Managing finances and multiple long-term conditions: eliciting the perspectives of individuals living on low incomes

Final Report

Principal investigator:

Olga Biosca, PhD[2]

Co-investigators:

Rachel Baker, PhD[1]

Cam Donaldson, PhD[1]

Neil McHugh, PhD[1]

Antony Morgan, PhD[2]

Research team:

Ahalya Bala, PhD[2]

Enrico Bellazzecca[1]

Marta Mojarrieta[2]

Gregory White, PhD[2]

External advisor:

Jonathan Morduch, PhD[3]

[1] Yunus Centre for Social Business and Health, Glasgow Caledonian University

[2] Yunus Centre for Social Business and Health, GCU London

[3] Wagner Graduate School of Public Service, New York University

Table of contents

Managing finances and multiple long-term conditions: eliciting the perspectives of individuals living on low incomes 1

Table of contents 2

List of figures 4

List of tables 4

1 Executive summary 5

2 Introduction 13

3 Methodology 14

3.1 Financial Diaries 14

3.1.1 The sample 14

3.1.2 Data collection 16

3.1.3 Analysis 17

3.2 In-depth qualitative interviews 17

3.2.1 Recruitment of sample 17

3.2.2 Analysis of data 18

3.3 Q Methodology 18

3.3.1 Generation of statement sets 18

3.3.2 Recruitment of sample 20

3.3.3 Data Collection 20

3.3.4 Analysis 21

3.4 Ethics 21

4 Results: Finances, health and social determinants 22

4.1 Financial lives and health 22

4.2 Income 25

4.2.1 Case study: Anya 27

4.2.2 Case study: Daliya 28

4.3 Finance 30

4.3.1 Case study: Sofia 34

4.3.2 Case study: Charles 36

4.4 Employment 38

4.4.1 Case study: Luisa's household 39

4.5 Housing 45

4.5.1 Case study: Andrea 46
4.6 Making services and support accessible for people with long-term conditions 49
4.7 Q Methodology 50
5 Discussion and Conclusion 54
6 Recommendations 56
7 References 58
8 Appendices 61
8.1 Appendix 1 Tool given to diarists for self-reported transactions 61
8.2 Appendix 2 Baseline questionnaires 65
8.3 Appendix 3 Final questionnaire 94
8.4 Appendix 4 Topic guide for the interviews 100
8.5 Appendix 5 ‘Causes’ and ‘Solutions’ statement sets and factor scores 103
8.6 Appendix 6 Factor solutions 105

List of figures

Figure 1 Data collection schedule

Figure 2 ‘Causes’ sorting-grid

Figure 3 ‘Solutions’ sorting-grid

Figure 4 Example card-sort

Figure 5 Anya’s monthly trends in expenditure and mental health

Figure 6 Daliya’s income trend and mental health during the study

Figure 7 Sofia’s household weekly income and expenditure (£)

Figure 8 Charles’ monthly income and expenditure (£)

Figure 9 Luisa's household monthly income by type (in £; after rent)

Figure 10 Luisa’s household monthly income and expenditure (£)

Figure 11 Andrea’s first accommodation during the study period

List of tables

Table 1 Sample of diarists

Table 2 Socio-demographic characteristics of the sample

Table 3 Demographic characteristics of interviewed diarists

Table 4 Examples of ‘Causes’ statements

Table 5 Examples of ‘Solutions’ statements

Table 6 Professional Stakeholders (PS) Expertise/Background

Table 7 Diarists’ perceptions on the effect of health on finances and vice versa

Table 8 Main characteristics of the financial diarists

Table 9 Anya's monthly budget for month 2 (August 10 - September 9, 2019)

Table 10 Financial instruments used

Table 11 Sofia’s monthly budget for month 6 (21 November - 20 December, 2019)

Table 12 Charles’ monthly budget for month 4 (15 October - 14 November, 2019)

Table 13 Luisa’ monthly budget for month 4 (19 October - 18 November, 2019)

Table 14 Luisa’ monthly budget for month 5 (19 November - 18 December, 2019)

Table 15 Luisa’ monthly budget for month 6 (19 December 2019 - 18 January 2020)

Table 16 Andrea’s monthly budget for month 1 (July 5 - August 4, 2019)

Table 17 Andrea’s monthly budget for month 3 (September 5 - October 4, 2019)

1 Executive summary

Introduction

Despite an established link between income and health, limited evidence exists on how the struggle to make ends meet impacts on aspects of health and *vice versa*. Low income and worse health interact and often reinforce each other. However, little is known about the nature of this relationship and, thus, what can be done to alleviate the challenges faced by people in difficult financial situations whilst also trying to manage multiple long-term conditions. It is to this knowledge gap which the study reported here responds. We aimed to establish whether there is a perceived link between people's financial lives (including the use of microcredit initiatives) and their health (focusing on the progression of long-term conditions), and the mediating mechanisms that might facilitate this association.

Methodology

To explore these issues, we used intensive and innovative research methods (financial diaries, in-depth interviews and Q methodology), closely following the lives of our participants over a 6-month period. Financial diary studies have the ability to provide unique insights into the lived experiences of our participants as the methodology enables longitudinal, in-depth data to be collected on how individuals cope with (un)expected changes to their income and expenditure in a way that cannot be captured through traditional surveys. Our participants were a diverse and hard-to-reach group of people living on low incomes in Lambeth and Southwark and with at least one long-term condition. We aimed to observe and analyse the widest possible range of experiences and identify both the events and patterns that most affected their finances and health. Our participants also experienced different levels of participation in fair microcredit and other financial and community support schemes in the locality. Microcredit is a form of small, collateral-free loan, supplied at fair interest rates to financially excluded individuals living on low incomes.

We used Q methodology to explore the subjective views of individuals living on low incomes with one or multiple long-term conditions, as well as professional stakeholders, on the 'Causes' of, and 'Solutions' to, the worse health of people living in low-income communities. This provided insight on the role of different types of income-based initiatives in enhancing health and wellbeing, relative to other types of public health initiatives.

Study population

We aimed for a sample that reflected the diversity of lived experience in terms of age, ethnicity and household composition, among other factors, rather than strictly representative of the UK population. Twenty-one (n=21) individuals (i.e. diarists) completed financial diaries over a period of six months. Using financial diaries, we aimed to understand the money management strategies observed through daily income and expenditure transactions, as well as gifts, assets, and liabilities. Eight (n=8) of these diarists were sub-sampled for a semi-structured interview to explore, in-depth, their experiences and perceptions of the connection between finances/responsible microcredit and health.

For Q methodology, we purposively selected a sample (n=40) that consisted of 20 financial diarists and 20 professional stakeholders with expertise in, for example, public health,

community development, financial, legal and housing services. Each participant undertook two card-sorts.

Findings from financial diaries and interviews

For most of our diarists, complex financial lives and health status were inextricably linked. The lived experiences of our diarists pointed to certain social determinants of health that emerged as more relevant than others for this population and in this context. Recurrent factors in the life stories of our diarists were income, employment, housing, and availability and accessibility to community-based resources such as support networks, health and social care, and other essential services, for example childcare, financial and legal advice, or microloans. These common factors were associated with 'cliff-edge moments', whereby sudden events led to multiple, immediate and serious problems that impacted the life course of the diarist. These events included, for example, a lost job, adjusting to life with young children, the medical assessment for Personal Independence Payment (PIP), a divorce, a decision by the Home Office regarding the immigration status of an individual or the diagnosis of yet another long-term condition. Diarists gave accounts of complex and sophisticated ways of managing their finances and their health conditions, in the attempt to break the connection between poverty and poor health.

Our key findings are:

a) <u>Income and financial management</u>

- Constant financial management to cope with low income, financial uncertainty, and short-term illiquidity by, for example, prioritising some expenses while leaving others unpaid was stressful and, when we first met our diarists, money was a source of worry for most.
- Due to our diarists' health conditions and financial situation, all participants were receiving at least one type of welfare benefit payment. However, sometimes these payments were not sufficient to cover all essential and urgent expenditure, their amount was variable and uncertain, and accessing and maintaining them was difficult.
- Most diarists had experienced 'cliff-edge moments' in which exceptionally high and urgent expenditure or unexpected reductions or delays in income led to a rapid deterioration of their financial situation.
- Our diarists made complex financial decisions almost every other day during the study, which represented a significant cognitive burden and a source of stress and anxiety.
- One third of the sample reported having enough savings to cope with an emergency. However, the main strategy adopted to deal with illiquidity was to borrow. All diarists, except two, had at least one loan and more than half were simultaneously using at least two types of credit providers. Relatives and friends were a main source of small, short-term, flexible, and interest-free loans.
- Retaining access to high-quality mainstream financial products after being diagnosed with one or many long-term condition(s) and experiencing a change of circumstances has, on occasions, made these individuals more financially vulnerable.
- Alternative forms of credit, mostly high-cost, were also used by our diarists to overcome the limits of informal borrowing through social networks, which are frequently small and resource-poor.

- Affordable microcredit was a fast and accessible solution for urgent problems. Knowing that it was available to be accessed in an emergency was a source of relief for our diarists. However, diarists who were worse-off in terms of their health and lacked control over their finances benefited more from other forms of support such as budgeting loans.

b) Employment

- Only one diarist worked at the time of the study, nine were unemployed, and 11 were permanently sick or disabled.
- In general, diarists preferred to be employed. However, for those who could work, finding a job was difficult.
- Long-term health conditions were the main barrier for our diarists to access formal employment. Absenteeism, due to symptoms of their health conditions and numerous medical visits, required exceptional flexibility from employers.
- Illiquidity issues and barriers to formal employment led some diarists to work informally as cleaners and waitresses. These jobs were not suitable for our diarists' health conditions and caused them increased stress and, in one case, physical injuries.
- Exclusion from formal employment among our diarists was also due to lack of support with affordable and reliable childcare.
- Work provides contact, expanded networks and friendship with others. Not being able to access supportive employment had a social impact on our diarists' lives.

c) Housing

- Most diarists receive housing benefits and live in social housing provided by either local councils or housing associations.
- Poor housing conditions of some of our diarists (damp, mould, no cooking facilities, no bed) were associated with the progression of their health conditions (for example, mental health, asthma, and diabetes).
- The complex processes involved with accessing social housing, getting repairs done, and re-housing were associated with increases in stress, anxiety and depression.

d) Access to support services

- Most diarists struggled to access available public support services such as welfare benefits, healthcare, social services, and housing.
- Diarists with poor mental health experienced difficulties in leaving the house and were not comfortable repeatedly telling their story to strangers.
- Diarists with physical long-term conditions experienced restricted mobility issues that limited their ability to access some services.
- Limited language skills and lack of appropriate outreach from community organisations also prevented our diarists from knowing that support was available in their community.

Findings from Q methodology

The Q study highlighted plural views among professional stakeholders and community participants regarding the perceived 'Causes' of, and 'Solutions' to, the ill-health of people living in low-income communities.

Key findings:

a) Three 'Causes' perspectives were identified, revealing beliefs that the worse health of individuals living in low-income communities was caused by:
   1. systemic inequality
   2. lack of community investment and cutbacks in local services
   3. financial vulnerability and a lack of money

b) Three 'Solutions' perspectives were identified. Broadly, these are that the health of individuals living in low-income communities could be improved by:
   1. creating a society where everyone has the same opportunity to thrive
   2. empowering individuals to take responsibility for their own future
   3. supporting individuals to have better lifestyles

c) 'Causes' Perspectives One and Three bring together the views of financial diarists and professional stakeholders; only the diarists shared the views represented by 'Causes' Perspective Two.

d) Financial diarists and professional stakeholders shared 'Solutions' Perspectives One, Two and Three.

e) There were some areas of agreement, which correspond to aspects of the financial diaries findings:
   - Precarious employment and lack of good quality, affordable housing, were viewed as key reasons for the worse health of people living in low-income communities.
   - 'Solutions' highlighted the importance of having access to key services, such as good primary health and social care and affordable childcare, listening to the needs of communities and of avoiding policies that would reduce what individuals living on low incomes receive and can access from the welfare system.

f) There were areas of (dis)agreement across the different perspectives regarding the role of income-based initiatives for impacting on health:
   - 'Causes':
      i. Perspective One focuses on unpredictable finances; Perspective Two recognises the role of the poverty premium; and Perspective Three views both these issues as being causes of worse health.
   - 'Solutions':
      i. Across the three perspectives there is agreement that welfare benefits should not be stopped or reduced and that providing safe ways for individuals to own their home or a car without getting into debt that they cannot repay is not a priority.
      ii. Perspective One believes individuals need financial security, their basic needs met and that the activities of payday or doorstep lenders should be restricted.
      iii. Perceptive Two sees the value of providing financial advice but not of increasing taxes that people pay or preventing payday or doorstep lenders operating.
      iv. Perspective Three believes individuals' basic needs have to be met, that raising taxes fairly can pay for other supportive services and that providing financial

advice can be valuable. Offering affordable, flexible loans as a way to improve health is not supported.

Recommendations from diaries and interviews

Our findings suggest that participants are actively trying to improve their lives and, as most of them are caregivers themselves, those of their families. This set of recommendations, developed in conjunction with our project advisors, aims to guide advice/support services and policy makers to support this ambition. The focus has been on recommendations that can be easily implemented within existing provision.

1. Improved marketing of available support services in the community, specifically adapted to people with long-term health conditions, in particular mental health issues. This could be done through the creation of hubs/networks of organisations, effective referral, leafleting, and direct and grassroots marketing, e.g. local events and meetings. Marketing strategies need to be adapted to hard-to-reach individuals. For example, online and leafleting strategies will reach our group better as, owing to mobility and mental health issues, they rarely leave their homes. Multilingual marketing strategies are also required in order to reach all those who need it.
2. Improved accessibility to support services for people with long-term conditions in terms of proximity, adequacy, language, and modes of communication. Organisations should have sufficient capacity to respond immediately when approached by individuals living with long-term conditions, as they are unlikely to approach an organisation twice.
3. Financial and legal providers need to focus on creating trusting, longer-term relationships with users/beneficiaries. This could be achieved, for example, through social workers working in partnership with particular advisors or, simply by ensuring these services are provided more sustainably over time. Projects like the Deep End advice project in Glasgow where financial, social security, housing and debt advice are provided at GP practices is another example. To build trust and make customers feel respected, service providers could also consider employing more people from the communities they serve, including people whose first language is not English, and people with health conditions.
4. Affordable lending has proved to be an accessible, reliable and valued alternative to high-cost credit. Partnerships with financial advice organisations add further value. However, responsible lenders need to adapt some of their products to help safeguard people with long-term conditions, particularly those experiencing mental health issues.
5. Promoting good, meaningful and flexible working conditions and healthy working environments is also vital to ensure that individuals such as our diarists can access and maintain appropriate formal employment to support their income.
6. Accurate assessment of the housing needs of people living on low incomes and with multiple long-term conditions is fundamental to preventing a worsening of their health. Providing social housing on time and in a good state is also important to ensure that people such as our diarists do not face unnecessary expenses and hazards.
7. Improved collaborative approaches between public and private support services are needed to break the link between low income and poor health. One example might be to create a network of local social workers, health professionals, and financial experts for mutual referrals. Local community organisations offering support to particular

groups (Latin-Americans, Portuguese, etc.) should be involved in these networks, as gatekeepers for other services (legal, housing, or financial advice).

Recommendations from the Q study

Areas of agreement across 'Causes' and 'Solutions' suggest there are several areas which could be used as a starting point for thinking about how to positively impact on the ill-health of people living in low-income communities.

1. Shift rhetoric away from blaming individuals and communities for their poorer health towards greater recognition of the structural factors that lead to worse health, such as systemic inequality, lack of community funding and individuals' financial vulnerability and lack of money.
2. Take steps to involve communities in decisions that will affect them, such as through citizen's juries or assemblies.
3. Improve the quality and condition of social housing stock.
4. Make forms of secure employment available for individuals living in low-income communities.
5. Within low-income communities, improve the availability and accessibility of good quality and free primary health, social and child care.
6. Avoid introducing punitive measures which make life harder for individuals living in low-income communities, such as cutting or reducing welfare benefits or denying those deemed responsible for their condition access to healthcare.

Further research

Our findings suggest that there are systemic issues with the welfare system that need to be explored in more detail. We have seen some evidence that the size of benefit payments to those who are unable to work due to ill-health is, on occasions, not enough to meet their daily needs and responsibilities. Additionally, our results suggest that the variation in dates and sizes of benefit payments from period to period provokes uncertainty around these payments which can hinder financial planning and appropriate financial management in these groups. These issues need to be explored further.

Data collection for this study was finished on March 2020 when COVID-19 was officially declared a pandemic. Given the fragility of the situations that most diarists faced when we finished data collection for this project, persistently disadvantaged by their financial exclusion, it is highly likely that our diarists will be amongst those hardest hit by COVID-19, and by the associated social and economic measures put in place to combat it. With UKRI/ESRC funding, we now have an opportunity to follow up with this same group of individuals in order to assess the impact of COVID-19 - and measures such as social distancing - on their financial portfolios, their short-term health and wellbeing and wider social determinants of health.

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Voices from diarists

"You haven't got a clue what it's like to sometimes go hungry, if you know what I mean, or feel as if you've got nothing and you haven't even got a penny in your purse and you can't go out and get a pint of milk because you've got to have black tea for the day, sort of thing. So you sometimes feel a bit like that, that it does affect your mood, it does affect your way of life, in a sense." (Ayleen).

