T_2 (*Ref: Take Main responsibility*	Shared responsibilities					0.542*			0.513*	
	No responsibilities/no children					0.968**			1.212**	
Household Resources (T_2)										
HH income - T_2	High HH income/adult (log)						-0.385**			-0.373**
Wald Chi2(*df*)		243.9***	346.0***	338.4**	233.2***	235.3***	235.3***	388.7***	349.18***	291.37***
Log likelihood		-3277.37	-2821.46	-2819.25	-2821.73	-2939.58	-3171.70	-2525.10	-2590.87	-2811.95
Variance Composition										
Sigma_u		7.93(.214)	5.90(.19)	5.89(.21)	7.91(.22)	7.98(.22)	7.82(.22)	5.76(.19)	5.98(.19)	5.80 (.268)
rho		.95(.003)	.91(.005)	.91(.001)	.95(.01)	.95(.002)	.95(.002)	.91(.005)	0.92(.005)	.912(.007)

Condition 3 is supported by significant relationships between mediating variables (labour market returns, household income and childcare responsibilities) and entrepreneur transition. Higher level of job satisfaction ($p<0.05$), economic activity ($p<0.01$) and labour income ($p<0.01$) are strongly related to business founding in models 4 and 7. Having higher household income ($p<0.05$) is negatively related to start-up in models 6 and 9. Relative freedom from childcare responsibilities is significantly ($p<0.01$) positively related to business entry in models 5 and 8.

Condition 4 depends on comparing model 1 with models 4 to 6 and model 3 with models 7 to 9. Irrespective of the influence of pre-enterprise labour market returns and household income and childcare responsibilities, having a parent with a higher occupational class and high childhood financial resources is strongly related to business founding in T_3 ($p<0.01$). Positive labour market experiences, low household income and relative freedom from childcare reduce coefficients for school leaving age, suggesting they mediate the relationship between higher school leaving age and start-up. The effect of having a school qualification is also partially mediated by relative freedom from childcare. High labour market returns and low household income partially mediate the association between having self-employed parents and business entry.

The effect of higher adulthood occupational class is still positively associated with start-up but its effect is partially mediated for some groups by relative freedom from childcare responsibilities and low household income. The effect of work experience is also partially mediated, and the effect of social participation is fully mediated, by all labour market and household conditions tested. The influence of adulthood financial resources on start-up remains largely the same but the positive effect of being a saver is partially mediated by childcare responsibilities. The effect of entrepreneurial intention is unchanged by the mediators.

DISCUSSION

We respond to Welter's (2011) calls for theorizing of how entrepreneurship emerges from, and recursively affects, context. Developing the RBV, we proposed that small business entrance emerges from the application of resources accrued from an agent's lifetime experience of interacting with an external world that governs (but does not determine) access to resources and subjection to social norms. We linked motivation and capacity to apply resources to entrepreneurship to labour market and household experiences in the years prior to start-up. We expected that people within a given society will have common behaviours and patterns of social feedback and this will create common pathways to entrepreneurship. We argued that life course modelling could enable us to identify statistical associations that represent these pathways and that, by drawing on knowledge created through qualitative research and social theory, we could interpret how pathways to entrepreneurship relate to experience of intersecting social relations.

We proposed a specific life course model that sought to identify, in particular, the influence of class relations on entrepreneur transitions. Specifically, we proposed pathways from inter-generational resource acquisition (in childhood continuing into a career period some years prior to business entrance) and entrepreneurship intention, through displacement factors further shaped by class (labour market returns and household income) and also by gender relations (childcare responsibilities) at an intermediate period, to start-up. We then tested this model using random effect logistic specification on a reliable longitudinal dataset, the BHPS. Of course, even when

strong statistical associations exist, pathways do not represent the experience of all subjects, reflecting the complexity of environmental factors and agent capacities (Archer, 2000). As all nine models tested are significant (p<0.000), however, our proposition that life course modelling is powerful in explaining entrepreneurial behaviour is confirmed. One of our most significant contributions, then, is to point to the promise of a theoretical approach that embeds resource-based theory within a life course context.

