

Applying cognitive models to question testing of UK Labour Force Survey questions about economic inactivity

Main findings from a qualitative study exploring the answers given to Labour Force Survey questions on economic inactivity, highlighting the methodology used.

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1 Background to the study

Both in the UK and internationally there is a strong interest in the potential supply of labour and in being able to identify a single group within the economically inactive, sometimes called the 'labour reserve'. The ONS's Labour Market Framework Review, completed in 2002, highlighted a need to look in more detail at issues around labour market attachment. Although the four questions asked in the Labour Force Survey (LFS) to establish economic inactivity have been in use for many years, they do not allow analysts readily to distinguish between sub-groups of the economically inactive in terms of their potential for becoming active suppliers of labour. There was also concern about 'random' changes in the reasons respondents give for their inactivity across different waves of the LFS.

The Data Collection Methodology Centre of Expertise (DCM) of ONS was commissioned by Labour Market Division (LMD) of ONS to conduct the qualitative study reported in this paper. The study involved cognitive testing of the four questions to explore respondents' understanding of the questions and how they formulated their answers. It also explored respondents' future intention to work.

The LFS derived variable of economic activity conforms to the International Labour Organisation's (ILO) standard definitions of employment, unemployment and economic inactivity.

This derived variable further sub-divides economic inactivity into three groups of people:

- those who had looked for work in the four weeks ending the Sunday prior to the LFS interview, but were unavailable to start in the next 2 weeks;
- those who had not looked for work, but said they would like a regular paid job at the moment;
- and those who had not looked for work and said they would not like a job at the moment.

Each of these groups is further divided into sub-groups (24 in total across the three groups), according to the main reasons why survey respondents were not available to start work, were not looking for work, or did not want a job.

This research project aimed to provide some insight into the respondents' understanding of the concepts behind this classification, by carrying out a cognitive test of the LFS questions relating to economic inactivity to identify potential sources of response error¹. The extent to which those classified as economically inactive included people who never wanted to work and those who would want work in the future, was explored in-depth.

The research was also able to shed light on 'a range of unobserved, idiosyncratic factors, such as the motivation to seek work' that are difficult, if not impossible, to incorporate in statistical models (p14, Thomas and Joyce, autumn 2003).

2 Methodology

2.1 The purposive sample

In April and March 2003, 20 respondents to the fifth wave of the 2002 LFS were purposively selected. The selection was based on people defined as 'economically inactive', and their socio-demographic characteristics: age, sex, area of residence and whether or not they had characteristics usually associated with people in work.

The aim of the sampling strategy described below was to help explore, understand and explain the range and diversity of ways in which people go about answering LFS survey questions with regard to economic inactivity. It is important to remember that this was a purposive, non-random sample. Thus, it is not possible to draw statistical inferences about the size or distribution of respondents' reactions and opinions reported in this article to the general population. In purposive sampling the number of people interviewed is less important than the criteria used to select them. These criteria are based on knowledge of the subject area under investigation, its literature and theory. In the case of this research respondents were:

- first, sorted according to their economic activity classification in their fifth and last wave of the 2002 LFS;
- then, economically inactive people who said they 'would like' and 'would not like' a job were selected;

¹ Response error is a type of non-sampling error that 'arises because, for reasons such as misunderstanding or lack of knowledge, respondents may give incorrect answers to questions (...) When individual responses are linked, such errors are far more likely to lead to an apparent change of state when the true situation is one of stability, than the reverse'. (p195, McIntyre, April 2002).

- then, people with the following reasons for inactivity were selected: 'retired', 'looking after family', 'long-term sick or disabled', 'temporarily sick or injured', 'not yet started looking', and 'any other reason'.

The following groups were excluded:

- Those waiting for the results of a job application.
- Those seeking work but unavailable to start in the next two weeks. Schweitzer's research shows that both these groups of people were likely to become economically active in the near future (p14, Schweitzer, 2003).
- Students. (Barham February 2002: 72). Schweitzer's research shows that students were likely to participate in the labour market once their studies were over (p15, Schweitzer, 2003).