"Depending on my mental health it all depends on my finances. If I'm in a really good bubbly, positive way, my finances is bound to be more stable. If I'm under the weather mentally my balance is up and down I can't concentrate on what I'm spending. It's just a mess." (Cyra)

"I found that when I was in employment, it was a lot better. I didn't have the issues that I have now. I think because even though you get a set wage, when you get benefits, you have to work it out to a tee, what you prioritise more than one thing, and I think that's where I struggle with my finances." (Anya)

"*[Asking relatives and friends for money] is very demeaning, I think in some senses, it makes you feel as if you're some sort of leech, leeching off people for money, if you know what I mean. It makes you feel uncomfortable; it does make you feel uncomfortable."* (Ayleen)

"One day I was at work and it was like the room was spinning and I fainted (…) Then I couldn't take much time off because if I didn't work I didn't get paid. So I was back at work the next day, I remember." (Shannon)

"Where can I go, me, that I won't get a contract because I am sick, who's gonna give me a lease contract?" (Carolina)

"I had to go to the doctor … to take pills, because I was having a bad time. I was being evicted. I know they weren't going to leave me in the street, but... whatever ... whatever ... they waited until the last day ... to give me one [house]." (Cassandra)

"I arrived here and I haven't been lucky … Days go by and I don't know what I can claim, I need specific help, someone I can trust". (Andrea)

Voices from the Q study

<u>'Causes':</u>

"Cold, drafty, poorly insulated, with mould [reference to housing]" (PS08)

"Rich people can afford to send their kids to after school clubs, poor people can't so if you had after school clubs in the poorer areas … teenagers wouldn't be running the streets and getting into violence and getting into drugs and getting into gangs." (CP11)

"Somebody could be a poor parent … because they don't have any money and they can't buy food. That doesn't make them a poor parent, that makes them a desperate person" (CP18)

<u>'Solutions':</u>

"work with communities rather than do things to communities" (PS14)

“all that happens is that people feel less and less empowered, because they feel the government controls more and more of their lives, less and less is within their control, they take less and less responsibility [reference to top-down social policies]” (PS02)

“if from when you are little you are told by your environment that you cannot, that you are limited because you don’t deserve it, limited by your background, because you don’t have money, and you believe that in your mind, that is going to limit you and make you think that you are useless. Create confident kids, deserving and able of everything, we are limitless” (CP13)

2 Introduction

Despite an established link between income and health, limited evidence exists on the health impacts of finances and the impact of health on the financial lives of people. Exploration of the finances-health relationship is particularly pertinent in populations living on low-incomes for whom that relationship is especially relevant and in whom long-term conditions are more prevalent. Being in financial difficulty is linked to increased stress and anxiety (Kempson et al. 2004) and certain individual strategies used to cope with these financial crises, such as highly priced debt, have been found to be detrimental to mental and physical health (Brown et al., 2005; Sweet et al., 2013). Financial inclusion has been recognised as a potential avenue to impact on health; however, most research tends to focus on the provision of financial advice in relation to health (Adams et al., 2006; Dobbie and Gillespie, 2010). This study, using an innovative mixed methods design (financial diaries, interviews and Q methodology), aims to establish whether there is a perceived link between people's financial lives (including the use of microcredit initiatives[1]) and their health (focusing on the progression of long-term conditions[2]), and the mediating mechanisms that might facilitate this association. We have explored these issues in a group of people living on low incomes with at least one long-term condition in Lambeth and Southwark, who experience different levels of participation in fair microcredit and other financial and community support schemes in the locality.

Despite advances in public health practice and in NHS provision, significant socioeconomic health inequalities persist in various parts of the United Kingdom (Wilkinson and Pickett, 2006). Lambeth and Southwark are prominent examples of this, being amongst the most deprived areas in the UK in terms of health and income (Beaumont, 2006; Leeser, 2016). For example, recent research has found that one in five (i.e. 140,000) local residents lives with at least one long-term condition, and over 19,000 live with three or more conditions including diabetes, chronic pain, chronic kidney disease, chronic heart disease, depression, morbid obesity, among others (Guy's and St. Thomas' Charity, 2018). Such long-term conditions can impact on people's broader (specifically in this case, economic) lives and vice versa. It is important to investigate such patterns as part of breaking the cycle of illness-leading-to-poverty and poverty-to-illness. This can inform new approaches to supplement existing public health efforts; approaches which are more upstream in the sense of acting on social determinants of health (McHugh et al., 2017). Better understanding of the financial issues faced by individuals with one or more long-term conditions will inform the design and implementation of income-based programmes focused on slowing progression of people from having 'one to many' long term conditions.

The research objectives (ROs) were to:

- RO 1: Understand how individuals living on low incomes with one or multiple long-term conditions manage their financial portfolios (i.e. day-to-day incomings and outgoings, risks to income, use of financial services), their lived experience of specific financial issues and the strategies they use to ameliorate financial challenges.

[1] Initiatives that offer small loans at fair interest rates to people living on low incomes and financially excluded from mainstream lenders.

[2] Following the definition in Guy's and St. Thomas' Charity report (Guy's and St. Thomas' Charity, 2018), we have defined a long-term condition as any chronic condition that a person is currently managing with medication, or, a medical problem that has troubled someone over a period of at least three months.

- RO 2: Improve our understanding of whether individuals living on low incomes with long-term conditions perceive a relationship exists between their finances, income-based initiatives and health and wellbeing and *vice versa*; and, if so, explore how this relationship is mediated by the presence of multiple long-term conditions.
- RO 3: Improve our understanding of the 'mechanisms of action' for health improvement to inform the design of potential initiatives aiming to tackle the connection between finances and health.
- RO 4: Explore the subjective views of individuals living on low-incomes with one or multiple long-term conditions, as well as professional stakeholders, on the role of different types of income-based initiatives in enhancing health and wellbeing, relative to other types of public health initiatives.

3 Methodology

Three different methods were used to gain an in-depth understanding of the connections between the financial lives and health of people living with low incomes and multiple health conditions: financial diaries; in-depth qualitative interviews; and Q methodology.

3.1 Financial Diaries

Financial diaries were used to provide unique insights into the everyday financial lives of low income people suffering from long-term conditions over time (RO1). Financial diaries are systematic records of all daily income and expenditure transactions, as well as gifts, assets, and liabilities, aimed at understanding the money management strategies of low-income populations in different economies over time (Collins et al., 2009). Originally applied in low-income countries, this method has recently been used in more economically-advanced nations such as the United States (Morduch and Schneider, 2017) and the UK (Biosca et al., 2020). Generally, the term 'diaries' is used to reflect the high-frequency of data collection and not necessarily the diarists logging transactions themselves.

3.1.1 The sample

We aimed to recruit a diverse group of users and non-users of fair microcredit who managed one or multiple long-term conditions within the Boroughs of Lambeth and Southwark. For the purposes of the study, these individuals needed to be of working age and living on low incomes. While we did not aim to have a statistically representative sample of the UK population; we did aim for diversity in the sample to better understand the lived experiences of different types of diarists in terms of, for example, age, ethnicity and household composition.

Referral sampling techniques were used to facilitate access to 'hard-to-reach' populations and community members whose voices might not otherwise be heard. Most of the sample was recruited through the following organisations: (a) Fair Finance, our microfinance partner, offering fair personal microloans and financial advice to financially-excluded individuals in the Boroughs, from their Brixton branch; (b) Latin American Women's Rights Service (LAWRS), a user-led community organisation focusing on the needs of Latin American migrant women; (c) Peabody and Metropolitan Thames Valley Housing Associations; (d) Pembroke House, a settlement and community organisation working in partnership with local residents and organisations; (e) Pecan, a Christian charity focusing on social action, employment support and resettlement; (f) Money and Mental Health Policy Institute, a charity seeking to break the link between financial difficulty and mental health issues; and (g) Citizens Advice Southwark. To help reach more 'hidden communities', the research team also disseminated recruitment posters and leaflets around the Boroughs of Lambeth and Southwark and circulated an online

recruitment questionnaire via various media channels and in three different languages. Members of the research team were fluent in French, Portuguese and Spanish which enabled better coverage of the complex ethnic mix in Lambeth and Southwark.

Referrals were contacted and screened by home address, age, income, and long-term conditions. A qualitative sampling frame aimed to maximise variation in terms of: (a) participation in microcredit; (b) socio-demographic characteristics; (c) type and number of long-term health conditions; and (d) residence across both Lambeth and Southwark.

Table 1 Sample of diarists

	Total
Referred and approached	58
Recruited for diaries	29
Drop-outs (before 4th diary)	8
Total diarists*	21

* Includes four drop-outs after the 4th diary whose data could still be included in the study.

Table 2 Socio-demographic characteristics of the sample

	Total	
	N	**%**
Age groups		
18-35	3	14%
36-45	5	24%
46-55	6	29%
>55	7	33%
Female	20	95%
Non-British background	16	76%
Full/part-time employment	1	5%
Welfare benefits (means-tested)	20	95%
Registered as disabled	11	52%
Household composition		
Lone parent w/ dependent children	8	38%
Couple w/ dependent children	2	10%
Couple with no children	1	5%
Single	2	10%
Separated/ Widowed	7	10%
Family abroad	1	5%
*Health status**		
One chronic condition	2	10%
Two chronic conditions	5	24%
Three or more chronic conditions	14	67%
Total diarists	21	100%

*As per baseline questionnaire

Table 1 shows the final sample of diarists. Despite a strategy of incentive payments that paid the highest reward on completion of all 6 diaries, recruitment and retention were challenging due to the level of intensity and sensitivity of the data collected. Recruitment of working age males was exceptionally difficult, many of those that were contacted were regularly working long days of ten hours or more, even although they were managing at least one long-term condition, and did not have time to participate. Finally, 21 diarists completed 4 or more diaries and 17 completed all 6 diaries. Attrition was around 41%. Participants discontinued their participation in the study for a variety of reasons, the most frequent of which was starting

intensive medical treatments. Other reasons were caring responsibilities, family emergencies, moving out of the Boroughs of Lambeth and Southwark, work and poor mental health. The socio-demographic characteristics of our final sample are shown in **Table 2**.

3.1.2 Data collection

Diaries were constructed through 131 baseline and diary-interviews that took place in our 21 participants' homes, or in public spaces, every month. The duration of data collection varied from four months of diaries (n = 4) to six months (n = 17). Researchers systematically recorded every diarist's income and expenditure transaction during the preceding month, as well as assets, liabilities, and 'events' related to their financial lives, their long-term conditions and subjective measures of health and wellbeing. Almost 9,000 transactions were recorded in total and captured in an Excel database for analysis. The predefined variables captured for each transaction were: purpose, amount (in £), direction of transaction (outflow/inflow), and method of payment (cash, card, financial transfer, etc.). The database also had an open "additional comments" section. For financial transactions, we coded the name of the person or the organisation with which the transaction had been made (for example, mother, brother, Fair Finance). Additionally, information about individuals' financial transactions were used as prompts to generate qualitative data – 'event records' – in relation to participants' lives, social networks, health and life events, and 'moments of crisis' or 'cliff-edge moments'. These cliff-edge moments are particular situations in our diarists' lives where a sudden change leads to multiple, immediate and potentially very serious problems. Phased data collection took place between June 2019 and March 2020.

The quality of the diary data was maintained as follows: (a) participants were sent weekly reminders to minimise recall bias in addition to being visited monthly for diary collection; (b) diarists' bank statements and receipts were also frequently provided and cross-checked with reported transactions (Appendix 1); (c) inconsistencies in income and savings against expenditure, as well as other misreporting errors, were tracked and addressed on subsequent visits to the diarist; and (d) data on cash-in-hand and savings were used to assess any mismatches between sources and uses of funds and explore them with diarists.

A baseline questionnaire (month 0) was administered before the first diary, in order to build the participants' profile (Appendix 2). A similar questionnaire was administered in month 7 to assess changes in terms of finances, health and wellbeing (Appendix 3). **Figure 1** shows the data collection schedule.

Figure 1 Data collection schedule

To systematically collect information with a high level of detail and consistency across diarists, and also due to the limited English language and literacy skills of some diarists, three skilled researchers were responsible for recording every income and expenditure transaction that was annotated by the diarists or appeared in bank statements during the preceding month, as well as assets, liabilities, health-related information and life events. Subjective comments on

each transaction were recorded in the database, such as, for example, the motivation behind asking for a loan. The interviews were partly open ended ('how have you been?') and covered general subjective health and more specific health-related questions (health shocks, medical visits, delayed medical visits, non-compliance with treatment, hospitalisation, etc.). While data were collected monthly, the research team maintained weekly/bi-monthly contact with diarists via telephone, text and/or email to support data collection, maintain rapport and help prevent attrition.

3.1.3 Analysis

A mixed-methods approach was used to analyse diary data (Collins et al., 2009). First, descriptive statistics of monthly income and expenditure transactions were examined for each diarist alongside the participant's characteristics and key events and shocks during the study period (identified through the qualitative data). Secondly, we purposively sampled individual cases based on the stage and number of health conditions, the intensity and diversity of financial products used, and the specific stories emerging from the data (for example, related to employment or housing). Income and expenditure of the selected cases were analysed quantitatively using corporate finance tools (monthly balance sheets and cash flow statements). These were combined with quantitative subjective health measures (both mental and physical health components of the SF-12v1). Finally, the quantitative interpretation of the results was supported by individual stories collected in the 'event records', researcher field notes, and diarist notes on financial transactions, evidencing rationales for the diarists' financial behaviour (Collins et al., 2009). This systematic method facilitated the combined analysis of the data on financial strategies and 'events' collected through the diaries and informed the design of the interviews described in section 3.2. Pseudonyms are used to maintain diarists' anonymity.

3.2 In-depth qualitative interviews

In-depth, face-to-face semi-structured qualitative interviews were conducted with eight of our diarists to further explore their lived experiences (RO1), financial lives and comorbidity and the perceived relationship between finances and health (RO2, RO3). Interviews were designed to be 'guided conversations' with the topic guide serving as an aide-memoire with space for exploring new issues raised by participants through open-ended questions and specific probing questions being tailored to each diarist based on emerging themes from their financial diaries. An example of the topic guide for the interviews is included in Appendix 4.

3.2.1 Recruitment of sample

A sub-sample of eight diarists was purposively selected on the basis of their experiences and perceptions of the connection between finances/microcredit and health. Through the repeated visits required by financial diaries, the research team had the opportunity to build-up trust and rapport with respondents so that these interviews could be used to tackle diverse and more sensitive aspects underlying the emerging pathways connecting finances and health. The interviewees were selected based on:

- Individual lived experiences of managing a range of long-term conditions (varying across number and type) and adverse financial circumstances.
- Debt status: we selected individuals who were managing at least one loan preferably from an affordable lender.
- Emerging qualitative and quantitative data from the financial diaries (e.g. the purpose of loans and their potential links to financial shocks; diarists' management of multiple loans and the potential threats to their health).

The interviews were conducted between November 2019 and January 2020. **Table 3** describes the characteristics of the diarists interviewed.

Table 3: Demographic characteristics of interviewed diarists

Name	Gender	Age	Origin	Ethnic minority	Employment status	No. health conditions	No. loans
Anya	F	54	UK	Yes	Long term illness	5	2
Ayleen	F	62	UK	No	Long term illness	2	4
Cyra	F	28	UK	Yes	Long term illness	3	3
Cassandra	F	48	LAC[3]	Yes	Awaiting to be registered disabled	3	2
Juliet	F	65	UK	No	Retired	3	1
Sofia	F	45	LAC	Yes	Long term illness	5	6
Daliya	F	27	UK	Yes	Time off for childcare	2	4
Shannon	F	55	UK	Yes	Long term illness	2	4

3.2.2 Analysis of data

Interviews were transcribed verbatim, imported into qualitative analysis software (NVivo 12) and subjected to thematic analysis, with the supporting principles of constant comparison (Braun and Clarke, 2006). Data were coded deductively using supporting evidence from financial diaries narratives (for example, the 'event records'). These data are used to support the themes identified from the financial diaries.

3.3 Q Methodology

Q-methodology was used to address RO4, the role of different types of income-based and other types of public health initiatives in enhancing health and wellbeing of individuals living in low income communities. Two questions were presented to participants, together with a set of possible responses:

1. Why is health worse in low-income communities? ('Causes')
2. How could health be improved in low-income communities? ('Solutions')

Q methodology is used to study 'subjectivity' – values, beliefs, attitudes and perspectives (Stephenson, 1953; Watts and Stenner, 2012). The main steps in a Q study involve the rank-ordering of statements of opinion onto a quasi-normal shaped grid (a card-sort) and a data reduction technique (by-person factor analysis) to look for patterns of similarity based on correlations between Q-sorts. These shared views (or factors) are then described and interpreted. In what follows the main steps of the research process are briefly described (see McHugh et al. (2019) for a full description of these steps).

3.3.1 Generation of statement sets

The main source of data in a Q study is the rank-ordering of a set of items, usually written statements. Statements can be extracted from any relevant source where opinions are expressed on the topic of interest; the aim is to represent the full range of opinions that exist.

[3] Latin America and the Caribbean.

Statements relating to 'Causes' and 'Solutions' were sourced from qualitative interviews with diarists from the FinWell-Glasgow project[4] (see McHugh et al. (2019) and Biosca et al., 2020)) and questionnaire responses from professional stakeholders. To examine whether relevant themes were covered, the identified statements were structured according to a well-known social determinants of health framework (Dahlgren and Whitehead, 1991). Following removal of duplicates, merging of similar statements and pilot work two statement sets of 34 'Causes' statements and 39 'Solutions' statements were finalised (see **Table 4** and **Table 5** for example statements and Appendix 5 for the full statement sets). These statements were prefixed by 'Health is worse in low-income communities because . . .' ('Causes') or 'Health could be improved in low-income communities by . . .' ('Solutions').

Table 4 Examples of 'Causes' statements

Health is worse in low-income communities because . . .	
Statement number	**Statement**
6	. . . of unpredictable finances
11	. . . there is a lack of good quality, affordable housing
13	. . . of how the welfare system works
23	. . . the people in these communities can't cope with unexpected events or costs
27	. . . of poor parenting
30	. . . there is a culture of dependency and laziness in these communities

Table 5 Examples of 'Solutions' statements

Health could be improved in low-income communities by . . .	
Statement number	**Statement**
1	. . . making free childcare available and accessible
13	. . . making sure that people have enough money each month to pay for their basic needs like rent, food, clothing, heat for their home
14	. . . cutting welfare benefits
22	. . . providing services that help people to organise their money like financial advice
21	. . . making sure communities have a say in any decisions that will affect them
26	. . . people taking responsibility for themselves

[4] The same 'Causes' and 'Solutions' statement sets were used in a study undertaken as part of the FinWell-Glasgow project – see McHugh et al. (2019) for the results of this study.