Our findings support the proposition that entrepreneurship is most likely for the higher classes in Britain. Business entry is directly associated with parents' high social class and reduced by every step down the occupational ladder. Achieving educational qualifications in childhood and having a higher school leaving age are also related to start-up. As these human capital attributes are associated with parental resources, skills and attitudes, we assume they are at least partially transmitted from the family of origin in an inter-generational class process (Roberts, 2001).

Having greater financial capital in the family of origin and at the foundation stage is also directly associated with business entry. In particular, coming from a family wealthy enough to fund private education and, in adulthood, having a high income and being a saver are very strongly related to later business entry. Outright ownership of accommodation also has an effect. Henley's (2007) finding (also employing BHPS) that saving is unrelated to business founding suggest that, just prior to start-up, saving is halted as investment is made in a new venture. Our findings suggest entrepreneurship is related to a longer-term pattern of saving. Moreover, the effect of financial resource is largely unmediated by intervening labour market or household factors. This suggests that deep and enduring divisions of wealth, originating in the inter-generational transmission of wealth core to class processes and sustained through career success built on class resources, dispositions and behaviours inherited from childhood (Roberts, 2001; Hebson, 2009), fundamentally influence the chance of starting in business.

Our family wealth measure (attending a fee paying school) might be interpreted as a proxy of human and social capital accruing from an elite education, as well as family wealth.[xviii] The lack of relationship between human capital measures in adulthood and business entry partially contradicts this interpretation, however. The better educated and trained feel too secure in prosperous employment careers to risk enterprise (Cassar, 2006). Being from a high class background and having a solid start in education, but not necessarily being the highest academic achiever, is a strong initial pathway to entrepreneurship. Adult occupational class and sustained labour market engagement is also positively related to start-up; a pathway continues from early privilege to building a career, albeit not strongly credentialed, probably through privileged contacts and network abilities developed from childhood.

In terms of social capital, we found that only social group membership is associated with start-up and this is fully mediated by later life events. As business success relates to membership of elite business or professional networks (Bauernschuster et al., 2010), and we were unable to measure these due to data restrictions, we conclude that the effect of social capital is only weakly modelled. We propose that enduring membership of wealthy personal networks that create exchange value, higher class dispositions that promote access to better quality networks, and financial wealth that supports the transaction costs involved in networking (Hanlon and Saunders, 2007; Lee and Jones, 2009) are likely to promote start-up among the higher classes because it enables access to scarce resources. Due to data restrictions, these networks and their effects are

difficult to model through mass longitudinal datasets. Qualitative inquiry is recommended to test our ideas about the effect of class in entrepreneur networking.

The effect that having entrepreneurial parents has on business foundation illustrates how norms (and probably more tangible resources) are transferred inter-generationally so start-up resembles a feasible life project (Kim et al., 2006; Western and Wright, 1994). This effect is partially mediated by positive labour market experience, which creates an opportunity cost to following a family tradition. Thus, parental self-employment has most influence on the young (Mungai and Velamuri, 2011). Partial mediation by low household income indicates some avoidance of necessity entrepreneurship; Mungai and Velamuri's (2011) report that the effect of parental self-employment is strongest when families have successful businesses suggests children raised in business families are more sensitive to the contingency of entrepreneurship on resources and opportunity. Of course, entrepreneur parents may have a range of occupational statuses – a point poorly addressed on standard class scales. We know that minority ethnic business owners who have reaped low rewards from hard work in low level service businesses channel their children to professionalized employment, although businesses pose viable alternative for under-performers (Ram et al., 2001). Mungai and Velamuri (2011) report that parents' experience of self-employment failure negatively affects the young. Further research is required to model the specific class pathways of children born to entrepreneur parents with different occupational standing and wealth.