Together with the above criteria based on the economic inactivity classification, respondents were selected on the basis of the following socio-demographic characteristics.

- Age. People in their 30s, 40s and 50s. People older than state pension age, or retired from paid work and nearing state pension age (55 or older for women; 60 or over for men) were excluded. The assumption was that older people were least likely to re-enter the labour market. People in the youngest age-groups were also excluded. The assumption was that the most frequent reason given for their inactivity was that they were studying - the same reasons given above for the exclusion of students.
- Sex. Analysis of LFS data shows that the respective rates of economic inactivity, and the reasons given for being economically inactive, were different for men and women of working age. For women the most common reason given for inactivity was family responsibilities, while for men the most common reason was long-term disability (p72, Barham, February 2002). Furthermore, over the last 20 years, among women aged 50 to 59, there has been a decrease in their inactivity rate, compared with an increase among men in the same age-group (p301, Barham, June 2002). These facts justified the equal split by sex of the purposive sample.
- Area of residence. Respondents to the purposive sample were distributed across the area of England with the highest inactivity rate (the North East) and the lowest (the South East). Respondents from the London area were also included; the capital was considered to be a mixed area, as it contains boroughs with high and low inactivity rates.
- Respondents with characteristics usually associated with those in work compared with those not in work. This variable was derived and is explained in detail below.

2.1.1 The derived variable describing people with 'high in-work' characteristics

This is a heuristic device that tries to account for the fact that people with an identical economic inactivity classification, living in the same area, and of the same age and sex, may live under different circumstances. For example, consider two economically inactive women who say they would like work and are currently 'looking after the family'. One is married and has a university degree. The other is single and has no qualifications. Their likelihood of obtaining work and their interpretation of 'would like work' may be completely different for each of these women in terms of the constraints they face to working and the choices they can make in this regard.

The derived variable was based on Burchardt's and Le Grand's research (2002) which identified the characteristics of those in the general population most likely to be in employment. The statistically significant predictors of being in employment that Burchardt and Le Grand identified were operationalised for the purposes of this qualitative research from the LFS variables presented below.

- Level of education: high-level qualifications - degree or equivalent, another higher education qualification, or GCE A level or equivalent.
- Former occupation: classified as professional or managerial - managers and senior officials, professional occupations, or associate professional and technical occupations.
- Tenure: not renting - accommodation owned outright or being bought with mortgage or loan.
- Marital status: married and living with husband/wife.

To be said to belong to the 'high in-work' category respondents had to fulfil all four conditions. In contrast, people who did not fulfil all of the conditions listed above are described as not having 'high in-work' characteristics.

Burchardt and Le Grand assumed that people classified as economically inactive but with similar characteristics of those in employment faced fewer obstacles to working; for this reason, it can be hypothesised that such people were not working voluntarily. At the other extreme, it is hypothesised that people with no qualifications, renting and divorced for example, were closer to the 'involuntary' end of a 'voluntary/involuntary' spectrum.

2.2 The interviews

Respondents were interviewed face-to-face in their homes. The interviews were tape-recorded and included the following stages.

1. Survey questionnaire: respondents were asked the LFS questions on economic activity.

2. Retrospective cognitive testing: researchers went back to the main questions of interest. Respondents were asked what they understood each question to mean and how they formulated their answer. In addition, each question was broken down into its main component parts to see how respondents understood each term. For example, researchers asked: 'in your own words, what does 'looking for work', 'regular paid job', 'at the moment' mean?

Probing was informed by a four stage cognitive model of the mental processes involved in responding: interpretation and understanding of the question and terms used, retrieval of the information required, judgement as to how to answer (which includes aspects such as sensitivity and social desirability), and providing the answer.

3. In-depth interviewing: researchers asked open questions about aspects of the respondents' life that related to their current situation as 'economically inactive':

- their education, work and life history;
- their current circumstances;
- their beliefs about the labour market and their employability;
- constraints that would prevent them from working in the future;
- their future intention to work.