3.3.2 Recruitment of sample

Our purposively selected sample (n=40) consisted of 20 financial diarists and 20 professional stakeholders, providing a set of rich and divergent views. The 20 financial diarists included 19 who completed four financial diaries or more and one individual who dropped-out of the financial diary stage. The 20 professional stakeholders had a variety of expertise in, for example, public health, community development, financial, legal and housing services (see **Table 6**).

Table 6 Professional Stakeholders (PS) Expertise/Background

ID	Expertise/Background
PS01	Academic - Public Health
PS02	Financial Services - Social Investment
PS03	Financial Services - Money Advice
PS04	Charity - Public Policy Researcher
PS05	Legal Service - Legal Aid
PS06	Financial Services - Community Development
PS07	Academic - Public Health
PS08	Charity – Advice
PS09	Charity - Community Worker
PS10	Housing Services - Welfare Rights
PS11	Academic - Philosophy and Public Policy
PS12	Financial Services - Loans and Money Advice
PS13	Charity - Social Policy
PS14	Government – Politician
PS15	Charity - Public Health Policy Researcher
PS16	Charity - Migrants' and Women's Rights
PS17	Doctor - Public Health
PS18	Charity - Social and Community Psychiatry
PS19	Doctor - General Practitioner
PS20	Academic - Public Health Policy

3.3.3 Data Collection

In Q studies, data are collected via participants' rank-ordering of statements, printed on cards, onto a quasi-normal shaped grid according to a condition of instruction, for example, from most agree to most disagree. This rank ordering is known as a card-sort. In our study, participants were asked to sort the statements from those that were most like to most unlike their point of view. Grids were shaped from -4 to +4 ('Causes') and from -5 to +5 ('Solutions') (see **Figure 2** and **Figure 3**). Statements are sorted from those respondents feel most strongly about (the outside of the grids), column by column, towards those they feel neutral about (the middle of the grid) (see **Figure 4**). The two statement sets were sorted independently of each other with 'Solutions' following 'Causes'. Following each card-sort a post-sort qualitative interview focused on participants' general views on the topic in question and on understanding the reasons for statements participants felt most strongly about. The grids and both statement sets were translated to Spanish by the team for the financial diarists who could not speak English. Data was collected from September 2019 to February 2020.

Figure 2 'Causes' sorting-grid

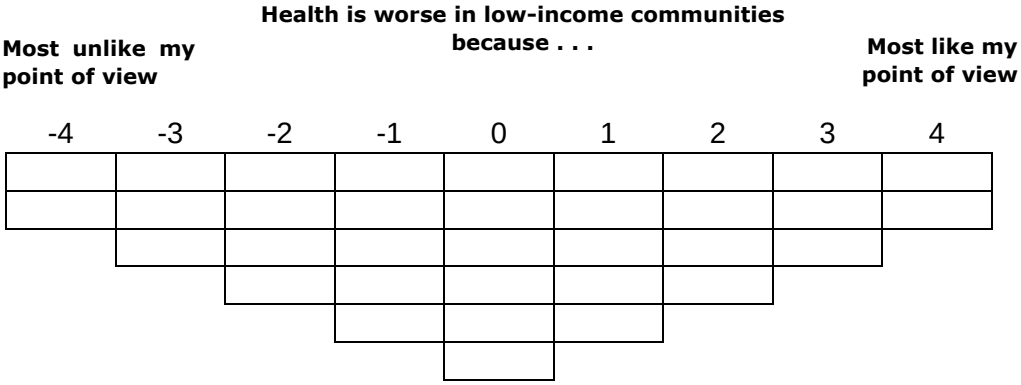


Figure 3 'Solutions' sorting-grid

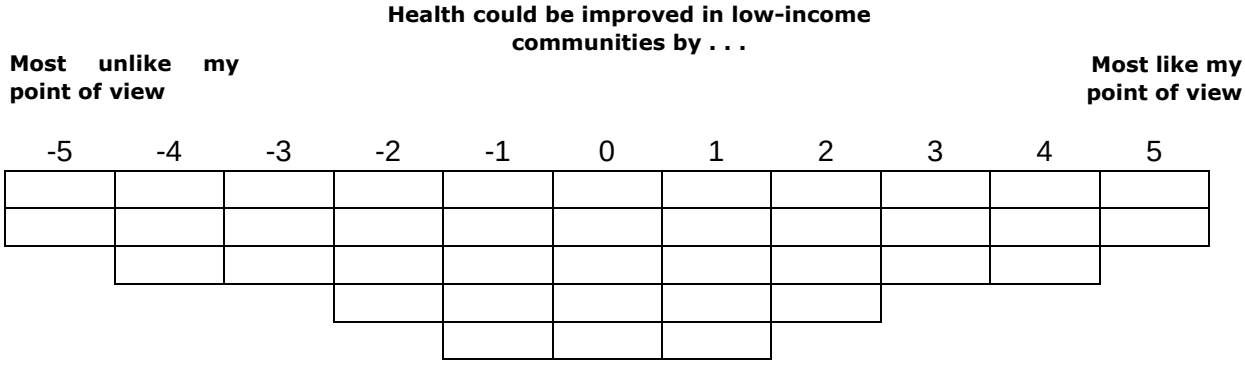
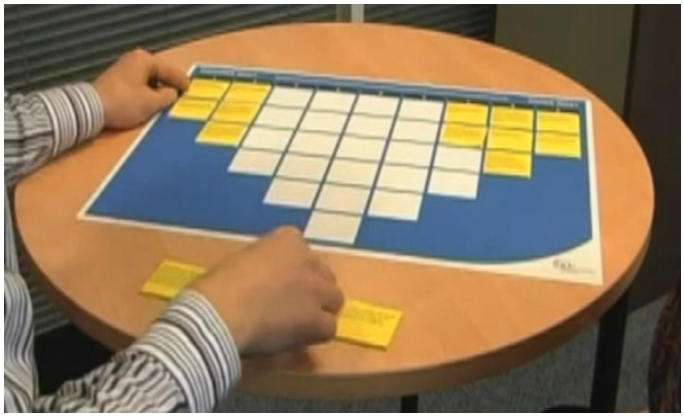


Figure 4 Example card-sort



3.3.4 Analysis

Each dataset – 'Causes' and 'Solutions' – was analysed independently using a dedicated Q methodology software package – KADE (Banasick, 2019). Factor analysis locates the shared perspectives that exist, based on the correlation (similarity) between each participant's card-sort and every other card-sort. Centroid factor extraction was followed by Varimax rotation to identify factors that represent shared perspectives on 'Causes' and 'Solutions'.

3.4 Ethics

Ethical approval for all three components of the study was obtained from the Glasgow School for Business and Society Research Ethics Committee, Glasgow Caledonian University.

4 Results: Finances, health and social determinants

4.1 Financial lives and health

As part of our baseline interview with each of our diarists, we asked them two questions aimed at better understanding if they perceived that a connection existed between their finances and their health. The first question was *"How much do you/your household's health conditions affect your household's finances?"* and the second was *"How much does you/your household's financial situation affect your household's health?"*. Their responses were unequivocal. Almost all diarists (n=18) perceived that their health had an impact on their finances and, everyone in the sample (n=21) perceived to some extent that their finances had an impact on their health. Responses on this two-way association are shown in more detail in **Table 7**.

Table 7 Diarists' perceptions on the effect of health on finances and vice versa

	Health on finances		Finances on health	
	n	**%**	**n**	**%**
Not at all	3	14%	0	0%
A little	4	19%	2	10%
Some	1	5%	4	19%
Very much	5	24%	6	29%
A lot	8	38%	9	43%
Total diarists	**21**	**100%**	**21**	**100%**

Our 21 diarists, ranging between 27 and 67 years of age, were living in particularly challenging conditions both in terms of their financial and health situations. Everyone in the sample was managing at least one and up to eight long-term health conditions; 16 diarists were from ethnic minorities; 7 were born in countries different from the UK; 4 did not speak English (native Spanish speakers); and all, except for one, were receiving means-tested benefits, indicating that their income and capital were low. These and other details on the lives of each of our diarists are shown in **Table 8**.

For most of our diarists, complex financial lives and health status were inextricably linked. The lived experiences of our diarists pointed to particular social determinants of health that seemed to be more relevant than others for this particular population and in this particular context. Economic factors such as income, employment and (the quality of) housing seemed to connect directly with the finances and health of the group. Access to (a) support networks, (b) health and social care, and (c) other essential services, such as childcare and legal, were also clear mediating mechanisms. Whilst the same factors kept coming up in the life stories of our diarists, the longitudinal component of the study enabled us to observe another layer of complexity in their lives. These common mediators were associated with 'cliff-edge moments', whereby sudden events led to multiple, immediate and serious problems that impacted the life course of the diarist. These events included, for example, a lost job, adjusting to life with young children, the medical assessment for Personal Independence Payment (PIP), a divorce, a decision by the Home Office regarding the immigration status of an individual or the diagnosis of yet another long-term condition. Diarists gave accounts of complex and sophisticated ways of managing their finances and their health conditions, in an individual attempt to break the connection between poverty and poor health. These findings are discussed in the following sub-sections, alongside in-depth case studies.

Table 8 Main characteristics of the financial diarists

Name	Gender	Age	Origin	Ethnic minority	Employment status at first interview	No. health conditions	Health conditions	Registered disabled	Means-tested benefits	Disability and sickness benefits	No. of financial providers
Anya	F	54	UK	Yes	Permanently sick or disabled	3	COPD; Hypertension; Type 2 diabetes	Yes	Yes	Yes	3
Andrea	F	44	LAC	Yes	Statutory sick pay	8	Arthritis.; GI disorders; Asthma; Knee, shoulder, neck and spine injuries; Epilepsy; Gynecological issues; Thyroid problems; Anxiety and depression	No	Yes	No	2
Ayleen	F	62	UK	No	Permanently sick or disabled	3	Arthritis; Musculoskeletal disorders; Anxiety and depression	Yes	Yes	Yes	6
Claire	F	44	UK	No	Permanently sick or disabled	2	Anxiety and depression; PTSD	No	Yes	Yes	0
Cyra	F	28	UK	Yes	Permanently sick or disabled	4	Keratoconus; Anxiety and depression; Schizophrenia and other psychoses; Bipolar disorders	Yes	Yes	Yes	6
Leona	F	52	UK	Yes	Unemployed and available for work	3	Arthritis; Prediabetes; Blepharitis	No	Yes	No	1
Carolina	F	55	LAC	Yes	Permanently sick or disabled	3	Arthrosis; Fibromyalgia; Anxiety and depression	No	Yes	Yes	1
Luisa	F	29	LAC	Yes	Unemployed and available for work	1	Anxiety and depression	No	Yes	No	3
Cassandra	F	48	LAC	Yes	Looking after family/home	4	Lupus; Hypertension; Prediabetes; Anxiety and depression	No	Yes	Yes	3
Hilda	F	67	African	Yes	Wholly retired from work	4	Arthritis; Hypertension; Cataracts; Anxiety and depression	No	No	No	1
Anna	F	61	UK	Yes	Wholly retired from work	6	Type 1 diabetes; Hypertension; Type 2 diabetes; Chronic back	Yes	Yes	Yes	1

							pain; Muscoloskeletal disorders; Anxiety and depression				
Juliet	F	65	UK	No	Permanently sick or disabled	3	Arthritis; COPD; Brain cysts	Yes	Yes	No	2
Madeleine	F	56	UK	Yes	Unemployed and available for work	5	Hypercholesterolemia; Hypertension; Knee, shoulder, neck and spine injuries; Anxiety and depression; PTSD	No	Yes	Yes	0
Mayowa	F	56	UK	Yes	Employee in part time job	2	Hypertension; Drepanocitosis	Yes	Yes	Yes	2
Sofia	F	45	LAC	Yes	Permanently sick or disabled	5	Hypertension; Type 2 Diabetes; Chronic back pain; Anxiety and depression; Schizophrenia and other psychoses	Yes	Yes	Yes	6
Sarah	F	43	UK	No	Unemployed and available for work	4	Arthritis; Asthma; COPD; Anxiety and depression	Yes	Yes	No	1
Teresa	F	44	LAC	Yes	Unemployed and available for work	4	HIV; Chronic back pain; Anxiety and depression; PTSD	No	Yes	No	1
Daliya	F	27	UK	Yes	Looking after family/home	4	Nystagmus; Anxiety and depression; Bipolar disorders; Prediabetes	Yes	Yes	Yes	6
Carla	F	60	UK	Yes	Permanently sick or disabled	9	Arthritis; Fibromyalgia; GI disorders; Hypertension; Prediabetes; Knee, shoulder, neck and spine injuries; Glaucoma; Osteoporosis; Anxiety and depression	Yes	Yes	Yes	4
Shannon	F	55	UK	Yes	Permanently sick or disabled	2	Knee, shoulder, neck and spine injuries; Schizophrenia and other psychoses	Yes	Yes	No	2
Charles	M	49	UK	No	Permanently sick or disabled	1	Anxiety and depression	No	Yes	No	1

4.2 Income

Income is one of the most influential social determinants of health (Wilkinson and Pickett, 2006). In this study, due to the diarists' health conditions and financial situation, all participants were receiving at least one type of welfare benefit payment (**Table 8**, columns 'Means-tested benefits' and 'Disability and sickness benefits'). Most diarists received a combination of benefits, which included those which are means-tested (e.g. Universal Credit, Employment and Support Allowance, Job Seeker Allowance) and sickness and disability benefits (e.g. Disability Living Allowance, Personal Independence Payment). In some of these households, there were times during this study in which these payments were not sufficient to cover all essential expenditure, not only due to the costs associated with living in London, but also because some diarists experienced unexpected cuts to, and interruption of, the benefits themselves (see, for example, Anya's and Daliya's cases in sections 4.2.1 and 4.2.2). Healthy households generally have access to a wider range of options (e.g. working more hours) when money is needed for an emergency. However, for people in poor health, the mechanisms of coping with sudden drops in or permanently low income are more restricted. Most of our diarists found that their financial life was easier when they were working, before their conditions worsened and they could no longer work. Our diarists found saving extremely hard which, in turn, affected their resilience to financial events such as, for example, a broken fridge (see, for example, Anya's case in section 4.2.1). The balance between income and expenditure was delicate and during the six months we observed how diarists had to carefully prioritise between different types of essential expenditures such as appliances and repairs, bills, council tax, housing, childcare, legal expenses and food.

Constant financial management, coping with emergency expenditure and prioritising expenses while leaving others unpaid was stressful and, when we first met our diarists, money was a source of worry for most (76% of the sample). It became a 'way of life'. In words of one of our diarists:

"You haven't got a clue what it's like to sometimes go hungry, if you know what I mean, or feel as if you've got nothing and you haven't even got a penny in your purse and you can't go out and get a pint of milk because you've got to have black tea for the day, sort of thing. So you sometimes feel a bit like that, that it does affect your mood, it does affect your way of life, in a sense." (Ayleen).

As expected, our diarists perceived it as easier to make more careful financial decisions when they were feeling better. For example, Daliya tells us:

"When I'm happy and I've rested enough, I think more carefully about how I spend my money, yes." (Daliya)

However, when their mental health worsened, diarists were conscious that their decisions were taken less cautiously:

"Depending on my mental health it all depends on my finances. If I'm in a really good bubbly, positive way, my finances is bound to be more stable. If I'm under the weather mentally my balance is up and down I can't concentrate on what I'm spending. It's just a mess." (Cyra)

Our diarists perceived a direct connection existed between income and, in particular, mental health; low, and at times, uncertain income was perceived as contributing to worsening mental health, and subsequently their other long-term health conditions. Diarists were unable to plan ahead when essential expenditure needed to be faced (e.g. housing, unexpected bills,

essentials for children, legal expenses for migration). For almost all diarists, the relationship between finances and mental health could be explained in a very straightforward way:

"I'm more happier when I know I've got money in my purse than what I am when I know I haven't got any money." (Juliet)

For other diarists a more complex relationship in which finances were connected to mental health and, in turn, physical health was perceived as existing:

"I think sometimes if you're financially okay, your health seems to be a wee bit better, you seem to be more happier. So mentally, you're a little bit more happier and when you're financially strapped and you haven't got enough money, it makes your mood a lot less … it makes you more depressed. So you feel more depressed and so therefore your ailments seem to be more prominent, I think in some senses." (Ayleen)

Despite welfare being considered a relatively reliable and certain source of income, this was not necessarily the case for all the individuals in our sample during the six months we were discussing their finances with them. Reassessments and interruptions in the provision of some benefits (for example Personal Independence Payments, PIP) and repeated variations in the amount of others (Universal Credit) directly affected the daily balance between income and expenditure in these households. Budgeting was also complicated by the scheduling of benefit payments. For example, some benefits, such as PIP, had payments scheduled every four weeks rather than on the same date every month. At times this required some households to juggle their finances, as this payment schedule did not align with dates of statutory expenses or more general bill payments. Different benefit payments were also paid at different intervals e.g. every four weeks, every two weeks or weekly. Depending on the month, this could create 'gap weeks' were diarists received no income at all for the week. During these 'gap' weeks, diarists would tell us:

"No, if I'm skint, like this week is my week that I don't get no money at all. So, they suffer what is in my house, if it isn't there, it's tough luck, if I haven't got money to go and buy something, it's tough luck." (Juliet)

For lone parents or those with limited support from their partners (see for example Daliya's case in section 4.2.2), managing such financial hardship was even more difficult and stressful, and represented a threat to mental health. For example, during one of our qualitative interviews, Cyra told us:

"It's hard and it's a struggle to raise two boys financially it's a drain, a constant drain, I feel constantly drained. You've got a constant – I don't know the amounts of times you've got to buy those kids trainers throughout the whole year is a nightmare you know. They're constantly needing something, they ruin their clothes, it's just a nightmare and that is what I find very expensive and food as well, they go through yoghurts in a day." (Cyra)

In sum, the role of income as a determinant of health emerged quite strongly from our financial diaries study. For our diarists, finding a job with their health and social conditions was difficult. Benefit payments were, among almost all diarists, the only source of stable income for the household. However, limited amount in benefit payments, uncertainty around some forms of welfare payments and the costs of living in London challenged our diarists' ability to balance between income and expenditure. Such delicate balance often translated into worries and threats to our diarists' mental health.