The notion that start-up emerges from positive labour market experiences emergent from class privilege is also supported by the effect of positive labour market status as a tipping point into start-up. Job satisfaction, high labour income and more continuous economic activity are all associated with business entry two years later, but these relationships do not mediate the effect of earlier class privilege, suggesting they are part of a continuous pathway. There is some mediation of resources held years prior to start-up: the effect of continuous labour market experience is diminished and the association with social group membership disappears. As career breaks may reflect ability to rely on alternative sources of income (as well to unemployment) and social group membership is a weak measure of entrepreneur social capital, these changes are not necessarily signs of lower class pathways to entrepreneurship. In terms of resources accrued in childhood, the only partial mediation effect is to later school leaving age. As all other class effects remain, this suggests that some people born to privilege achieve career success even when they failed to credentialise their learning and then apply their resources to entrepreneurship. In short, entrepreneurship pathways are deeply embedded in the financial and (we propose) social capital emergent from higher-class families of origin.

Interestingly, having low levels of income per adult household member does mediate some of the class associations with start-up. We found a general negative relationship between household income and start-up. Our finding that the positive effects of staying on at school, sustaining labour market engagement and social group membership, and the negative effect of being a manual labourer, are diminished by low household income confirms existing evidence that household need pushes the poorly resourced into necessity entrepreneurship (Authors 2, 2011). However, he fact that most class measures are not mediated by poor household income is significant. Members of the higher classes are still more likely to start-up when household income is low, probably because they can draw on financial and non-tangible resources transmitted from childhood to meet the resource challenges of start-up and, possibly, as a middle class strategy to guard against downward social mobility (see Roberts, 2001).

We confirmed Henley's (2007) finding that long-standing entrepreneurial intention is neither a mechanistic predictor, nor a necessary condition, of business founding. Specifically, we found that holding an entrepreneur intention has some affect on chances of start-up 2-7 years hence, a specific detail that contextualises the effect of entrepreneur intention in a life course process. Entrepreneur intention might be understood better if its effect was tested at different stages of the individual and household life courses, particularly as it mediates a class-structured pathway of resource accrual and application. In our model, entrepreneur intention was part of a class-privilege pathway and had most effect in triggering start-up under positive labour market circumstances. Even people who are drawn to business ownership are more likely to act if they have the right resources to identify and/or exploit opportunities.

Overall, start-up is associated with a lifelong pattern of capital accumulation in Britain, particularly in terms of personal wealth and, we propose, the class networks and norms that foster career success regardless of mediocre educational achievement. The most privileged – with high-class backgrounds and the best qualifications – are as likely to focus on employment careers. Agents seem to have tacit knowledge that start-up demands a range of rich resources and this generally deters the resource poor from business founding. When household income is low, the poorly educated and socially isolated with intermittent employment records may enter business as a survival strategy (Authors 2, 2011). These kinds of businesses tend to be under-capitalised, despite the small resource enhancements often made by micro-enterprise programmes (Authors, 2006). They barely make a living wage (see Authors, 2006). This evidence supports our general conclusion that entrepreneurship is, as class and RBV theorists have long-argued, crucially dependent on social capacity to access resources. In the parlance of Marxist class theory, entrepreneurs require the capacity to own the means of production. This finding is powerful; it defies the popular myth that entrepreneurship is an arena of meritocracy in which hard work (i.e. unfettered agency) is more powerful than privilege in supporting business venturing (Scase, 1992). It defies the discourse of enterprise as an open route of opportunity on which neo-liberal policy depends (Authors 1, 2011) and contradicts more simple analysis proposing that there is no wealth or class barrier to entrepreneurship (Kim et al., 2006).

By investigating class, we not only contribute to understanding of entrepreneurship but can comment on the role that entrepreneurship has on context (as called upon by Welter, 2011). Higher rates of start-up by people following a class-privileged pathway of resource accrual suggest that entrepreneurship is a route through which class is reproduced in Britain. Indeed, our finding that entrepreneurship is pursued by higher classes with low educational qualifications indicates that it is a means of defending against downward mobility (see Roberts, 2001; Western and Wright, 1994). Entrepreneurship may, thus, hinder change to a more meritocratic system. Ultimately, this claim depends on understanding the returns on entrepreneurship made by people from different class backgrounds. As business income tends to increase in time, and is situated in wider household work and economic strategies (Carter, 2011), modelling should integrate individual, business and household life courses.