2.3 The analysis

We analysed our interviews by using the 'constant comparative method' that Glaser and Strauss (1968) systematised in the 60s. This method starts by drawing a purposive sample that covers all the social dimensions pertinent to the object under study. After all members of the sample had been interviewed, we familiarised ourselves with the data, identifying themes and concepts, each of which was given a code. We then

1. coded the transcripts of the interviews;
2. compared codes within each interview and across interviews; and
3. looked for patterns in which codes and themes appear within each interview and across interviews.

In our research we used LFS question labels as codes (e.g., 'LOOK4', 'LIKEWK', etc.). We also used as codes the main parts of each question whose meaning we probed (e.g., 'at any time', 'paid job', 'would you like', etc.). Finally, we created codes such as 'background', 'motivation' or 'discrimination' for the in-depth part of our interview. We used 'Atlas.ti', a software package for the coding, organisation and retrieval of qualitative data.

2.4 Cognitive models and prototype effects

The analysis of some of the terms used in the questions tested was informed by Lakoff's theory of linguistics and, in particular, by the concept of cognitive models (Lakoff, 1987). Cognitive models are a partly conscious, partly unconscious set of assumptions members of a society or group share about the meanings of the categories into which the world is ordered. The most common cognitive model is the 'prototype', or 'best example' of a category. For instance, consider the word 'chair'. More people are likely to think of a desk chair than of a rocking chair or an electric chair. Similarly, people will more commonly associate the word 'bachelor', meaning an unmarried man, with someone like the film star George Clooney than with the Pope.

This matters in the field of survey research because the questionnaire designer and the respondent may have cognitive models of a category which do not match. Cognitive question-testing provides a method to identify any such mismatches. In section 5 below, respondents' cognitive models of different terms relating to the concepts of 'paid work' and 'paid job', used in several LFS questions, are discussed.

3 Findings relating to the key survey variables

This section reports the findings relating to the four key questions used in the classification of economically inactive: whether respondents were looking for work, whether they would like a job, and the reasons why they were not looking for or did not want work at the moment. They are illustrated by quotations from respondents².

3.1 Looking for work

Thinking of the 4 weeks ending Sunday the [date prior to interview], were you looking for any kind of paid work at any time in those 4 weeks?

- 1 Yes
- 2 No

This question determines whether respondents are classified as 'unemployed' (those answering 'yes' - provided they were available to start work in the next two weeks) or 'economically inactive' (those answering 'yes' - but unavailable to start work within 2 weeks, and those answering 'no').

² Quotations of more than a few words are attributed to the respondents who said them. Respondents are identified by sex, age-group, area of residence and the reason for not looking for or not wanting work, as recorded by the LFS. Some respondents gave different reasons during the qualitative interviews compared with those given during their last LFS interview. In these cases the LFS reason is presented first, and the reason given during the qualitative interview is presented second (for example, 'woman in her 40s, North East, disabled/retired').

The interviews aimed to explore the basic issue at the core of this question, namely, the way the individual's subjective intention to work determined their answer, and hence their classification as either 'unemployed' or 'economically inactive'.

The statistical measurement of employment, unemployment and inactivity rates has evolved historically against the backdrop of the inherent ambiguity of individuals' intentionality or will. As Merllie, a French sociologist, wrote: 'unemployment is different from inactivity in that the individual is actively looking for work, that is he or she has the will to work' (Merllie, 1989).

Cognitive probing of respondents' understanding of what was meant by 'looking for paid work' revealed a striking agreement among respondents that 'looking for' implicitly meant 'actively looking for'.

The question would imply that someone was actually doing something about it, rather than just reading and sitting doing nothing, actually going out of your way to fill a form in or perhaps attend an interview, or go and speak to somebody about a job. (*Woman in her 30s, South East, looking after family.*)

You have to, there's something you have to do, you have to plan, you have to... make yourself do it. [Jobs] don't come to you. You go to them... (*Man in his 50s, South East, retired/other reason.*)

The adverb 'actively' implies having the intention to work. This transforms an apparently factual question into an attitudinal one.