4.2.1 Case study: Anya

Anya is a 54-year-old single mum who lives in a flat with her daughter in Brixton. She is currently managing three long-term health conditions and is registered as disabled. Anya's needs are mostly to manage chronic obstructive pulmonary disease (COPD), and issues with her breathing – for which she needs oxygen. Her daughter (and carer) is now 23 years old and the main support to her mother, helping her to manage her conditions. Anya's daughter is at university and also currently works part-time as a security assistant, but her income does not contribute much to the household.

Anya used to work as a cook in a nursery and, later, a day centre but she was forced to reduce her number of working days as her conditions became more and more severe. For Anya, financial life was easier when she could still work. She struggled with the careful budgeting required when living on benefits:

"I found that when I was in employment, it was a lot better. I didn't have the issues that I have now. I think because even though you get a set wage, when you get benefits, you have to work it out to a tee, what you prioritise more than one thing, and I think that's where I struggle with my finances." (Anya)

Anya's budgeting struggles were also challenged by unexpected cuts to her welfare payments. From our interview with Anya, these cuts emerged as particularly detrimental because they led her to stop her life insurance payments:

"It got a bit more daunting when my benefits were cut. So, you know, looking at people who they say they take away … I was fortunate. They didn't take everything away, but having that loss when you've got commitments in place, once you've got that, and then for some of it to be taken away, you try and balance everything out that you were doing. So, little things like paying my life insurance, which isn't a lot a month, but still having to juggle it around to pay certain things, I lost that for about nine months, and then it was reinstated. So, that played a big part, again, with mental issues and my finances as well." (Anya).

Already finding it hard to prioritise essential expenses and managing two loans, Anya's fridge suddenly broke. She did not have many options but to top up her credit union loan (**Table 9**). She had started using credit unions when she was still working and had worked hard to create a credit history that preserved her access to further loans in case she needed it. Although access to credit from her credit union was possible, this new debt put pressure on Anya. When we interviewed her, she told us:

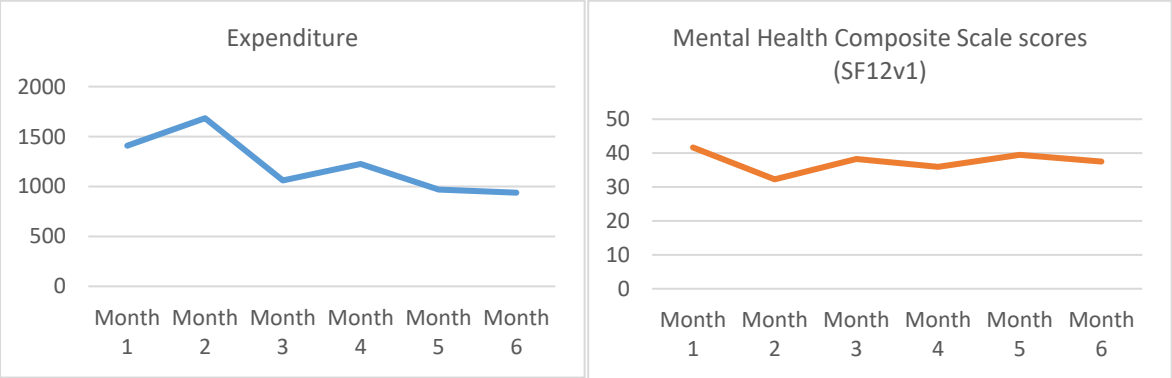
"[If] your circumstances change once you've taken it, that can be a pressure of … "Well, how am I going to pay this back, because I've gone past the period where I can say take it back. I don't need it anymore." (Anya)

Anya's mental health was assessed after the fridge broke and Anya took the credit union loan. **Figure 5** shows the trend in both expenditure and mental health composite scale scores from SF12v1 questionnaires. These graphs suggest that Anya's mental health worsened as a consequence of having to deal with the broken fridge; in month 2 Anya's mental health reached its lowest point during the study period.

Table 9 Anya's monthly budget for month 2 (August 10 - September 9, 2019)

Source of funds (£)	1574	Use of funds (£)	1678
Housing benefit	408	Rent	408
Loan from Credit Union	500	*New fridge*	600
PIP	350	Groceries	161
ESA	301	Gift to daughter	100
Research incentives	15	Council tax	4
		Electricity bills	48
		Mobile phone bill	27
		Water bills	12
		TV (license and on demand)	39
		Household items	49
		Personal care	11
		Transport and petrol	45
		Gambling	40
		Takeaway	25
		Charity	10
		Personal Loan (Credit Union)	43
		Personal Loan (Fair Finance)	56

Figure 5 Anya's monthly trends in expenditure and mental health



4.2.2 Case study: Daliya

Daliya is 27 years old and from the UK. She has two children (3 and 6 years old) and, before they were born, she used to work full time. After her children were born, Daliya had to stop working to look after them. Daliya has suffered from Nystagmus from birth; this is a vision condition in which the eyes make uncontrolled movements that often result in reduced vision and depth perception. In 2016 she started to suffer from mental health issues including anxiety, depression and bipolar disorders. In January 2019, she was diagnosed with Prediabetes. These conditions challenge, severely, her sight and daily activities.

During the study period, Daliya was actively looking for a job but also trying to graduate from a BSc in Computing, IT and Mathematics (part-time), which she pays for through a student loan of £3000 from Student Finance. Daliya studies when the children are at school or when they are sleeping. Daliya's partner and father of her children, Ferdinand, does not live with them. He tries to help the family every day by picking the eldest son from school at 3 PM, supporting Daliya with showering her upper body and buying groceries, which Daliya pays for as Ferdinand does not have a stable job. However, Ferdinand's help is not enough for Daliya

who sees money as a challenge. She feels she cannot count on anybody, not even him. Daliya told us:

"*I think he* [Ferdinand] *is finding family responsibilities overwhelming. He can only contribute around 2% financially."* (Daliya)

Daliya wants to work, be independent and make enough money to live a decent life but she cannot get enough childcare support from her partner and, thus, she is not able to apply for, or take, a job even though she wants to. During our interviews with her, she told us:

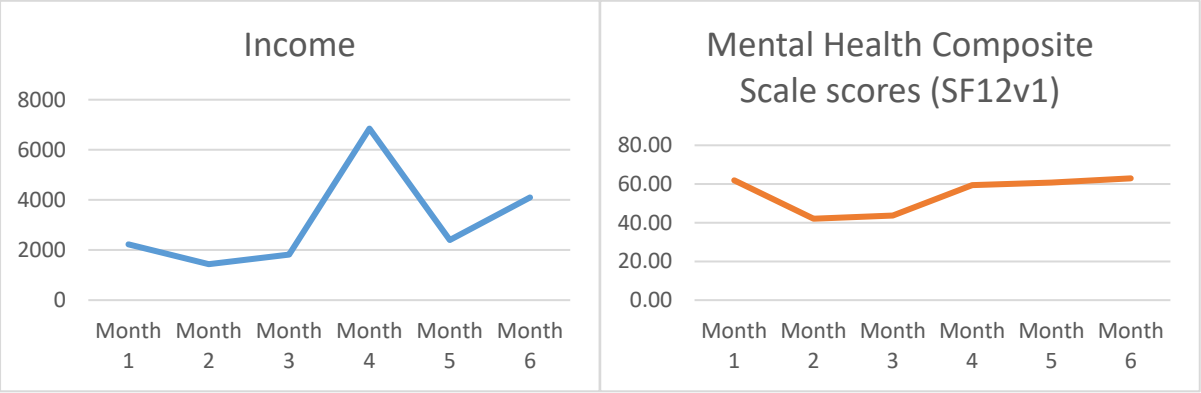
"I've thought about it, but each time I think about it my partner says to me: "Do you think you can cope because even though they say it's flexible, you will need time to be able to pick the children up from school, drop them off and things like that". I said, "Yes, I have thought about it but… this time they're going to pay me for it at the time, so I think it's worth me going for it." (Daliya)

Unfortunately, Daliya was not lucky with job hunting during the study period. Even worse, in April 2019 Daliya's Disability Living Allowance (DLA) was stopped. As the main breadwinner of the household, this was problematic. When we met her and during the three first months of the study, Daliya relied on her savings but these were not enough. She had to take out three loans; one per month over consecutive months (months 1-3), one from Fair Finance and two from Oakam. With no income at all, this was the only way in which her family could survive this particular cliff-edge moment. Daliya was budgeting and making financial decisions to the hour. When talking about her different loans she says:

"I like that it is direct debit. So that means it has to come out of my bank. It's not like a card, you know, there's some, like Oakam, they take it in, erm, like [in the] *early part of the morning instead of at midnight because it's not a direct debit".* (Daliya)

Suddenly, following her appeal, in month 4 Daliya started receiving PIP. **Figure 6** shows Daliya's income trend during the study as well as the mental health component of the SF12v1. These show how her mental health increased during the month when she started receiving PIP.

Figure 6 Daliya's income trend and mental health during the study



4.3 Finance

Due to the combination of low income, financial uncertainty and insecurity, finance plays an essential part of our diarists' lives. We observed that diarists made extensive use of financial services to help them smooth their consumption patterns at difficult times when their income did not match their expenditure. Finance-related transactions—those including credit, savings, insurance, and other financial services—were the second most frequent overall (11 percent), after groceries (17 percent) and closely followed by entertainment (10 percent). Most of these transactions were related to credit and credit arrears, followed by insurance products (mainly related to housing), savings and, finally, pensions.

On average, this means that every month each participant was making around 12 decisions related to financial services such as taking out or paying back a loan or paying for insurance; this is between 2 and 3 financial decisions every week. Financial decisions are particularly complex and stressful; they deal with relatively large amounts of money, can have serious future implications, and are not easily reversed. For our diarists, these decisions are even harder to make; urgency, poor mental health, and lack of control all combine to increase stress levels and anxiety.

It is important to note that all of our participants were financially vulnerable as defined by the Financial Conduct Authority (FCA; 2018) because they had at least one long-term health condition or disability. Other characteristics of financial vulnerability are having limited financial resilience; low financial capability; and experiencing a recent serious life event, such as job loss, relationship breakdown, illness, bereavement, or becoming the main caretaker for a family member. While financial vulnerability relates to having only one of these characteristics, most diarists in this sample were vulnerable on all of these counts.

Despite their financial vulnerability and their low incomes, our diarists had extremely complex financial lives. Everyone in the sample, except two diarists, had at least one loan (90 percent, n=19). More than half of the sample (57 percent, n=12) were simultaneously using at least two types of financial providers during the study, both regulated by the FCA and nonregulated. Over the data collection period, study participants were using two credit products on average and four diarists were found to be simultaneously managing six loans.

Only one third of diarists had reported, when we first met them, having enough savings to cope with emergency expenditure. Their low incomes and unpredictable variations in income and expenditure meant that it was really difficult to save. Savings are important; they can help individuals meet emergency, lifecycle and investment needs to improve their future situation (Rutherford, 2001). When savings are not enough to survive a 'cliff-edge moment' and you do not own any assets, then borrowing becomes the only option to stabilize consumption over time (Morduch and Schneider, 2017; Tomlinson, 2018).

Sources of credit

All the loans that were taken out just before and during the research period were to cover essential needs. Almost all were for housing-related items; some were for refurbishment and decoration and others to urgently replace broken white goods. One was to pay for a trip abroad to visit family after 7 years of not seeing them and to introduce children to their grandparents in the Caribbean. A different type of emergency expenditure for non-UK citizens was for obtaining visas and other Home Office related expenses. These expenses could be particularly destabilising; they were not planned, they were difficult to control or postpone, they

came with associated expenses such as paying for legal advice, they were of relatively large amounts and the consequences of not paying were serious and immediate.

Whilst all of the diarists in the sample were financially vulnerable, it is important to point out that not all of our diarists were experiencing financial exclusion. Part of this group of individuals with long-term health conditions were once able to work and some of them still go in and out of work depending on the progression of those conditions. This means that some of our diarists can access mainstream-priced financial institutions (banks and credit unions) and relatively low-priced products (overdrafts, credit cards, mortgages) that were first accessed when they had more secure financial situations. It also means that some of them have credit histories which give them easier access to different loan products, including affordable credit, catalogue, store cards and doorstep loans. The wide range of financial instruments used by the 19 diarists in our sample who had at least one current loan are shown in **Table 10**.

Table 10 Financial instruments used

Financial instruments	Total *(n=19)*
Relatives and friends	12
Microcredit	7
Credit card	6
Budgeting loans	5
Doorstep	5
Catalogue	4
Overdraft	3
Pawn	3
Credit union	2
Store card	2
RoSCA	1
Bank loan	1
Mortgage	1
Total financial instruments	52

Financial inclusion in this sample can be a double-edged sword because individuals who were once financially secure have now experienced a change in circumstances after being diagnosed with a long-term condition. Ironically, having access to high-quality mainstream financial products could potentially make them more financially vulnerable. For example, Hilda, a 67-year-old woman originally from Africa who has lived in London since 1981, is the only diarist who has a mortgage in the sample. She used to work as a carer for the Council and decided to retire three years ago when she was made redundant as her health conditions had worsened. After that, she could no longer afford her mortgage, which is now informally being paid by her children, but decided to keep it anyway as she did not want to give up her house. Bank overdrafts are another example; some diarists such as Sofia, whose case is discussed in section 4.3.1, have kept the overdraft limits they could access when they were healthy and have found difficulties reducing the size of this debt. Maintaining access to financial products, even if they are mainstream, could become a problem if the diarists borrow more than what they can afford in their new situation.

Furthermore, diarists who were previously working and who are not experiencing financial exclusion are at higher risk of having repayment problems when they are diagnosed with, or have to quit their jobs as a consequence of their long-term conditions. Most diarists in our sample using mainstream financial products had already taken out loans when their circumstances changed. The repayment of these loans, with instalment amounts corresponding to what they could afford in a different situation, now need to come out of diarists' benefit payments. This is not always possible and can create stressful situations for our borrowers.

Informal credit

Most of our diarists, however, were dealing with their financial insecurity by relying on informal loans with family, friends and employers. Immigrant diarists in particular, but also others in the sample such as Charles (see Charles' case study in section 4.3.2), could not borrow from mainstream financial institutions because of unemployment, unstable employment, having a poor credit history or being "credit invisible," i.e., not having a credit history. Whilst some were more likely to be managing a portfolio of regulated subprime loans (pawn brokers, catalogue, doorstep, etc.) as well as loans from family and friends, others were managing their finances by relying solely on the latter.

Social networks were a main source of small, short-term, flexible, and interest-free loans. These characteristics make them valuable for our diarists as they fit exactly with their needs. When we first met them, twelve diarists were indebted with family and friends. For example, Anya receives regular financial help from her daughter and she tells us:

"Yes, my daughter's a great support, but at the end of the day, I don't always like to pressure her. Without her help, honestly, I wouldn't be able to keep my head above water. She is a great help, but then she's got her life." (Anya)

Like Anya, diarists are not keen on asking their social network for money because they know that this puts pressure on loved ones that have their own financial struggles. Ayleen has an outstanding loan with a doorstep lender of £600 that she cannot pay back. She knows that due to that it is unlikely that other financial providers will lend her money. When she is strapped for cash, she asks her brother for help:

"I ask my brother and my brother is very good and he gives me money. So he will help me out, although he's got tired of it now and he doesn't want to help me out anymore." (Ayleen)

Ayleen would prefer to get the money from a different source. She tells us her thoughts about asking for money to family and friends:

"*It is very demeaning, I think in some senses, it makes you feel as if you're some sort of leech, leeching off people for money, if you know what I mean. It makes you feel uncomfortable; it does make you feel uncomfortable."* (Ayleen)

Charles, Anya, Ayleen and most of our diarists would prefer not to have to borrow from relatives and friends. They are scared that if they struggle to repay, their lenders will suffer as a consequence because their financial situation is also delicate. In Charles' case, his brother borrows (through his credit card) to lend him the money. If Charles' were not able to pay back, his brother might see his own credit score affected. However, in an emergency they have no other option but to rely on their loved ones for help.

Responsible microcredit: Fair Finance

Others in the sample used an alternative but also 'safe' strategy, for example Anya only borrows from fair-priced affordable providers such as credit unions and responsible lenders (Fair Finance). In the past, she had to borrow for her grandfather's funeral and she chose a doorstep lender. During this loan, her interest rates kept increasing and it took her two years to be able to clear the debt. Anya told us: *"After, I said I'd never go back."*.

Fair microcredit from Fair Finance was an affordable alternative for our diarists to cover for emergencies when the amounts required exceeded the lending capacity of their informal networks or they chose not to ask them for help. Out of the seven borrowers that were using it, most were satisfied as it met their needs (small, fast, flexible, short-term, and affordable). The loan had, in most cases, enabled them to swiftly replace broken white goods such as a new fridge or a washing machine. Affordable credit borrowers valued the staff that walked them through the process and how this process was straightforward and adapted to their health problems. They also appreciated the accessibility of the loans:

"I think it would help so much because they don't look at your credit history, they look at it but they don't say because you don't have a good history or you don't have a history at all, they're not going to lend to you, they at least give everybody a fair chance, do you know what I mean?" (Daliya)

Borrowers also valued that the loans were designed to be affordable for them and repayment was adjusted to when the benefits were paid so that the money was always in the bank when it was due. This contributed to the repayment process being as stress-free as possible.

Affordable microcredit seemed to be a fast and accessible solution for problems that required immediate action and knowing that it was a source that could be accessed in an emergency was a relief for our diarists. Whilst Fair Finance's loans provided a fair alternative to high-cost subprime lenders, they (as with any type of debt) were reported to work better for those diarists who were more in control of their finances and, more generally, their lives. For the borrowers with more advanced and more severe conditions, particularly mental health related, the microloan could become one more debt in a list of high-cost loans from catalogues, doorstep lenders, and family and friends. Problems with loan repayment could add to the stress and anxiety experienced with other lenders contributing to a worsening of their already severe mental health problems.