As predicted by theorising about how entrepreneur labour capacity relates to household divisions in care labour (Ekinsmyth, 2011; Rouse, 2010), freedom from childcare responsibilities is strongly positively associated with start-up. People sharing care responsibilities also have a higher chance of start-up than primary carers. Agents, then, have a tacit understanding of limitations in the strategy of reconciling work and family through business start-up and the contingency of business

growth on entrepreneur labour capacity (Rouse and Kitching, 2006; Rouse, 2010). This confirms that entrepreneurship is embedded in the family (Jennings and McDougald, 2007; Hamilton, 2006; Aldrich and Cliff, 2003). Since typical sexual divisions in care labour in Britain cast women as primary carers (Bradley, 2003), reducing their entrepreneurial labour capacity (Ekinsmyth, 2011; Rouse, 2010), we can see that family embeddedness is a strong explanation of why women start-up much less frequently than men.

Interestingly, we found that class-based pathways to entrepreneurship are particularly strong for people with care responsibilities. People with lower occupations, less regular employment experience, low social group membership and who do not save are more likely to apply their resources to entrepreneurship if they have freedom, or relative freedom, from childcare. They probably believe they can compensate for financial constraints by working long hours and, so, substitute with labour resource. If they are cast in the masculine role of family breadwinner, their gendered household role may enable such time investment. However, we know that some entrepreneur fathers have primary or shared childcare responsibilities (Authors 2, 2011). Future analyses should investigate sex differences in the incidence and effect of childcare responsibilities on class-based pathways to entrepreneurship; ideally, this effect should be modelled to investigate change across the household life course. These findings should be employed to develop a family-embedded notion of the entrepreneur (male and female).

Sex, as a control variable, is significant in all of our models, reflecting much lower rates of start-up by women in Britain. It is likely that these differences emerge from gendered social processes that create differences in women and men's access to resources and subjection to social norms (see Rouse, 2010). It is also likely that multiple gender divisions are at work in addition to divisions in childcare responsibilities (2003). Meanwhile, we present evidence that women's economic liberation through entrepreneurship is hindered through care responsibilities. Women of low class, who are multiply resource constrained, are particularly discouraged from start-up.

Our life course model was tested on people in a wide age range to observe incidences of entrepreneur transition in a panel study during a specific chronological period. Observations about childhood relate to particular points in respondents' life courses but all other phases are age varying. The strength of age as a control variable suggests unexplained heterogeneity related to age. This effect could be investigated in future studies through two methodological strategies: repeating the model for people of particular age ranges and comparing results, or; employing cohort studies in which age is common among all respondents. The first strategy could be pursued using our BHPS dataset, although small sample sizes may prove problematic at the age extremes, where business founding is less common. British cohort studies are available, but present data limitations; we considered using the National Child Development Study but long periods between waves meant mediation effects could not be modelled, creating a more serious compromise in model operationalization than the age effect evident in the BHPS. Life course analyses commonly include compromises and demands researcher judgement (Audas and Williams, 2001). We have consistently stated that no single study can research the complexity of life course processes and urge experimentation with both alternative datasets and models.

Overall, our findings support the proposition underlying our contextualised life course framework. An individual's capacity to accrue resources and apply them to entrepreneurship depends on their lifelong experience of a social world that creates, and sets limits to, opportunities (Welter, 2011) depending on position within intersecting social relations (Reynolds, 1991; Bradley

1996). Clearly, this finding has significant implications for the RBV, understanding of business start-up and, indeed, our conception of the entrepreneurial agent.

CONCLUSION

We set out to conceptualise and model life course pathways that stimulate entrepreneurial action. Our conceptualisation of life course pathways drew on an understanding of potential entrepreneurs as socialised agents in continual interaction with an external social world structured through complex social relations that sets boundaries on opportunities (Welter, 2011; Archer, 2000). We presented a specific model that sought to identify the effect of class on resource accrual and application to entrepreneurship. To demonstrate how social relations intersect, we also modelled the effect of a specific gender division (in childcare responsibilities) on this class-structured pathway. All of our random effect logistic specifications are highly significant. As we drew on a reliable longitudinal dataset, the BHPS, this is powerful evidence that pathways to entrepreneurship in Britain are embedded in class and gender relations. It provides initial support to our wider conceptual framework. We have also contributed to sociological theory about the nature of contemporary society by interpreting the effect that the life course pathways to entrepreneurship have in reproducing class and gender relations in Britain.