Interesting question. There are all shades of answer. I did pick up an application form for a particular job. So I suppose the answer is yes... But... did you, does [the question] use the word 'actively'? (...) I happened to be at the local library and there were jobs advertised. So I picked up an application form and read it. So, is that a 'yes' or a 'no'? I wasn't actively looking for [laughter]. (*Man in his 50s, South East, not started looking/other reason.*)

Respondents went through two cognitive steps when answering the question.

1. They determined whether or not they had the intention to look for work (either during the past four weeks, if the time frame of the question was taken into account, or simply during the recent past).
2. They determined whether or not they had actually done something in the last four weeks (or in the recent past) that could have resulted in obtaining paid work.

Only 'actively looking' leads to a positive response. People who answered 'no' were in one of the following situations:

- 'not looking at all', that is, not having the intention to work and not looking for work;
- 'keeping an eye open' on the employment situation. This consisted of the most passive activities related to job seeking, such as reading

newspaper advertisements, but not having the intention to work (at least currently);

Sometimes I look in the paper and see what jobs there are, but not because I want to go back to work at the moment, I don't. So I was looking but not actively looking, I suppose ... because I want to see what there is around, maybe. (*Woman in her 30s, South East, looking after family.*)

- 'passively looking'. This consisted of having a weak intention to work but not being proactive, for example by applying for jobs. In this situation people were seeing if the right job "comes along"³. One respondent had found a job through 'passively looking', since her LFS interview. She said she had always considered working once her children were old enough. She had read adverts in newspapers and asked friends and relatives but,

I wasn't actively looking, just used to... You ask about 'cos you never know when something is gonna come up, do you? (...) Finally, a friend just rang up and asked me if I was interested, basically. (*Woman in her 30s, London, looking after family/working.*)

3.2 Would like a paid job at the moment

Even though you were not looking for work in the 4 weeks ending Sunday the [date prior to interview], would you like to have a regular paid job at the moment, either a full- or part-time job?

- 1 Yes
- 2 No

This question aims to distinguish between those who 'would like to have a regular paid job' and those who would not. People giving a positive response are generally thought to be more attached to the labour market than people giving a negative one (Laux, October 1997).

3.2.1 The meaning of 'would you like (to have a regular paid job)'

Respondents gave either a realistic or an idealistic interpretation of 'would you like' based on their desire, need, and ability to work. The complexity of respondents' answers to the cognitive testing of the phrase 'would you like (to have a regular paid job)' reflects the complexity of the question itself. In the present conditional 'would you like' the dimension of desire is explicit, while the dimensions of need and ability are implicit. In other words, the question 'would you like to have a regular paid job' not only asks 'do you want', but also 'do you need....' and 'can you have a regular paid job?' Some respondents considered all three aspects, while others considered only one or two of them.

³ Schweitzer (p. 12, 2003) for a discussion of the issue of 'people not actively looking for a job' from the perspective of the employer.

The need to work was considered in terms of a financial need, a psychological need or a combination of both. The following quote illustrates what respondents meant by psychological need in this context:

It's not really a need or... I mean, if it is a need, it is not a need in financial terms. A need perhaps to bring a bit of routine, a bit of more social interaction into one's life. You see, I mean, the job for me would be almost you can treat it as a hobby [laughter]. It's just bringing a little bit of extra money and providing me with some, what's the word I am going to use? Entertainment? (*Man in his 50s, South East, not yet started looking [for work]/other reason.*)

3.2.1.1 The 'realistic'

People who gave realistic answers interpreted the question in terms of whether or not they needed work at the time of the interview and whether they were able to work. They answered 'no' when they did not need to work at all or when they realistically assessed that constraints prevented them from working. If those who answered realistically believed they could overcome their constraints they answered 'yes' when asked if they would like a job.

Disability was often considered an insurmountable constraint.

I would like [a job] but I can't have one. (*Man in his 40s, North East, disabled.*)

Because of the circumstances for myself, I know I couldn't have a job. I couldn't do a job anyway. So whether I would want to have a one or not, I couldn't do it... (*Woman in her 40s, North East, disabled/retired.*)

'Looking after the family' could either be a surmountable or an insurmountable obstacle to working, mainly depending on whether the individual had 'high in-work' characteristics' or not [Box 1].