Diarists who were worse-off in terms of their health benefited more from other forms of support such as budgeting loans. These are interest-free loans provided by the UK Government to individuals who are accessing means-tested benefits, for expenditures connected to, for example, furniture or household items, clothes or footwear, rent in advance, maternity costs, funeral costs, or repaying loans taken for the listed items. These are a safe alternative to cope with emergencies for those diarists who were managing multiple and severe health conditions that impeded them being in control of their finances**.**

High-cost credit and other 'coping strategies'

Doorstep lenders were the most popular high-cost credit source in our sample and the majority of diarists had used them in the past. These fast, small and short-term loans were generally valued by diarists. However, diarists only borrowed from them at last resort because they were aware of their high costs and additional charges and fees in case of default, as well as their sometimes aggressive collection tactics.

Three individuals out of the 21 in our sample reported in their diaries frequent gambling (for example, online casino, online bingo and scratch cards) and there were others whose diaries showed moderate sporadic gambling. This proved to be a particular issue for the diarists with more severe mental health and personality disorders who showed, in general, more compulsive behaviours. The majority gambled as a financial strategy to try to cope with expenses that they could not afford. Ayleen starts her interview by explaining:

"I think I gambled because I didn't have enough to pay something and ended up thinking I could gamble it and try and get it back but couldn't." (Ayleen)

Gamblers in the sample, due to mental health problems and medication, found it difficult to keep track of how much they were spending and the consequences that losing the money would have on their capacity of buying essentials.

4.3.1 Case study: Sofia

Sofia is 45 years old and arrived in the UK 20 years ago. She was first diagnosed with schizophrenia and, after a few years, she developed hypertension, diabetes, chronic back pain and depression. Her ill health limits her daily tasks and she struggles to find a job. She lives alone with four dependent children in a council house. She does not have support with childcare, and she cannot afford full-time nursery for her youngest son. Sofia has also two older sons outside the UK. Both of them suffer from mental disorders, and she supports them financially. Sofia is registered as disabled. Her income is entirely made of benefits including: weekly payments of housing benefit and child benefit, Jobseeker's Allowance (JSA) every two weeks, and child tax credit and PIP every four weeks.

Sofia's monthly income is around £2,500 after housing benefits. However, her income does not meet the basic needs of her household. **Figure 7** shows Sofia's attempts to manage, weekly, between her irregular income (blue line) and spikes in expenditures (red line) that include groceries, electricity and children's need, among others.

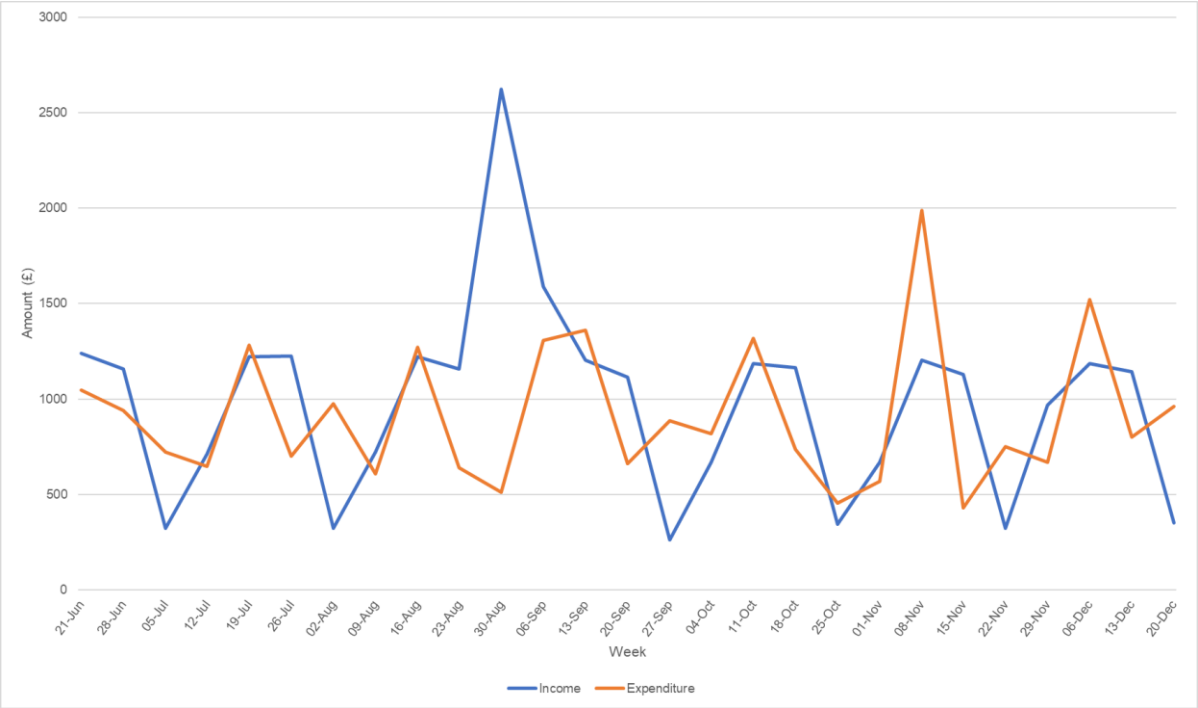
Sofia was able to smooth her consumption from one week through a combination of debts, including formal and informal loans (bank overdrafts, affordable credit, budgeting loans, and loans from friends). During her in-depth interview, Sofia tells us: *"That's how I survive. I survive on the loans."*.

Sofia was simultaneously managing 6 loans during the study, as well as water and electricity arrears (**Table 11**). We left her just before COVID-19 struck with liabilities close to £6,200.

During the study period, the additional loans she took out (**Figure 7**, w/c 30th August 2019, spike in income, blue line) were meant to: (a) manage foreseen gaps between PIP scheduled payments to guarantee that groceries could be bought and bills could be paid (**Figure 7**, w/c 27th of September 2019, drop in in the blue line); (b) children's schooling needs (school uniforms) could be bought (**Figure 7,** w/c 30th August and 6th September 2019); (c) continue to support her sons living outside the UK throughout September and October 2019; and (d) budget for predicted expenses for immigration legal procedures in November and December 2019 (£1,000 in total). In this instance, Sofia told us:

"Right now I saved some money £1000 and gave to the solicitor £750 still I must give the Home Office, £2,400. I don't even have it; I have remained in £250 to give to the solicitor. I don't have it. I must wait until I get my benefit or I go and borrow some more money". (Sofia)

Figure 7 Sofia's household weekly income and expenditure (£)



Despite Sofia's ability to foresee upcoming expenses and manage challenging weeks, her health was worsening. When we met Sofia in September and October, she felt particularly anxious and faintish due to fluctuating sugar levels. Her financially-related anxiety and stress was perceived by Sofia as impacting on her diet. She felt physically nauseous, and she found it difficult to organise her chaotic life. She knew she needed help but felt that the system did not understand her needs. She felt she was being judged:

"They can sanction you for stealing you know, what they say is because you keep on doing it over and over, they don't think oh financially this woman is struggling. There's a lot of things going on, sick people who really genuinely sick but then it's nothing to do with your sickness it's to do with the way of life". (Sofia)

In our final meeting in December 2019, Sofia told us:

"I don't make ends meet, even if I get money. My life is not moving forward. I'm just in one place, I can't move. My kids want to go on holiday." (Sofia)

Table 11 Sofia's monthly budget for month 6 (21 November – 20 December, 2019)

Source of funds (£)	4415	Use of funds (£)	4620
Child benefit	1109	Rent	1048
ESA	692	International phone credit	25
Housing benefit	1048	Mobile phone bills and internet	62
Loan from Morses Club	*300*	Pocket money to children	100
Loan from neighbour	*350*	Groceries	226
PIP	896	Netflix	12
Research incentives	20	Sky TV	50
		Tobacco	311
		Children expenses	111
		Christmas gifts	480
		Toiletries	16
		Household items	7
		Pet expenses	25
		Account fees	4
		Hairdressing (daughter)	70
		Payment to solicitor (migration)	500
		Hairdressing	96
		Transports	173
		Remittances to family	550
		Electricity arrears	*140*
		Water arrears	*15*
		Loan repayment to sister	*55*
		Loan repayment to friend	*20*
		Loan repayment to Fair Finance	*264*
		Loan repayment to H&T	*200*
		Loan repayment to Morses Club	*60*

4.3.2 Case study: Charles

Charles is a 49-year-old British male. He is permanently off sick because he suffers from anxiety and depression. Charles lives with his 80-year-old mother and he is her main carer. His role of carer entails about four hours a day looking after his mum, the house and the shopping. He is worried about the future because he feels his carer role is going to prevent him from finding a job. He talks about his role as a carer as something that conditions his day-to-day decisions and he tells us:

"Caring is a burden and it is stressful because it doesn't allow me to do things." (Charles)

Charles receives Employment and Support Allowance (ESA) every two weeks. He is reluctant to claim PIP because of the psychological implications of being "permanently sick" or "disabled". His mother receives a weekly pension of £160 that goes towards household expenses. Although he was told by his uncle that he could claim more benefits, at the end of the study Charles had still not applied for any other support. He found the process draining and complicated:

"*When you are sick, you don't have the energy to be applying for benefits or things like that. But also, when you are sick, you are just waiting for that regular payment*". (Charles)

Charles starts his days feeling dreadful and hopeless. Then he feels better throughout the day but at nights, before bed time, he starts feeling anxious again. Charles has insomnia and difficulties with his memory and concentration. He worries about money:

"'When your finances are limited, your life becomes limited (…) Whoever has the benefits, they've done their calculations, because there is only so little you can do with that money." (Charles)

Charles struggles to make ends meet and spends all of his income every month. This can be observed from his monthly income and expenditure graph (**Figure 8**), where his income was only higher than his expenditure in in months 4 (**Table 12**) and 5. He has not got much saved and he cannot access financial products that would help him smooth his and his mum's consumption. When Charles faces cash constraints, his mum and him rely on his brother. Charles' brother uses his credit card to pay in advance for bills when needed. He also drives Charles to the supermarket when he needs to buy groceries for the household so that he can save on transport. Charles pays him back in cash (for petrol and for the bills paid) when he gets his benefits money. His brother also helps with other expenditures when Charles asks him. However, this help is not always consistent. For example, in month 6 the brother's car broke and Charles had to spend more on bus fares. Also, as Charles puts in:

"*my brother helps, but they have their own problems, you know? His son is going to the University of Brighton and that.*" (Charles)

Figure 8 Charles' monthly income and expenditure (£)

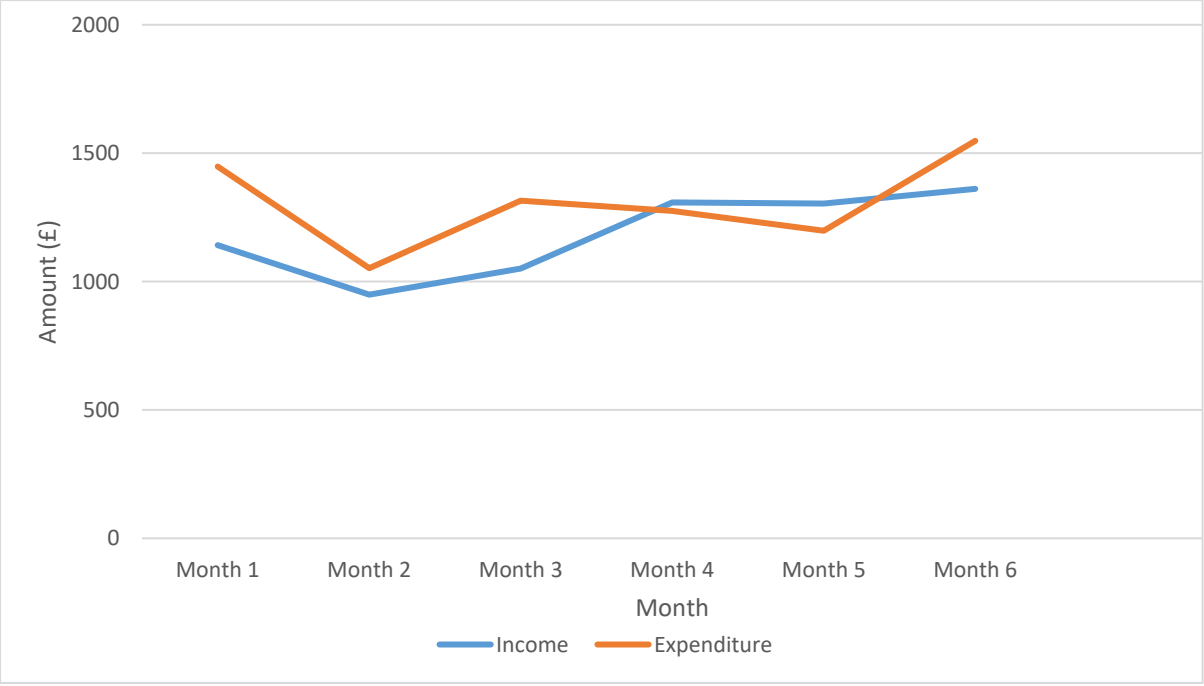


Table 12 Charles' monthly budget for month 4 (15 October – 14 November, 2019)

Source of funds (£)	1308	Use of funds (£)	1275
Housing benefit	408	Rent	528
ESA	762	Alcoholic drinks	15
Gift from brother (monthly TV package)	33	Electricity/gas bills	75
Loan from brother	105	Electronics	50
		Groceries	308
		Household items	60
		Loan repayment to brother	105
		Mobile phone bills	30
		Over the counter medicines	4
		Transports	30
		TV package	33
		Water bills	37

4.4 Employment

Employment (or lack thereof) emerged as a strong determinant of the relationship between finances and health. In our study, we could see three types of diarists: (a) those who were looking for an occupation or trying to set up their own businesses; (b) those who were not fit for work but were sporadically working informally or volunteering; and, (c) those who could not work anymore due to the number and severity of their conditions.

When we first met our diarists only one was working, nine were unemployed and 11 were permanently sick or disabled, or retired (**Table 8** column 'Employment status at first interview'). Long-term health conditions were an important barrier for our diarists not being able to access formal employment. Most diarists could not find a job, even if they wanted to. For Anya, who had progressively stopped working due to her COPD and diabetes worsening, this was understandable:

"People might look at you and think, "God, well you could go out and get a job," and I always say, for me … you might look at me today and think, "Yes, she's capable of working." Tomorrow morning, I could get up and I've got the oxygen on all day, you know, and for me, an employer doesn't want someone who can come in three days a week. They want someone for five days." (Anya)

In addition to absenteeism related to their health conditions, some of our diarists were having up to eight medical appointments per month. Our diarists were conscious that, if they would have been at work, this would have required exceptional flexibility from employers to accommodate.

Additionally, most of our diarists were looking for low-paid jobs (cleaners, baristas, delivery people) and lack of support with affordable and reliable childcare and/or other caring responsibilities was a significant barrier for them to be able to work. In Shannon's words:

"Why did I bother going out to work? I was thinking I'm worse off than I was before. I was having problems having someone to pick the kids up from school. And I'd get a phone call if they hadn't been picked up, because I was doing 10 hour shifts." (Shannon)

A couple of diarists, unable to find a job but needing the money, were working informally as cleaners or waitresses during the study. For Luisa (case study in section 4.4.1) this was too tiring and stressful and she had to stop. Working conditions and healthy environments are particularly important for people that have just been diagnosed with a long-term condition as these can prevent their health from deteriorating rapidly. For example, Andrea (see case study in section 4.5.1) had a serious accident at work and her employer gave a slow and unsatisfactory response in relation to her ability to go back to work. Her health has now worsened to the point she might be unable to work again.