Neo-liberal policy tends to assume that entrepreneurship is an open route of opportunity or, at least, a meritocracy; our findings contribute to a growing body of evidence that undermines this notion (Authors 1, 2011). We identified a strong enterprise life course pathway from direct inter-generational transmission of financial, basic human and, we theorised, elite social capital, that supports further resource accrual through successful employment careers and subsequent business entry. This is either as a continued route of social mobility or as a defence against downward mobility for people with high class inheritance who failed in education, or who are at a point in the gendered household life course when income is stretched and/or childcare responsibilities are heavy.

Our finding that lower class agents tend to avoid start-up, particularly if their entrepreneur labour capacity is low due to care responsibilities, suggests that most have a tacit understanding of the resource demands of entrepreneurship. We know that micro-enterprise programmes can inculcate the poor and economically inactive into the discourse of enterprise as an open route of opportunity (MacDonald, 1996), but they make only small resource enhancements and found under-capitalised businesses (Authors, 2006) that barely make a living wage (Authors 1, 2011). Policy makers seeking to create enterprise inclusion should respond to evidence of socially constituted life course pathways by tackling the causes of class and gender inequality. This means disrupting divisions in the inter-generational transmission of financial and human capital, and the structuring of elite social networks on higher class norms and privileges. Providing support with childcare, to liberate entrepreneurial labour capacity, is also important (Rouse and Kitching, 2006). Equalising higher level educational opportunities may play a part in promoting social mobility through employment more than entrepreneurship.

Working with secondary sources inevitably involves compromises because there is no opportunity to collect ideal data (Audas and Williams, 2001). Our model is limited by weak social capital measures with the consequence that our interpretation relies on theoretical arguments about class-privileged network access and skills (Roberts, 2001), rather than empirical testing. Researchers must understand the implications of these compromises for the knowledge they can

generate. Nevertheless, the free availability of mass longitudinal data that is nationally representative and not subject to significant recall or attrition bias (Uhrig, 2008) make panel and cohort studies rich sources for life course modelling. The logistic specification employed in this study follows the principle of random intercept modelling that accounts for unobserved heterogeneity at the individual level. It also tolerates modelling of inter-correlated factors within clusters.

We encourage conceptualisation and testing of multiple alternative life course pathways to, and through, entrepreneurship. Particularly, to explore how start-up emerges from intersecting social relations (Bradley, 1996; Reynolds, 1991) as they are experienced across the life course of the individual, the household and the business (Chen and Korinek, 2010). As social relations vary spatially and temporally (Welter, 2011), we encourage comparative analyses utilising longitudinal data available for different periods, countries and regions. It would be interesting to compare our results with more unfettered capitalist systems such as the United State and more highly governed societies, such as the Nordic states (National Equality Panel, 2010), where boundaries to capital ownership may be more or less permeable (Western and Wright, 1994). Meanwhile, our evidence should not be dismissed as specific only to class-structured Britain. The hope that any American can make it in business has already been exposed as an illusion (Bates, 1997) and poor outcomes from international micro-enterprise programmes (Jurik, 2005; Karides, 2005) point to the resource intensity, and socially constituted nature, of entrepreneurial opportunities internationally. Nevertheless, we would urge that other similar studies be conducted in other geographic and cultural contexts. In addition, comparison of life course pathways enacted at different times will inform us about changes to the nature of entrepreneurial opportunities across generations. Comparison between recessionary and non-recessionary periods will illuminate the effect of macro-economic forces; macro-economic climate might also act as proxy for market opportunity, which is otherwise difficult to model using mass datasets.