For those who did not have 'high in-work' characteristics, often relying on state benefits, working would have to be financially beneficial for it to be considered a plausible option and to compensate them for the loss of state benefits and the cost of child-care. People in this situation sometimes felt a sense of guilt at not working.

I should be bringing something into the house. But... I have childcare to pay for, so even if it's a part-time job it's got to be bringing in good pay... [if I were to work] I'd be out of pocket and she'd be without her Mam all day. So that's a big thing keeping me at home at the moment. (*Woman in her 30s, North East, looking after family.*)

On the other hand, people looking after the family, with 'high in-work' characteristics, often felt no guilt at being economically inactive. Their state of economic inactivity was voluntary, not complicated by any other considerations. In this respect, they were similar to the retired people who were financially secure.

... we decided to, well, I decided to stay at home with the children until they are all at school. (*Woman in her 30s, London, looking after family.*)

... I've been looking after children. I can't fit any more things into any more hours in the day! (*Woman in her 30s, South East, looking after family.*)

In summary, the common trait among realistic respondents was that they emphasised need and ability to work over desire. They answered this question in terms of its implicit dimensions of 'need' and 'ability'.

3.2.1.2 The idealistic

The present conditional tense of the verb 'would like' used in this question, implies a hypothetical and ideal dimension.

It's gentleness in the wording, 'would you like', it sounds as if it's trying to invite me – 'would you like a piece of cake?' (*Woman in her 50s, South East, retired/other reason.*)

I think 'want' is probably a better word given my situation. 'Like' tends to be a bit... it doesn't, to me, stress the benefits. It's all, 'would you like to go down the pub today, would you like to have a different coloured car. If you want something it tends to indicate that there's an active role on your part. 'Like' to me has a... if it come along it comes along, if it doesn't it doesn't, I'm happy anyhow. (*Man in his 30s, North East, disabled.*)

The word 'would' suggested to respondents who answered idealistically to imagine an 'if' clause implicit in the question: 'if things were different, or in an ideal world (e.g., if you needed money, if you had no obstacles to working...), would you like to have a regular paid job...?' One respondent thought the question asked 'would you go out to work **if** you could?'

Some 'idealistic' people, who had a weak financial or psychological need to work, and who were able to do so, answered 'yes'. These were people who said they were 'passively' looking for work.

In my personal circumstances ... I don't have a financial need for working at this particular time. If I do some work it would probably be part time and for interest reasons – of course you get paid for it as well... (*Man in his 50s, South East, retired/other reason.*)

There were some people whose 'idealism' in answering 'yes' did originate out of financial necessity. But they faced obstacles to working that were very difficult to overcome. This was the case for unskilled disabled men in their mid-50s without 'high in-work' characteristics, who had been forced to leave their last job.

Put yourself in my shoes. Could you live on £56 a week? That's all I'm saying. You can live on it, I'm not saying you can't, you can shop around. It's the bills that cripple you, when you suddenly get faced with £200 for water, I've got a bill here now £80 for gas, £50 for electric. They're not big bills by any means but they've still got to be paid. ... Something's got to be found one way or another. (*Man in his 50s, South East, temporarily sick/disabled.*)

If I came across a job that I could do and it offered a decent wage I'd apply for it tomorrow. (*Man in his 30s, aged 37, North East, disabled.*)

Given their situation, this financial need surpassed the actual impediments they faced and resulted in an idealistic answer based more on desire than ability.

In summary, the common trait among all idealistic respondents was that they emphasised desire and need to work over their ability to do so.

3.2.2 *The meaning of 'at the moment'*

The interpretation of 'at the moment' varied. For some, it referred to the present, literally understood as "right now, today." For others it meant a broader range in time, ranging from next week to next year.

I was thinking at this very moment about getting a job in... possibly later this year [laughter]... But not getting a job at this moment.
(*Man in his 50s, South East, married, not started looking/retired.*)

The fact that some respondents answered 'yes' to the question when in reality they wanted work in the future, not 'at the moment', had consequences for their subsequent routing through the LFS questionnaire.