The group of diarists who could no longer work talked to us about the influence that precarious working conditions had had on the progression of their long-term conditions, in particular, the need for paid leave to recover. Job insecurity frequently prevents people from taking time to recover after a health shock. Shannon had two excellent examples of this:

"One day I was at work and it was like the room was spinning and I fainted (…) So they took me down to Emergency and they said my blood pressure was low. Then I couldn't take much time off because if I didn't work I didn't get paid. So I was back at work the next day, I remember." (Shannon)

"…when the bomb went off in the West End. I was working and I was on the Controls. So I remember that being horrible and I was feeling horrible anyway. We kept getting those phone calls, what about their family and that, and I didn't have any information to give them. Sometimes you're told to just cut them off and I felt really horrible and after that everything went downhill. I went to my doctors and took time off and next thing I know I got a letter to say that they didn't need me anymore." (Shannon)

Some diarists were volunteering as they felt it helped to keep them occupied and was a way to socialise. For those who could no longer work, adapting to the new situation had not been easy:

"I haven't worked for ten years now, and it took me a long time to get my head around that. I've had counselling, having to deal with it, because I have to keep myself occupied now." (Anya)

Finally, others like Ayleen feel that if they had been given better medical treatment, they would have never needed to stop working in the first place:

"I think because the NHS is so poorly funded, I think if people like myself would have had an operation, say and their back fixed, I would have been able to work an extra 20 years and been able to contribute to taxes and everything else. And to help myself and not to be a burden to the NHS, then afterwards by having to go to hospitals, physios, by having a mental illness, all that sort of thing. I think it's really the physical illness has got an awful lot to do with finances in a sense, in that way." (Ayleen)

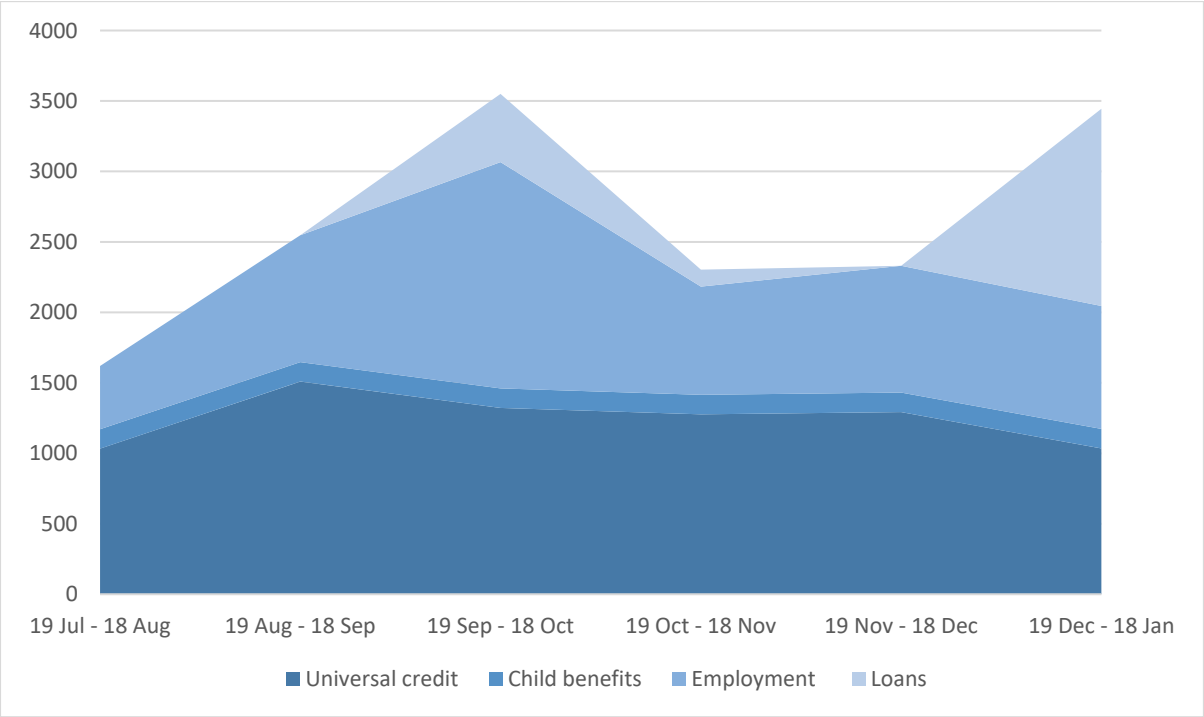
4.4.1 Case study: Luisa's household

Luisa is a 28-year-old mother of two young children (4 and 1) who lives with her husband Tony. The couple relocated from Portugal and have been living in the UK for the last 6 years. Luisa suffers from depression and her mental health deteriorated so much last year that she had to stop working. She used to work as a cleaner. Work played an important part in her social life and on the household's finances. When we first meet her, she is feeling better and has started looking for a new job. However, the family has no help with childcare and the one-year-old

only has 15-hours free nursery a week. Luisa is constrained: it is difficult to combine childcare responsibilities with low-pay work.

During the second month in the study, the family needs money and Luisa manages to find an informal cleaning job. It is little time and money but she is afraid that if she gets a more formal job the family will lose entitlement to universal credit, which is the most reliable income they have at the moment. She has to quit the job in month 3 as her anxiety was worsening because she was not yet fit to work. The household income (**Figure 9**) is not only low but also variable from month-to-month. Tony works on a zero-hour contract, and his salary does not always cover for essential expenses. At times when they are strapped for cash, they mostly rely on loans and gifts from Tony's mum and Luisa's aunty. Sometimes they are not in a position to help either, and then Luisa and Tony have to ask others such as Luisa's boss. For example, the household budget on month 6 shows a £1,400 loan that the family got from Luisa's boss. They urgently needed to rent a car whilst visiting their family in Portugal and they did not have enough cash. The loan was repaid 4 days later once they received a delayed Universal Credit payment. These informal debts are easier to renegotiate and some, particularly with Tony's mum, never have to be repaid.

Figure 9 Luisa's household monthly income by type (in £; after rent)



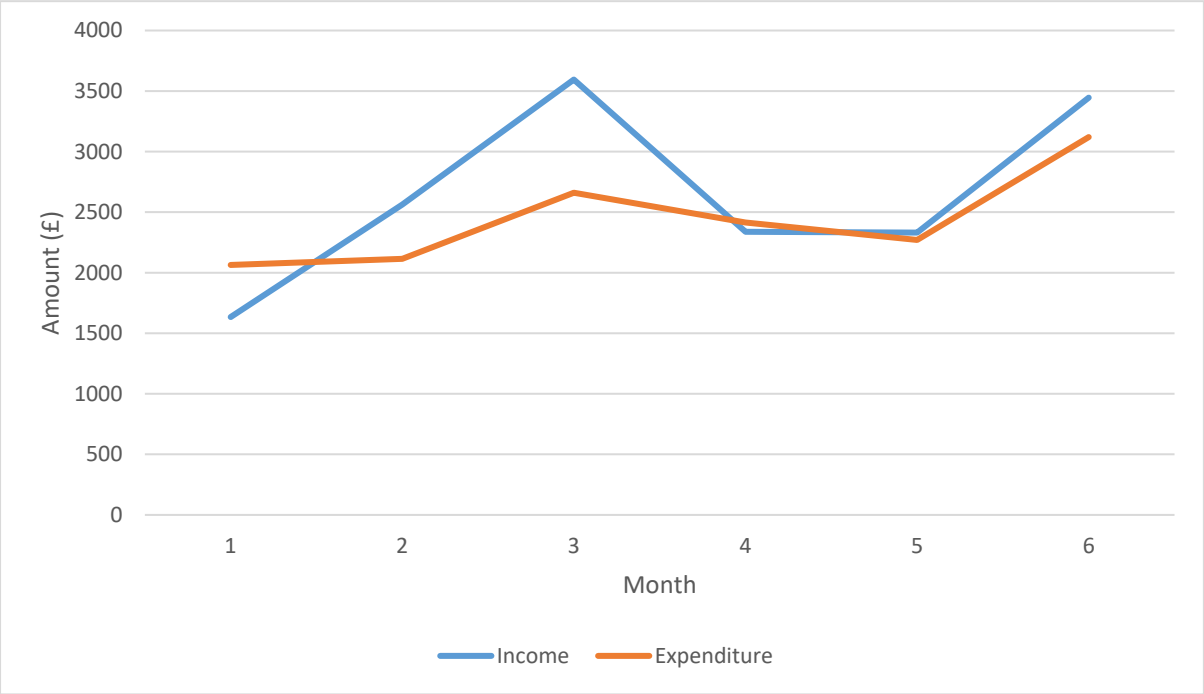
However, the family spends around £500 monthly repaying loans and arrears, which are substantially less flexible. The first one, with Brighthouse, was used to buy much needed house appliances over a year ago. The second one is with the council. When Luisa stopped working they fell behind in their council tax payments and now they pay arrears twice every month. The third debt is with a mobile network provider and, finally, they have an overdraft with a commercial bank which they are trying to clear. The bills of the house are usually around £200. All these regular and important expenses leave them with little room to pay for the rest of the things they need, especially those that are unexpected or of high expense. Their income and expenses for months 4, 5, and 6 evidence the importance of servicing debt in their monthly budgets (see **Tables 13, 14** and **15**).

Their income and expenditure is always very close which indicates that it is difficult for them to save **(Figure 10)**. The months in which they do not receive any loans (1, 2, 4 and 5) they spend all the money that comes into the household, which does not leave much room to cope with any emergency expenditures.

When Luisa tells us about the connection between her depression and her finances she says that money uncertainty makes her stressed, noting that she has developed a rash in her skin. The rash comes and goes throughout the six months, depending on her stress levels and her income. The GP tells her she is somatising her mental issues.

Luisa also prefers daily visits to small, nearby stores rather than less frequent grocery shopping at a bigger supermarket, which could save her money. *"I prefer to pay this money every day"* she tells us. She adds that she does not have the mental space to plan her meals so she sometimes goes out for groceries several times a day.

Figure 10 Luisa's household monthly income and expenditure (£)



When she is not doing well from her depression and anxiety, Luisa buys compulsively. She talks about *"the anxiety that wanting more than you need gives you (her)"*. She is trying to control this behaviour as it not only has financial implications for the household but also brings tensions to the relationship between the couple: *"my husband says I've spent £700 on amazon this year"*. The item 'Miscellaneous (personal shopping)' in the monthly budgets 4, 5 and 6 reflects this 'compulsive' behaviour (**Tables 13, 14** and **15**).

Luisa is trying hard to improve her live and those of other members of her family. Apart from medical advice for her mental health and skin problems, she has also sought help from community groups in the Borough (mostly parenting groups which she tries to attend regularly) and is getting free psychotherapy services from a local organisation that her GP referred her to. After a period where she was finding hard to leave the house:

"*I just wanted to stay at home, next to the heating and watching TV. I've got anxiety with too many things in mind.*" (Luisa)

During the last research meeting she told us that in general she feels better and is making an effort to go out, attend group meetings and mingle with others: "*Otherwise I will fall again in the same circle as before*". (Luisa)

When we last see her, Luisa is planning to further her education and get a secure and meaningful job. She is considering a £14,000 loan to pay for the course. It is a difficult decision to make; the pressure of the loan, the uncertainty of the household income, her delicate mental health and the lack of support with childcare are all factors that she needs to bear in mind.

Table 13 Luisa' monthly budget for month 4 (19 October – 18 November, 2019)

Source of funds (£)	2338	Use of funds (£)	2415
Child benefits	138	Account fees	8
Employment income	768	Aeroplane ticket	140
Research incentives	35	Alcoholic drinks	4
Universal credit	1277	Charity	15
Loan from family and friends	120	Children expenses	5
		Clothing	82
		Concert	15
		Contact lenses	60
		Council arrears	103
		Eating out	84
		Electricity bill	100
		Electronics	163
		Gift to husband	3
		Groceries	325
		Hairdressing	40
		Home insurance	28
		Household items	189
		Internet bills	79
		Investment	250
		IT insurance	13
		Miscellaneous (personal shopping)	97
		Mobile phone bill	34
		Other health expenses	12
		Overdraft	200
		Overdraft fees	22
		Personal care	25
		Personal loan repayment (Brighthouse)	50
		Personal loan repayment (O2)	30
		Post office	13
		Recorded music	9
		Transports	158
		TV license	13
		TV show purchases	17
		Water bills	29

Table 14 Luisa' monthly budget for month 5 (19 November – 18 December, 2019)

Source of funds (£)	2331	Use of funds (£)	2271
Child benefits	138	Accessories	49
Employment income	900	Account fees	31
Universal credit	1293	Alcoholic drinks	4
		Charity	15
		Children expenses	58
		Clothing	190
		Contact lenses	33
		Council arrears	253
		Eating out	147
		Electricity bill	50
		Gift to husband	3
		Groceries	318
		Hairdressing	115
		Home insurance	24
		Household items	51
		Internet bills	79
		IT insurance	15
		Miscellaneous (personal shopping)	152
		Mobile phone	100
		Mobile phone bill	26
		Overdraft	200
		Personal care	5
		Personal loan repayment (Brighthouse)	50
		Personal loan repayment (O2)	20
		Personal loan repayment to friend	20
		Transports	200
		TV license	13
		TV show purchases	17
		Video games	4
		Water bills	29

Table 15 Luisa' monthly budget for month 6 (19 December 2019 - 18 January 2020)

Source of funds (£)	3445	Use of funds (£)	3123
Child benefits	138	Accessories	13
Employment income	812	Account fees	25
Loan from boss	1400	Alcoholic drinks	6
Mobile phone sold	60	Card fee	7
Universal credit	1035	Charity	15
		Children expenses	37
		Clothing	33
		Contact lenses	20
		Council arrears	123
		Eating out	302
		Electricity bill	80
		Groceries	175
		Hairdressing	40
		Home insurance	22
		Household items	7
		Internet bills	79
		IT insurance	15
		Miscellaneous (personal shopping)	66
		Other health expenses	9
		Overdraft	200
		Overdraft fees	27
		Personal loan repayment (Brighthouse)	50
		Personal loan repayment (O2)	40
		Personal loan repayment (boss)	1400
		Toiletries	4
		Transports	187
		TV license	13
		TV show purchases	23
		Unpaid bill fee	23
		Video games	53
		Water bills	29

4.5 Housing

Good housing is important for a meaningful life and, therefore, it is a crucial determinant of people's health (Shaw, 2004). The way housing impacts on the health of our diarists emerges as closely connected to their precarious finances. Overall, we observed that due to difficulties in finding or maintaining a job and their limited and/or uncertain income coming from welfare payments, most diarists (n=18) are not able to access a mortgage to buy their own house. Most diarists (n=16) cannot even afford to rent their accommodation from the mainstream London rental market and, for this reason, they rely on housing benefits. In several cases, these benefits are used towards social housing provided by either local councils or housing associations. But in several cases we found that the low quality of the housing and the complex processes around accessing social housing or maintaining them in good state had an impact on our diarists' health.

When trying to approach social housing through the council, our diarists reported that the process was really challenging. When diarists urgently needed a new house (e.g. after being evicted), the council made them wait too long and this had an impact on their health:

I had to go to the doctor … to take pills, because I was having a bad time. I was being evicted. I saw myself alone in the house, the dad of my children is... he went to Santo Domingo, and I prospect that is only one day left for them to kick me out [of the house]. I know they weren't going to leave me in the street, but... whatever ... whatever ... they waited until the last day, there, in the council, there, in Lambeth ... to give me one [house]. (Cassandra)

Searching for a council house also emerged as a particularly challenging activity for some diarists already experiencing a hectic life full of health issues, health check appointments, re-assessment of working capacity and benefits and debt repayments. For example, finding a council house absorbed a lot of our diarists' energy and time. This had an impact on their finances and health because, whilst trying to apply for social housing with no effective support from the council, diarists had to pay for poor-quality private housing that was over their budget and which was viewed as worsening their physical and mental health (see, for example, Andrea's case in section 4.5.1).

Another issue with council housing that emerged from our data was that the process of re-housing from one council house to another was difficult and slow, and thus represented a source of worries for some diarists. During the study period, we observed and talked to diarists in need of re-housing, and they told and showed us that their houses were not safe and suitable to their health conditions and/or household composition. For example, when we first met Carolina in July 2019, she told us that her council house had been assessed several times by an engineer, and it was declared unsafe. Carolina and her family were told to avoid using the living-room because it was dangerous. This made Carolina experience anxiety for her and her children. Carolina's house was also declared as having poor insulation, which made it very cold during winter time. She told us that poor insulation had an impact on her fibromyalgia and chronic pain. Although the council told her she was eligible for a new house, by the end of the study Carolina had not reported any changes in her housing conditions. When we interviewed her, she made it clear that she really needed quick support with her housing conditions, because her health status was worsening and she could not afford any good-quality private accommodation:

"Where can I go, me, that I won't get a contract because I am sick, who's gonna give me a lease contract?" (Carolina)

During this study, we also observed that some diarists were helped with their housing needs by housing associations. In these cases, diarists generally had better experiences in terms of waiting times, and this prevented them from searching for temporary and expensive private accommodations. We also found that some of our diarists were able to establish long-term relationships with these organisations. However, the conditions of some rented houses when they were made available to diarists represented a health threat. Some diarists found it difficult to carpet their houses, because they could not afford it. Leona, a 52-years-old woman suffering from arthritis, prediabetes and blepharitis, could not even buy a bed, and this had health implications for her physical health, because she had to sleep on the floor for some time, until a friend bought her a new bed. Other diarists reported different structural problems in their accommodations, including lack of rails on the stairs, leaks and bad insulation. All these issues emerged as having a direct impact on diarists' health. For example, Anna, who is 61 years old and suffers from serious musculoskeletal conditions that affect her mobility, has been renting her house from the same housing association for 30 years. She showed us, when we visited for an interview, that she needed to install rails on the stairs by herself because she was not able to book an appointment with the housing association to re-assess her accommodation and check its suitability. In this instance, she told us:

"The organisation has got too big; it doesn't deal with problems efficiently. I think they think I'm senile". (Anna)

4.5.1 Case study: Andrea

Andrea is a 44-year-old single woman living with no dependants and originally from Latin America. She moved to the UK in early 2018 to find a job and become financially stable. Before arriving in the UK, Andrea used to live in Spain, where she was registered as disabled due to several health conditions (arthritis.; gastrointestinal disorders; asthma; knee, shoulder, neck and spine injuries; epilepsy; gynaecological issues; thyroid problems; anxiety and depression). Andrea's disability allowance in Spain was 380 euros a month, and her status of disabled person did not allow her to work. Andrea decided not to transfer her disability status to the UK. This strategy allowed her to find a part-time job in a cleaning company in London.

Being new to the UK and in part-time occupation, Andrea managed to find her first accommodation through a sub-let agreement. When we first met Andrea in summer 2019, she was living in single room in a shared flat, for which she used to pay £650 a month, plus £200 of supplementary costs if she wanted to host guests. She used to pay for it through Universal Credit (UC), which she accessed because she had been off-sick since April 2018, when she injured herself chronically at work while cleaning pools at a hospital. The conditions of her house and room were extremely adverse, and they worsened her already precarious health. She reported that her room and house conditions (humidity, mould and floods) exacerbated her asthma by making her have bad attacks at night, for which she needed more medication (**Figure 11**). For this reason, Andrea sought help from the council, which told her that she was eligible to access social housing.

During month 1 of this study, Andrea was told there were no social houses available yet. Andrea had to pay for a new month of private rent, and this challenged her health but also her finances, because the price charged by her landlord almost equalled her benefit payments, and she needed to ask for a Universal Credit budgeting advance to cope with illiquidity issues (**Table 16**).

Figure 11 Andrea's first accommodation during the study period

Table 16 Andrea's monthly budget for month 1 (July 5 - August 4, 2019)

Source of funds (£)	1329	Use of funds (£)	1310
Budgeting Advance (UC)	348	Account fees	1
Off-sick pay	36	Eating out	14
Universal Credit	945	Groceries	83
		Household items	13
		Internet	11
		Loan repayment to a friend	18
		Mobile phone bill	21
		Netflix	10
		Pension fund outside the UK	180
		Rent	850
		Storage space in Spain	58
		Transports	51

In month 2, Andrea was still waiting to be re-housed. This time, the council made a formal assessment of her accommodation, and they suggested to her not to pay for the rent, because the house was in a really bad condition. By skipping one month of rent, Andrea was able to save some money, find a new private accommodation and pay for the deposit and the first month of rent (**Table 17**).