To explore, at a micro level, continual interactions between social agents and external social relations in business start-up, and so to extend our knowledge of resources, opportunities and entrepreneurship itself as socially constituted, we encourage qualitative investigation of life course pathways to entrepreneurship. Studies might compare typical, socially constrained experiences with exceptional 'rags to riches' entrepreneur stories. Our findings suggest that innovations or inconsistencies in structure and novel strategies devised by sensemaking agents can create 'gaps' in normal social processes and create socially mobile routes to, and through, entrepreneurship for the minority. Qualitative enquiry is required to test and extend our theorisation of opportunity identification, development and exploitation as governed, but not mechanically determined, by a lifetime's experience of resource accrual and subjection to social norms.

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[i] Noteable exceptions are explorations of why entrepreneur children are more likely to start-up (Sorenson, 2004; Aldrich and Renzulli, 1998).

[ii] We employ a range of terms to refer to small business owner-management, including self-employment. Our sample includes business owners with or without employees, some of whom referred to themselves in the BHPS as self-employed and others who did not but reported being business owners.

[iii] We focus on class as a process that shapes market capacities as a stepping stone to theorising entrepreneurship as embedded in, and affecting, class divided societies. Future research could usefully engage with additional or allied notions of class division, particularly as these relate to dispositions/habitus, status/autonomy and collective identification/struggle (see Bourdieu, 1990; Atkinson, 2007; Roberts, 2001; Western and Wright, 1994).

[iv] It is acknowledged that gender relations are constituted by a number of divisions in addition to the sexual division of labour. In particular, occupational segregation, gender practises and divisions of power (Bradley, 2003). The influence of these should be tested in life course models.

[v] A limitation of random effect modelling is the assumption that unmeasured characteristics of respondents are not correlated with measured characteristics. Despite this, we adopted random effect modelling because fixed effect modelling cannot estimate the effect of time invariant measures on the dependent variable important to this study (e.g. sex and education). A Hausman specification test (Allison, 1984) suggested that, while fixed effect modelling generated better model fit ($p<0.05$), individual parameter estimates for key variables are similar in both models.

[vi] Entrepreneur intention is assumed to have a proximal effect on entrepreneur action and, so, is measured in the 'pre-enterprise stage' (T2) of our model. We were unable to test the effect of more longstanding entrepreneur intention as the BHPS only began to collect entrepreneur intention data in Wave 8.

[vii] The 'foundation stage' (T1) starts two years prior to the end of the 'pre-enterprise stage' (T2). This begins and ends variably between 1992 and 1996.

[viii] The 'enterprise stage' is the five year period in which careers were observed to detect entrepreneur transition (or not) (i.e. 2004-8).

[ix] The 'pre-enterprise stage' (T2) is the five year period that is 2-6 years prior to start-up for those who made a self-employment transition in the five year observed career period (2004-8) (T3); this begins and ends variably between 1998 and 2006. For the comparison group who remained in employment, the 'pre-enterprise stage' is the 2-6 years prior to 2004, the beginning of the observed career period (T3).

[x] The results presented are not sensitive to using fewer evaluation points (tested for 20 and 10).

[xi] Years = 5 for all measures.

[xii] iid – independently and identically distributed.

[xiii] Highest academic qualification is time invariant. Employment experience is aggregated and treated as time invariant.

[xiv] To model entrepreneur transition, respondents in business within two years of T3 were excluded.

[xv] Preliminary analysis suggest some strong significant relationship between resources at T_0 and T_1 (T1 measures are taken for individual years, results are not reported in order to conserve space). As a result, separate models (models 1and 2) were created to avoid strong multicollinearlity effects in the models.

[xvi] Three further models were estimated to establish that mediation conditions are met (these results are not reported to conserve space). These established an association between labour market returns, household income and freedom from childcare at T2 and entrepreneur transition in T3.

[xvii] Due to conditions imposed on sample selection, the number of respondents in entrepreneurship at the foundation stage is very low. This finding should, consequently, be treated with caution.

[xviii] Just 6.5 per cent of children in the UK attend fee-paying schools (Independent Schools Council, 2011). They achieve significantly higher educational success at school and labour market privilege not fully explained by better educational credentials (Naylor et al., 2002).