3.3 **Reasons for not looking for or not wanting work**

Asked if respondents said they would like a job at the moment:

May I just check, what was the main reason you did not look for work (in the last 4 weeks)?

DO NOT PROMPT. CODE ONE ONLY

1. waiting for the results of an application for a job/being assessed by a training agent
2. student
3. looking after the family/home
4. temporarily sick or injured
5. long-term sick or disabled
6. believes no jobs available
7. not yet started looking
8. any other reason}

*Asked if respondents said they would **not** like a job at the moment:*

May I just check, what was the main reason that you did not want work (in the last 4 weeks)?

DO NOT PROMPT. CODE ONE ONLY

1. waiting for the results of an application for a job/being assessed by a training agent
2. student

3. looking after the family/home
4. temporarily sick or injured
5. long-term sick or disabled
6. doesn't need employment
7. retired from paid work
8. any other reason

The questions asking for the main reason why respondents were not looking for or did not want work each have eight response categories, six of which are common to both. Each question has two exclusive categories that are: 'believes no jobs available' and 'not yet started looking' when asked why they were not looking, and; 'doesn't need employment' and 'retired from paid work' when asked why they did not want work.

3.3.1 Routing to questions about not looking for or not wanting work

The questions are intended to determine the main reason why someone was economically inactive. Which question they were asked depended on their answer to the previous question about whether they would like a job. If they said they would like a job at the moment, they were asked to give their main reason for not looking. If they said they would not like a job at the moment, they were asked why not. Both are open questions, that is, the interviewer assigns the response to an answer category without prompting or showing a card listing the possible responses.

People who has said they would like a job, but who actually wanted work in the future and not at the moment, were asked to give their main reason for not looking. The wording assumes that work is wanted at the moment. The consequences of this routing differed, depending on the main reason given for being economically inactive.

For some respondents, the answer categories corresponded to their situation, for example, people 'looking after the family/home'. Therefore, they could be coded accurately.

However, for others, the answer categories did not correspond to their situation and could not be coded accurately. For example, when asked why they were not looking for work, the answer categories 'doesn't need employment' or 'retired from paid work' did not exist, so the interviewer had to code 'any other reason' instead. People said they had not looked for work in the last four weeks because they had either retired early (by choice or because of redundancy), or because they were financially secure.

I didn't have to [look for work]. I took early retirement and I'm taking it easy and seeing what happens in the future. (*Man in his 50s, South East, not started looking/other reason.*)

Well the reason is... to have time, a little bit of time to myself. I've worked since I was 15. I've never drawn dole money or anything. Always had work. And now it's my time

to enjoy life a little bit. That is why I don't **want** work [emphasis added]. (*Man in his 50s, London, retired/other reason.*)

[No need] is definitely the most important [reason] because I have no need at the moment ... So that's my motives for not having to look for work... coz I've got pension, and some pay-out, so until that goes... (*Man in his 50s, South East, not started looking/other reason.*)

These findings highlight the fact that the LFS questioning assumes that someone who 'would like work' has not 'retired'. As a respondent said after answering, "this questionnaire is not catered for newly retired people, is it?"

3.3.2 *Difficulty coding main reason*

Sick or disabled respondents in the sample drew attention to a further issue. Some of the disabled downplayed their condition and the impact that it had on their lives. Others normalised their disability, because it was not the main focus of their lives. They had difficulty determining why they were not looking or did not want work and found it difficult to give just one reason.

Downplaying and normalising resulted in some disabled respondents mentioning other reasons for not wanting or not looking for work before they mentioned their physical condition. The reason they gave initially tended to be a consequence of their disability. Answers included 'lack of confidence' (which had to be coded as 'any other reason'), and 'retired', as one woman in her 40s said, given that her disability had forced her into retirement (for a more detailed discussion of this topic see pp198-9 in Bacon, April 2002). As a consequence, not all of the disabled people interviewed were classified as such.

Respondents' subjective perceptions of the 'main reason' meant that:

- i) people in similar situations might be classified differently, and;
- ii) the same person, in the same circumstances, could be classified differently from wave to wave depending on how they expressed their answers and how interviewers interpreted them. Both i) and ii) are potential sources of response error.