Table 17 Andrea's monthly budget for month 3 (September 5 - October 4, 2019)

Source of funds (£)	932	Use of funds (£)	1925
Off-sick pay	36	Account fees	1
Research incentives	15	Eating out	8
Universal Credit	881	Groceries	117
		Household items	43
		Optician	241
		Loan repayment to friends	58
		Mobile phone bill	21
		Netflix	10
		Pension fund outside the UK	60
		Storage space in Spain	58
		Transports	92
		Clothing	41
		Personal care	10
		Rent new accommodation	750
		Deposit new accommodation	400
		Ankle wrap	1
		Gift to a friend	14

However, the money saved from month 2 was not enough to cover all the expenses in month 3. During the following months of this study, we observed that Andrea asked for several other loans from family and friends (worth £1830). Andrea's UC was impacted by the scheduled repayments for the budgeting advance she asked for in month 1, and she still had to pay for a private rent because the council had not yet solved her housing situation. Andrea found the situation very frustrating and financially difficult. She felt unsupported by the council and she told us she was sent to visit the same houses multiple times, for which she was not eligible:

"They only send me to places I've already been, as I don't understand…" (Andrea)

When we talked to her in December (month 6), she made it clear that she needed supplementary support to cope with her situation. Her health was comprised by the stress and lack of support with her housing case. Her employer had not assessed her case yet, and for that reason she could not try to go back to work and earn money. On that occasion, she had second thoughts about asking for disability status in the UK, and she told us:

"Looking at pictures, how I was in Spain, yes, without a job because of the crisis, but I used to move around, I was studying, I dressed up nicely, had a social life…I arrived here and I haven't been lucky … Days go by and I don't know what I can claim, I need specific help, someone I can trust". (Andrea)

We met Andrea for the last time in February 2020. She was still waiting for her social housing to be fully solved. We left her before COVID-19 became a pandemic while she was living in a shared accommodation with around 12-14 people.

4.6 Making services and support accessible for people with long-term conditions

During the six months of interviews, many diarists experienced 'cliff edge moments' in which sudden changes in their circumstances required different kinds of services and urgent support. All diarists in our sample, in particular those with mental health issues, struggled to access public services such as welfare benefits, healthcare, housing and social services. Diarists with poor mental health generally struggled to leave the house and were not comfortable repeatedly telling their story to strangers. Diarists with physical long-term conditions experienced restricted mobility issues that limited their ability to access some services. Most diarists from ethnic minorities in the sample, in particular those who could not speak English properly such as Andrea, faced challenges accessing and receiving appropriate support. Some diarists reported that the organisations they were asking support from were not listening and so it did not make sense to make the effort to reach them. If they thought there were too many barriers, sometimes the diarists stopped seeking help. This applied to all the services that were discussed with them, from getting appointments for medical visits to accessing free legal advice. The consequences of not seeking help were serious and if this involved not accessing, in particular, welfare benefits or housing their situation could deteriorate fast.

The main example is accessing the NHS to get treatment for their conditions, particularly mental health in primary care settings. For example, Charles tells us:

"It's so difficult just to get an appointment with the doctor. You go there and they say there are no appointments on the system, but if you're not seen, there's not much you can do". (Charles)

Daliya, for example, told us about the complications in combining the different appointments and treatments for each of her comorbidities. She described how she had to discuss each of her conditions one by one with the doctors and at some point she realised that she had stopped getting treatment for one of them:

"The GP kept calling me about other things, my other health conditions, yes. It's like he kind of forgot about that one and I, myself, I forgot too, yes." (Daliya)

Daliya had to go to court for DWP to change their decision over her PIP. She got the backdated payment but the process deeply affected her mental health. When asked about what could have made the situation better, she said:

"*I would say counselling, kind of, therapy*". (Daliya)

Most diarists referred to the need for more social support during the study. Ayleen, for example, when asked what could have helped to slow down her conditions said:

"Social help, in a sense. If you've got somebody coming in and seeing that you're in a situation where say you haven't got any milk or you haven't got any sugar or you're not too good with your finances at the time, then go and get me some help, sort of thing." (Ayleen)

Our diarists also struggled to access the benefits system and there was a general lack of knowledge about how some particular benefits worked and what to expect from changes of circumstances. Some diarists, such as Luisa, considered their employment decisions based on flawed assumptions of what the implications would be for her benefits. Luisa, Daliya and other diarists had struggled to access independent financial advice in the past even if they knew that they would benefit from it. In Daliya's words:

"*I need somebody else's intervention in helping me to budget but then I can do it, it's just that I need that motivation to do it, yes. Sometimes if there's anything I wanted to do with money but because of my learning disability I don't understand some of the jargon that they throw at me, do you know what I mean?"* (Daliya)

When financial advice services had been used, some diarists did not find them useful. The main reason for this was that the diarists found it difficult to open up and share their real financial lives. This was due to a combination of shame and diarists distrusting the advisors. For example, when asked about how financial and budgeting advice had been helpful, Cyra told us:

"Nothing really, nothing. I don't really think, I probably front it like everything's okay so I haven't really, because I haven't been that honest… I haven't really run into debt and spoken about it, I've spoken about other things." (Cyra)

The experiences of our diarists with the Job Centre were also unsatisfactory. They felt the whole process was demeaning for them and that their particular health problems and the implications of their conditions were not being taken into account. The same applied to housing providers where diarists felt that the staff they spoke to did not seem to understand their immediate needs due to their health conditions.

4.7 Q Methodology

Three factor solutions were identified for both 'Causes' and 'Solutions' that yielded interpretable accounts (see Appendix 6).

'Causes'

Three shared perspectives were identified, representing different understandings of the worse health experienced by those living in low-income communities. 'Causes' Perspectives One and Three bring together the views of financial diarists and professional stakeholders; only financial diarists share the views represented by 'Causes' Perspective Two.

For 'Causes' Perspective One the primary cause of worse health is systemic inequality as it affects individuals' opportunities and living environments. In particular, low-levels of education in poorer communities are seen as having wide ranging implications that persist across the life course and generations. Such individuals are less likely to be "informed about their rights" (PS08), services that are available to them and what they are entitled to from the welfare system. This then makes it more difficult to live a healthy life. The physical and family environments in which individuals live are affected by poverty and are not seen as conducive to good health. The daily grind of poverty and the focus on day-to-day survival puts pressure on individuals and restricts their ability to contemplate or plan for the future. Explanations that focus on blaming poor people for their worse health are dismissed as prejudiced and ignorant.

"poor people are planning until payday at the end of the week and rich people are planning for their grandchildren…" (PS20)

"cold, drafty, poorly insulated, with mould [reference to housing]" (PS08)

"actually living and surviving and making the best of your circumstances is much harder in a low income community than it is in a high income community" (PS15)

'Causes' Perspective Two views health as being worse in low-income communities because of a lack of investment in communities and cutbacks in local services which makes it harder for individuals to manage difficult situations and lead healthy lives. Cutbacks affect key support

services in, for example, mental health and make it more difficult for individuals to get help with health, housing and welfare as an already complex system has become more difficult to navigate. Lack of community investment affects young people in particular as there is less for them to do and means they are more likely to spend time on the streets where it's easier to become involved in drugs, gangs and violence. Stereotypes, such as a culture of dependency and laziness existing in low-income communities, are believed to be perpetrated in society, particularly against minority groups, and negatively affect individuals in their daily lives. Individuals in these communities want to take responsibility for themselves and have ambitions but do not have the necessary means to do so. Consequently, individuals living on low incomes have a tendency to "live for today and forget about tomorrow" (CP05) which brings short-term relief but can lead to worry and depression.

"Rich people can afford to send their kids to after school clubs, poor people can't so if you had after school clubs in the poorer areas … teenagers wouldn't be running the streets and getting into violence and getting into drugs and getting into gangs." (CP11)

"as long as I'm alright and I've got food for today and I've got stuff that I need for today, blow tomorrow and blow next week…I've been like that since I was twelve years' old" (CP11)

'Causes' Perspective Three views financial vulnerability and a lack of money as a cause of "chronic stress" (PS11) and an "absence of hope" (PS13) which in turn is a cause of the worse health experienced by individuals living in low income communities. Not having enough money makes it "harder for people to self-care" (PS05) and small unexpected things, such as a broken appliance or unexpected bill, can be very stressful and very quickly "spiral out of control" (PS14). Insecure employment increases the difficulty of coping with unexpected financial difficulties and poor housing conditions are not conducive to good health. Consequently, individuals face daily stresses that mean they do not have the "mental peace and calm" (PS13) to make better long-term decisions. Services and support, such as the welfare system and health sector, which should help individuals in times of need are thought to often discriminate against individuals because of their social class, health or immigration status. The idea that the culture of low-income communities could lead to their worse health is considered nonsense and a bigoted view.

"systems that are supposedly there to help you in some ways but constantly treat you as someone who's likely to be cheating the system, there's a level of lack of human contact with the people who are meant to be providing services for you" (PS11)

"somebody could be a poor parent … because they don't have any money and they can't buy food. That doesn't make them a poor parent, that makes them a desperate person" (CP18)

'Solutions'

Three shared perspectives were identified on how the health of those living in low-income communities could be improved. Financial diarists and professional stakeholders shared 'Solutions' Perspectives One, Two and Three.

'Solutions' Perspective One believes that the ultimate goal should be to create a society where "everyone has the same opportunity to thrive" (PS04). Key to this is making sure that individuals basic needs, in terms of living in good quality housing and being able to pay for rent, food, heating and clothing, are met. This will provide "financial security" (PS04) that enables individuals "to think about medium-term and longer-term issues" (PS12). Individuals also require access to community-based programmes, that provide good primary health, social care and mental health services and are geared towards prevention. Importantly these

programmes and other community services should be designed to respond directly to issues identified by communities. The focus should be on tackling *why* individuals have poor health including why they might have unhealthy lifestyles.

"[when] people get poorer, they're more likely to become unhealthy than healthy and… they're also going to be more vulnerable to all the stresses that are going to affect their mental health" (PS05)

"work with communities rather than do things to communities" (PS14)

'Solutions' Perspective Two believes that improving the health of those living in low-income communities requires that individuals are empowered to take responsibility for their own future. People need to be given agency which will allow them "to take control of their own environment" (PS02). The focus should be on improving individuals' skill-sets and decision making capability rather than top-down solutions imposed on individuals by Government through social policy. The latter can be disempowering and policies which, for example, either prohibit what people can spend their money on or increase the price of things that are bad for people like unhealthy food are unlikely to change behaviour and may have unintended negative consequences. While individuals are "ultimately responsible for their own happiness, their own wellbeing" (PS13) they should not be punished for failing to take responsibility. Improving the environment of these communities through better housing and "wellbeing centres" (CP02) can also give individuals more opportunities, and encourage them, to take control of their own life.

"all that happens is that people feel less and less empowered, because they feel the government controls more and more of their lives, less and less is within their control, they take less and less responsibility [reference to top-down social policies]" (PS02)

"It's this sort of idea that Government somehow makes good choices and good decisions. I'm afraid there is ample evidence of the fact that, you know, an industrial policy can be completely cack-handed [reference to choosing particular industries to support]" (PS13)

For 'Solutions' Perspective Three improving health comes down to individuals having better lifestyles, "doing less of things that make you more ill" (PS19). For this to happen individuals need to make, and be supported to make, the right choices in life; the right choice being the healthy choice. This starts from childhood. Children need to be supported and encouraged to have goals and be confident to follow them and be instilled with a "value set" (PS07) to take some responsibility for what they do in their life. This also requires a system that recognises that people often make bad choices in terms of health behaviours for good reasons e.g. not having enough money, a job or good housing. As well as ensuring people's basic needs are met, better support systems in terms of networks and services, around children and adults can encourage and promote healthier lifestyles. These supportive mechanisms should be paid for by raising taxes that people pay in a fair way.

"a right choice is the healthy choice (…) bad choices are mostly related to unhealthy lifestyles" (PS07)

"if from when you are little you are told by your environment that you cannot, that you are limited because you don't deserve it, limited by your background, because you don't have money, and you believe that in your mind, that is going to limit you and make you think that you are useless. Create confident kids, deserving and able of everything, we are limitless" (CP13)

"everybody in this life, in this world has to take some responsibility for how well they do in their life, whether that be their health, their job or other forms of success that people will value" (PS07)

The role of income-based initiatives

There were different views on the role of income-based initiatives in relation to impacting on health and wellbeing relative to other types of public health initiatives. Causes Perspective One focuses on unpredictable finances; Perspective Two recognises that to some extent having less money increases the cost of things people need like electricity and loans; and Perspective Three views both these issues as being a cause of worse health.

Within 'Solutions', there is agreement that individuals' welfare benefits should not be stopped or reduced and that providing safe ways for individuals to own their home or a car without getting into debt that they cannot repay is not a priority. However, there is also some disagreement between the perspectives. Perspective One believes individuals need to have financial security and to that end holds that individuals' basic needs must be met and gives some support to preventing the activities of payday or doorstep lenders. Perspective Two sees the value of providing financial advice but not of implementing other income-based initiatives, particularly increasing taxes that people pay or preventing payday or doorstep lenders operating. This fits with the overall view of Perspective Two which is against top-down solutions imposed on individuals that give more control to Government and that restrict behaviour. Perspective Three believes individuals' basic needs have to be met, that money can be raised for supportive mechanisms and services by raising the taxes that people pay in a fair way and that provision of financial advice could be valuable. This account is not supportive of offering affordable, flexible loans as a way to improve health in comparison to other types of initiative which could provide a support system to individuals to encourage and promote a healthier lifestyle.

Agreement across 'Causes' and 'Solutions'

While there were distinct shared perspectives on 'Causes' and 'Solutions', areas of agreement were also identified. Within 'Causes', the three perspectives shared the view that individuals and communities should not be blamed for their poorer health and that precarious employment and lack of good quality affordable housing were key issues. Within 'Solutions', the three perspectives recognised the importance of trying to do something to improve the situation of people with worse health, increasing the availability of, and access to, good primary health and social care and childcare and avoiding punitive measures, such as cutting or reducing welfare benefits or denying those deemed responsible for their condition access to healthcare, as a strategy to improve health. All three 'Solutions' perspectives also believe that it is important that communities have a say in any decisions that affect them.

(Dis)Agreement between financial diarists and professional stakeholders

Financial diarists and professional stakeholders contribute to all but one of the identified perspectives across 'Causes' and 'Solutions'; no professional stakeholders held 'Causes' Perspective Two. Encouragingly this indicates broad agreement across groups even if disagreement exists within groups (although, as noted above, areas of agreement do exist). For 'Causes' Perspective Two, lack of investment in communities and cutbacks in local services was seen as causing the worse health experienced by those living in low-income communities. It should be stressed that our results do not imply that, in general, *no* professional stakeholders will hold this perspective, but in our sample none of the professionals advanced this view through their card sort and interview. To examine whether

this finding can be generalised requires the development of related survey questions (see, for example, Mason et al., 2018). Q methodology does not enable generalisations to be made about the *types* of participants holding each perspective but provides a good basis for survey development. Nevertheless, this raises interesting questions about why only residents of low-income communities perceive local funding decisions as being important for health.

5 Discussion and Conclusion

This study shows the crucial role that finances play in the everyday lives of individuals living on low incomes with at least one long-term health condition. Financial management strategies underlie all aspects of our participants' day-to-day lives. For the individuals in our sample, who rely mostly on low, and at times uncertain, welfare benefits due to their chronic health conditions, managing cash flows and avoiding the detrimental effects of short-term illiquidity is critical.

Financial diaries show how changes in income and expenditure drive financial decisions and some of the complex strategies that are used to cope with financial uncertainty. Depending on welfare does not always imply that income is certain (due to reassessments or monthly adjustments in amounts) or paid on the same date every month (payment dates of different benefits vary - for example, PIP every 4 weeks, UC every month, child benefit weekly or every 28 days). Juggling changes in income amounts and dates, and sizeable or unexpected essential expenditure meant that our diarists' financial lives were so complicated that participants were making financial-related decisions almost every other day, which represents a significant source of stress and anxiety. In a sample where participants lacked assets and savings, the most frequent strategy to deal with financial issues was debt. In particular, the preferred option for participants was to borrow from family and friends. However, there are limits to how much these social networks can help as they are frequently small and also resource-poor. Participants are then forced to combine this informal borrowing with alternative forms of finance, which are frequently high-cost. Individuals end up managing a portfolio of loans that forces them to make continuous financial decisions with immediate and important consequences. This financial stress can worsen existing psychological disorders or potentially result in periods of poor mental health for participants who suffer unrelated chronic conditions.

The lived experiences of our participants suggest that an association exists between their financial management strategies and their health status and, consequently, the progression of their conditions. Our research highlights the relevance of how the financial management of limited income affects directly, and indirectly mainly through employment and housing, the participants' health and *vice versa*. As shown in our case studies, whilst most coping strategies were, to some extent, perceived to affect mental health, some of them had a direct impact on physical health that worsened the diarists' conditions; for example, living in inadequate housing or non-complying with prescribed rest after a severe health shock due to job insecurity.

Employment and housing, conditioned by the health and financial status of our sample population, presented their own particular challenges. For employment, issues revolving around wanting to work but not finding a job because of poor health and not being allowed to work once you qualify as disabled came up for most of our diarists. More flexibility around working and resting, and more clarity around the financial implications of the decision to work on welfare benefits seem to be important. For housing, the financial strategies to cope with long waiting times for re-housing were always detrimental for participants' financial stability. Additionally, most participants had difficulties affording essential refurbishments, white goods and other decorative but important items such as carpets or curtains.