4 Cognitive models of 'paid work' and 'paid job'

A number of the questions asked of economically inactive people on the LFS include terms relating to 'paid work' and 'paid job', including those described in sections 4.1. and 4.2 above. The terms are worded differently at different questions, and respondents' interpretations of them were investigated.

4.1 'Any kind of paid work'

This term is used in the question about looking for work described in section 4.1 above. 'Paid work' seems to have a self-evident definition: work done for pay, pay given for work. But when respondents were asked what they thought

the term 'paid work' meant, an implicit prototype emerged, of permanent, full-time work with a regular salary.

Getting a salary, a regular salary, working a certain amount of hours and having a contract. (*Woman in her 40s, London, other reason/student*)

However, in cognitive probing, respondents said that when answering this question they were also thinking of types of work other than the prototype, such as part-time, temporary or one-off jobs, because of the additional clause 'any kind of' which precedes 'paid work'.

Any type of work that I'm given money for I would count as paid work... Even if it is only cash in hand ...I'd still say that was a paid job (*Woman in her 30s, London, looking after family*)

4.2 'A regular paid job'

This phrase, in the question described at section 4.2 above, asking people whether they would like a job at the moment, was more restrictive than the phrase 'any kind of paid work'. It caused some respondents to consider only the prototype of paid, permanent, full-time work.

Regular paid job is 9 to 5, 5 days a week. That's what comes straight to my mind. (*Man in his late 50s, London, retired/other reason*)

'A regular paid job' was more powerful than 'any kind of work' in cancelling out from respondents' minds instances of job/work that were outside of the prototype such as part-time, one-off or temporary jobs.

4.3 'Last paid job'

This phrase was included in a question not yet described in this paper, asked of economically inactive respondents who said they had ever in their life had paid work: "Which year did you leave your last paid job?"

The word 'job' evoked in some respondents' minds the prototypical model of the full-time, permanent, regularly paid or waged job. In cognitive terms, this model has 'prototype effects' (Lakoff, 1987:p40-45): it takes precedence over any other type of job done.

Respondents varied in whether they interpreted 'last paid job' to mean their last paid work of any kind, or their last work closest to the prototype of job.

Consider the case of a respondent whose last work was as self-employed. She answered this question as follows.

"Last paid job? Nothing to do with being self-employed? Last paid job? It must have been 1970." (*Woman in her 50s, South East, retired/other reason*)

She had actually last worked in 2000, when she sold her business. She explained that

"... I understood that question to be asking when did I last...I was excluding being self employed, I was going back to when I was, I suppose, last **physically paid** ... Obviously, working for myself I was thinking I wasn't really being physically paid... **It was that word 'paid' that changed my mind from when I last worked**, because I

was self employed in the middle. **I didn't consider I was being paid by myself**, did I?"
(*Emphasis added*). (Woman in her 50s, South East, retired/other reason)

For some respondents the prototype of paid job took precedence over any other type of job done, connoting employee status and implicitly ruling out self-employment. To them there was a hidden passive clause: 'work that is paid by someone else'.

In conclusion, in the context of the validity of survey questions, it can be seen that sometimes, prototype effects are commonly shared by the researcher and respondents. However, at other times the researcher may be unaware of any problems caused by prototype effects changing the intended meaning of a question for some respondents, as in the last example cited. It is here that cognitive question-testing can be such a useful tool in identifying problems which can be addressed through revisions to the question.

5 Intention to work in the future

Respondents were asked about their intention to work in the future with a view to developing new LFS questions on this subject⁴. The research question focussed on whether economically inactive people who wanted to work in future could be distinguished from those who never wanted to work again.

A continuum of how likely people were to work in the future was developed. It was based on respondents' own statements, where these were clearly articulated. Where statements were not so clear, or where fulfilment of intention was doubtful, analysis was based on a judgement of the respondent's likelihood of working in the future. Five main categories were identified.

1. People who definitely **did not** want to work in the future.

People in this group made clear and unambiguous statements. They were all retired from work for good and did not have 'high in-work' characteristics.

2. People who were unlikely to work in the future.

People in this group gave the impression that they were unlikely to work in the future, but did not rule out the possibility. They included two types of respondents:

i) retired people 'passively looking' for work; and,

ii) disabled people who wanted work, but had a negative view of the job market and were limited in the types of job they could do.

⁴ Such questions could serve as a proxy for 'individual's disposition to work', an omitted variable in some secondary analysis because it is 'unobservable' (p12 Burchardt and Le Grand, 2002).

3. People who were undecided.

This group included two types of people:

- i) those with 'high in-work' characteristics', either retired or looking after children. These people had a clear idea of the type of work they might do and had freedom to choose whether or not they would work. However, they were undecided about whether or not they would do so; and,
- ii) the long-term sick or disabled for whom it was not choice, but constraint that made uncertain their future work status. They expressed a need to work, but their circumstances meant they were doubtful of their success in finding it⁵.

4. People who were likely to work in the future.

Some people had the intention to work in the future, once their circumstances allowed, but the likelihood of their actually doing so was qualified. In particular, they were pessimistic about their employability and the job market. They were also concerned about not being able to overcome their current obstacles to working, such as fitting work around child care and finding a sufficiently well paid job that would enable them to come off benefits.

5. People who definitely **did** want to work in the future.

People in this group were all women looking after their children. They were certain they would work in the future, at least part-time. In some cases they intended to work in the coming months; others intended to work in several years time.

The findings show that respondents' answers could not be reduced to a simple 'yes' or 'no' dichotomy.

Furthermore, the previous findings at the question asking if people would like a job suggest that the verbs 'like' and 'want' should be avoided in the phrasing of the question because they could lead to idealistic expressions of intention.

An alternative approach would be to ask a question such as, 'Do you think you will work in the future?' A possible follow-up question could ask respondents who wanted work 'to rate their chances of finding [it] in the following [n] months' (Bacon, April 2002:p199), as asked in the Jobseeker's Allowance Evaluation Survey (Ashworth, K. et al., 2001).

6 Further research

⁵ This impression gathered in the qualitative interview was consistent with the statistical analysis of people moving from unemployment to inactivity due to ill health: these people have 'the greater labour market disadvantage' and 'are unlikely to move back into work' (p309, Barham, June 2002).

The study has highlighted areas of misapprehension in the LFS questionnaire. It has also suggested ways of asking about people's future intention to work. As a result of the study, a follow-up stage of work is being considered, to redevelop the subclassifications of economic inactivity and to design and test new questions for the LFS to derive these new subclassifications. The intended outcome is more reliable identification of those people who will, or are likely to, work in the future and those who will not, or are unlikely to do so.

7 References

Ashworth, K., Hartfree, Y., and Stephenson, A., *Well enough to work?*, DSS Research Report no. 145, 2001.

Bacon, J., 'Moving between sickness and unemployment', in *Labour Market Trends*, April 2002.

Barham, C., 'Economic inactivity and the labour market', in *Labour Market Trends*, February 2002.

Barham, C., 'Patterns of economic inactivity among older men', in *Labour Market Trends*, June 2002.

Burchardt, T. and Le Grand, J., *Constraint and opportunity: Identifying voluntary non-employment*, CASE paper no. 55, London School of Economics, 2002.

Lakoff, George., *Women, fire, and dangerous things: what categories reveal about the mind*. Chicago: University of Chicago Press, 1987.

Laux, R., 'Measuring labour market attachment using the Labour Force Survey', in *Labour Market Trends*, October 1997.

Merllie, D. 'La construction statistique', in Patrick Champagne (ed.) *Initiation a la pratique sociologique*. Paris: Dunod, 1989.

McIntyre, A., 'People leaving economic inactivity: characteristics and flows', in *Labour Market Trends*, April 2002.

Schweitzer, M., *Ready, willing, and able? Measuring labour availability in the UK*, Bank of England Working Paper no. 186, 2003.

Thomas, J. and Joyce, M., 'Non-employment and labour availability', forthcoming in the *Bank of England Quarterly Bulletin*, autumn 2003