Events that imply drops or delays in income or essential expenditure that cannot be met represent ‘cliff-edge moments’ for our diarists, where their financial situation can deteriorate fast. This puts significant pressure on their already delicate health. Adopting appropriate financial strategies and having affordable ways of managing illiquidity are important to preserve their deteriorating health. A more direct link, based on referral routes, between expert financial advice and the health services would make advice more accessible to our diarists at times when they need it most. Alternative high-quality, affordable, fast, safe, and flexible financial products are also required to help this group and responsible lenders are in a unique position to provide these. However, these should be combined with budgeting loans and other anti-poverty policies that facilitate access and are better adapted to the needs of individuals with severe chronic conditions who do not have enough slack to cope with the ups and downs of everyday life. A holistic approach to enhance the financial health of individuals with chronic conditions could be pivotal to the success of other siloed interventions targeting specific social determinants of health such as food, housing, or employment.

The results of our Q methodology study highlight that there are plural views among professional stakeholders and community participants regarding the perceived causes of, and solutions to, the worse health of those living in low-income communities. However, between these distinct perspectives there were also areas of agreement which correspond to aspects of the financial diaries findings. Precarious employment and lack of good quality, affordable housing, were viewed as key reasons for the worse health of individuals living in low-income communities. ‘Solutions’ highlighted the importance of having access to services, such as good primary health and social care and affordable childcare, listening to the needs of communities and of avoiding policies that would reduce what individuals living on low incomes receive and can access from the welfare system.

Our findings also suggest that there are systemic issues with the welfare system that need to be explored in more detail. We have seen some evidence that the size of benefit payments to those who are unable to work due to ill-health is, on occasions, not enough to meet their daily needs and responsibilities. Additionally, our results suggest that the variation in dates and sizes of benefit payments from period to period provokes uncertainty around these payments which can hinder financial planning and appropriate financial management in these groups. These issues need to be explored further.

We finished data collection on March 2020, the same month in which COVID-19 was officially declared a pandemic. It is evident that our diarists will be amongst those hit hardest by COVID-19, and the associated social and economic measures put in place to combat it. People with chronic conditions, who live in precarious financial situations, could be amongst the most vulnerable not only to the virus but also to measures such as social distancing and self-isolation. According to extant knowledge about COVID-19 (CDC, 2020), all diarists, given their underlying medical conditions are at greater risk of developing severe or critical illness if infected with the virus. Shielding is also very likely to have an impact on diarists’ financial portfolios, their short-term health and wellbeing and wider social determinants of health. For example, daily financial mechanisms such as frequent visits to grocery stores to avoid spending high lump sums on food and save some money in case it is needed later might be no longer possible. Accessing and managing debt from ‘safer’ sources, such as family and friends or responsible lenders, might be more difficult. Family and friends are also likely to be struggling and in no position to lend money, or might ask to have their loans repaid in full. Responsible lenders, even though some offer online services, may have had to interrupt their activity and are likely to have restricted access. At the same time, individuals who are shielding in unsafe accommodations may have experienced increases in stress and anxiety, as well as

in exposure to conditions that might have contributed to worsen their chronic illnesses. Finally, restricted physical access to community-based services such as money and legal advice, as well as mental health and housing services may have compromised our diarists' chances to cope with COVID-19, related and unrelated, cliff-edge moments.

6 Recommendations

Recommendations from diaries and interviews

Our findings suggest that participants are actively trying to improve their lives and, as most of them are caregivers themselves, those of their families. This set of recommendations, developed in conjunction with our project advisors, aims to guide advice/support services and policy makers to support this ambition. The focus has been on recommendations that can be easily implemented within existing provision.

8. Improved marketing of available support services in the community, specifically adapted to people with long-term health conditions, in particular mental health issues. This could be done through the creation of hubs/networks of organisations, effective referral, leafleting, and direct and grassroots marketing, e.g. local events and meetings. Marketing strategies need to be adapted to hard-to-reach individuals. For example, online and leafleting strategies will reach our group better as, owing to mobility and mental health issues, they rarely leave their homes. Multilingual marketing strategies are also required in order to reach all those who need it.
9. Improved accessibility to support services for people with long-term conditions in terms of proximity, adequacy, language, and modes of communication. Organisations should have sufficient capacity to respond immediately when approached by individuals living with long-term conditions, as they are unlikely to approach an organisation twice.
10. Financial and legal providers need to focus on creating trusting, longer-term relationships with users/beneficiaries. This could be achieved, for example, through social workers working in partnership with particular advisors or, simply by ensuring these services are provided more sustainably over time. Projects like the Deep End advice project in Glasgow where financial, social security, housing and debt advice are provided at GP practices is another example. To build trust and make customers feel respected, service providers could also consider employing more people from the communities they serve, including people whose first language is not English, and people with health conditions.
11. Affordable lending has proved to be an accessible, reliable and valued alternative to high-cost credit. Partnerships with financial advice organisations add further value. However, responsible lenders need to adapt some of their products to help safeguard people with long-term conditions, particularly those experiencing mental health issues.
12. Promoting good, meaningful and flexible working conditions and healthy working environments is also vital to ensure that individuals such as our diarists can access and maintain appropriate formal employment to support their income.
13. Accurate assessment of the housing needs of people living on low incomes and with multiple long-term conditions is fundamental to preventing a worsening of their health. Providing social housing on time and in a good state is also important to ensure that people such as our diarists do not face unnecessary expenses and hazards.

14. Improved collaborative approaches between public and private support services are needed to break the link between low income and poor health. One example might be to create a network of local social workers, health professionals, and financial experts for mutual referrals. Local community organisations offering support to particular groups (Latin-Americans, Portuguese, etc.) should be involved in these networks, as gatekeepers for other services (legal, housing, or financial advice).

Recommendations from the Q study

Areas of agreement across 'Causes' and 'Solutions' suggest there are several areas which could be used as a starting point for thinking about how to positively impact on the ill-health of people living in low-income communities.

1. Shift rhetoric away from blaming individuals and communities for their poorer health towards greater recognition of the structural factors that lead to worse health, such as systemic inequality, lack of community funding and individuals' financial vulnerability and lack of money.
2. Take steps to involve communities in decisions that will affect them, such as through citizen's juries or assemblies.
3. Improve the quality and condition of social housing stock.
4. Make forms of secure employment available for individuals living in low-income communities.
5. Within low-income communities, improve the availability and accessibility of good quality and free primary health, social and child care.
6. Avoid introducing punitive measures which make life harder for individuals living in low-income communities, such as cutting or reducing welfare benefits or denying those deemed responsible for their condition access to healthcare.

7 References

Adams, J., White, M., Moffatt, S., Howel, D., & Mackintosh, J. (2006). A systematic review of the health, social and financial impacts of welfare rights advice delivered in healthcare settings. *BMC Public Health*, *6*(1), 81.

Banasick, S. (2019). "KADE: A desktop application for Q methodology", *Journal of Open Source Software*, Vol. 4 No. 36, available at:https://doi.org/10.21105/joss.01360.

Beaumont, J. (2006). "London: Deprivation, Social Isolation and Regeneration", in Musterd, S., Murie, A. and Kesteloot, C. (Eds.), *Neighbourhoods of Poverty*, pp. 139–161.

Biosca, O., McHugh, N., Ibrahim, F., Baker, R., Laxton, T. and Donaldson, C. (2020). "Walking a Tightrope: Using Financial Diaries to Investigate Day-to-Day Financial Decisions and the Social Safety Net of the Financially Excluded", *The ANNALS of the American Academy of Political and Social Science*, SAGE PublicationsSage CA: Los Angeles, CA, available at:https://doi.org/10.1177/0002716220921154.

Braun, V. and Clarke, V. (2006). "Using thematic analysis in psychology", *Qualitative Research in Psychology*, Vol. 3 No. 2, pp. 77–101.

Brown, S., Taylor, K., & Price, S. W. (2005). Debt and distress: Evaluating the psychological cost of credit. *Journal of Economic Psychology*, *26*(5), 642-663.

CDC. (2020). "Coronavirus Disease 2019 (COVID-19)", *Centers for Disease Control and Prevention*, 11 February, available at: https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html (accessed 30 July 2020).

Collins, D., Morduch, J., Rutherford, S. and Ruthven, O. (2009). *Portfolios of the Poor: How the World's Poor Live on $2 a Day*, Princeton, NJ., Princeton University Press.

Dahlgren, G. and Whitehead, M. (1991). *Policies and Strategies to Promote Social Equity in Health*, available at: http://repositori.uji.es/xmlui/bitstream/handle/10234/187797/

GoeranD_Policies%20and%20strategies%20to%20promote%20social%20equity%20in%20health.pdf?sequence=1.

Dobbie, L., & Gillespie, M. (2010). The health benefits of financial inclusion. *Report for NHS Greater Glasgow and Clyde*.

Financial Conduct Authority (FCA). (2018), "The Financial Lives of Consumers across the UK: Key Findings from the FCA's Financial Lives Survey 2017.", available at: https://www.fca.org.uk/publication/research/financial-lives-consumers-across-uk.pdf.

Guy's and St. Thomas' Charity. (2018), "From one to many: Exploring people's progression to multiple long-term conditions in an urban environment", available at: https://www.gsttcharity.org.uk/sites/default/files/GSTTC_MLTC_Report_2018.pdf.

Kempson, E., McKay, S., & Willitts, M. (2004). *Characteristics of families in debt and the nature of indebtedness (No. 211)*. Leeds: Corporate Document Services.

Leeser, R. (2016), *English Indices of Deprivation 2015. Intelligence Briefing 2016-01*, Greater London Authority. Mayor of London, available at: https://airdrive-secure.s3-eu-west-1.amazonaws.com/london/dataset/indices-of-deprivation/2019-10-09T14%3A23%3A00/indices-deprivation-2015.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAJJDIMAIVZJDICKHA%2F20200730%2Feu-west-1%2Fs3%2Faws4_request&X-Amz-Date=20200730T124630Z&X-Amz-Expires=300&X-Amz-Signature=99c085365aef603c74cd6e5c4b7ecd56cd82967eaa3b35dc912caa2b3cda3ca7&X-Amz-SignedHeaders=host (accessed 30 July 2020).

Mason H, Collins M, McHugh N, Godwin J, Van Exel J, Donaldson C, et al. (2018) Is "end of life" a special case? Connecting Q with survey methods to measure societal support for views on the value of life-extending treatments. *Health Economics*, 27(5):819–31.

McHugh, N., Baker, R., Biosca, O., Ibrahim, F. and Donaldson, C. (2019), "Who knows best? A Q methodology study to explore perspectives of professional stakeholders and

community participants on health in low-income communities", *BMC Health Services Research*, Vol. 19 No. 1, p. 35.

McHugh, N., Biosca, O. and Donaldson, C. (2017), "From wealth to health: Evaluating microfinance as a complex intervention", *Evaluation*, Vol. 23 No. 2, pp. 209–225.

Morduch, J. and Schneider, R. (2017), *The Financial Diaries: How American Families Cope in a World of Uncertainty*, Princeton University Press, Princeton, NJ.

Rutherford, S. (2001), *The Poor and Their Money*, Oxford University Press, New Delhi.

Shaw, M. (2004), "Housing and Public Health", *Annual Review of Public Health*, Vol. 25 No. 1, pp. 397–418.

Stephenson, W. (1953), *The Study of Behavior; Q-Technique and Its Methodology*, University of Chicago Press, Chicago, IL, US, pp. ix, 376.

Sweet, E., Nandi, A., Adam, E. K., and McDade, T. W., (2013), The high price of debt: Household financial debt and its impact on mental and physical health. *Social Science & Medicine*, 91, 94-100.

Tomlinson, D. (2018), "Irregular Payments: Assessing the Breadth and Depth of Month to Month Earnings Volatility", Resolution Foundation Report, available at: https://www.resolutionfoundation.org/publications/irregular-payments/.

Watts, S. and Stenner, P. (2012), *Doing Q Methodological Research: Theory, Method & Interpretation*, SAGE.

Wilkinson, R.G. and Pickett, K.E. (2006), "Income inequality and population health: A review and explanation of the evidence", *Social Science & Medicine*, Vol. 62 No. 7, pp. 1768–1784.

8 Appendices

8.1 Appendix 1 Tool given to diarists for self-reported transactions

Week no.

Start Date *(DD/MM/YYYY)*

End Date *(DD/MM/YYYY)*

Part 1- Money In

In this section, please write down any money that you received during the week from any source.

Amount	Date	Received from	Paid with	Comments

Part 2- Money Out

In this section, please write down any money that you spent during the week.

Amount	Date	Spent on	Paid with	Comments

Part 3- Money Unspent

In this section, please write down any money that is left unspent in your savings, bank account/s and from cash in hand.

Remaining balance	
Savings	

Part 4- Gifts

In this section, please write down any gifts that you received during the week. Think of items or services you received from friends or family or others without having to pay for them.

Type of gift	Gift received from	Date	Value in £

Part 5- Weekly Events

This section is for events that have happened during the week and that might have an impact on you or any member of your household.

Date of event	Type of event

8.2 Appendix 2 Baseline questionnaires

Baseline Non-Financial questionnaire

a. Date:
b. Participant code:
c. Interviewer code:

Thank you for agreeing to take part in the study and for your time today. This survey should take about half an hour, but you have as much time as you need to answer the questions. This interview is completely voluntary, if we should come to any question that you do not want to answer, just let me know and we can continue on to the next question.

The survey includes 49 questions about your personal and household characteristics, financial situation, financial behaviour, health and wellbeing.

Your responses will be confidential. Anything you say that might mean that people would be able to identify you will not be shared with anyone outside the FinWell London research team.

At the end I will give you time to share any general comments or thoughts on the questions today.

Do you have any questions? Are you ready to begin?

SECTION 1

We will start with some questions about you and your household.

1. *How do you identify yourself in terms of gender?*
   - ☐ Male
   - ☐ Female
   - ☐ Other

2. What is your date of birth? *Day:* ___ *Month:* ___ *Year:* _____

3. Which is your current employment situation?[5]
   Employee in full time job (30 hours or more);
   Employee in part time job (less than 30 hours);
   Self-employed – full or part time;
   Government supported training;
   Unemployed and available for work;
   Wholly retired from work;
   Full time education (school, college, university);
   Looking after family/home;
   Permanently sick or disabled;
   Casual work / cash in hand work;

[5] Choose most appropriate response in terms of hours worked, but also record any secondary form of work/employment in notes.

Other (please specify)] [specify]

4. Who else lives in this household with you? What are their sex, age, relationship to you, and occupation? Think about those who share a budget. Now I am going to ask you about each of them. Please include students who may be away at university / college or those currently in institutions but have this address as their main residence.
   DO ANY OF THOSE HOUSEHOLD MEMBERS NEEDS LOOKING AFTER, ARE YOU THEIR CARER? ARE YOU A CARER OF SOMEONE ELSE OUTSIDE OF YOUR HOUSEHOLD?
   Which is [NAME's] current employment situation?

	Sex	**Age**	**Relationship to Interviewee**	**Employment status**
1				
2				
3				
4				
5				
6				

5. What is your ethnic group?
   British/English/Scottish/Welsh/Northern Irish
   Irish
   Gypsy or Irish Traveller
   Any other White background
   White and Black Caribbean
   White and Black African
   White and Asian
   Any other mixed background
   Indian
   Pakistani
   Bangladeshi
   Chinese
   Any other Asian background
   Caribbean
   African
   Any other Black background
   Arab
   Any other ethnic group [specify]

6. What is your country of origin? _____

7. How long have you lived in the UK? Years_____

8. Do you have the feeling that your English has made interactions with people harder?

☐ Completely agree
☐ Sometimes
☐ I couldn't be sure
☐ Not at all

9. What is the highest level of education that you have completed?
   - ☐ Primary school or less
   - ☐ GCSEs, O Levels, CSE, School Certificate, Scottish Ordinary, Lower Certificate, 3/Foundations S Grade, Scottish Access 1-2, Scottish intermediate 2/Credit S Grade, Foundation GNVQ, Intermediate GNVQ, BTEC first certificate, SVQ/NVQ level 1-2, Level 1-2 vocational awards, IVQ certificate/Technician/Diploma, Level 1-2 International Introductory Awards
   - ☐ Vocational A-Levels, AVCE, BTEC National, Certificate/Diploma, City and Guilds SVQ/NVQ level 3, Level 3 vocational awards, IVQ Technician Diploma, IVQ Advanced Diploma, Level 3 International Awards
   - ☐ A-levels or Higher Certificate, Scottish Higher Certificate, International Baccalaureate
   - ☐ Nursing certificate, Teacher training, HE Diploma, Edexcel/B, Full technical certificate, BTEC HND/HNC, City and Guilds Licentiateship (LCGI), Graduateship (GCGI), Associateship (ACGI), Membership (MCGI), Master Professional, Diploma, Fellowship (FCGI), Higher Professional Diploma, SVQ/NVQ level 4-5, Level 4-5 vocational awards, IVQ Advanced Technician Diploma
   - ☐ 3-4 year University, CNAA first Degree (BA, BSc., BEd., BEng.)
   - ☐ 5 year University, CNAA first Degree (MB, BDS, BV etc)
   - ☐ Masters Degree, M.Phil, PGCE, PGDip, PGDE, PGCert, Post-Graduate Diplomas and Certificates
   - ☐ Ph.D, D.Phil or equivalent
   - ☐ Other (please specify): _____

10. Have you received any training in financial management (budgeting/assessment of income and expenditure/record keeping/debt management/savings/ understanding of bank charges)?
    - ☐ No
    - ☐ Yes

    IF YES:

    a. Please give details of that training: (ie. Who provided it? How long was it? How did you fund it?)

SECTION 2

The next few questions are about health and wellbeing.

11. In general, would you say your health is:
    - ☐ Excellent
    - ☐ Very good
    - ☐ Good

☐ Fair
☐ Poor

12. Do you have any long-standing physical or mental impairment, illness or disability? By 'long-standing' we mean anything that is a chronic condition you are currently managing with medication or a medical problem that has troubled you over a period of at least 3 months.
☐ No ☐ Yes

IF YES…

a. Please specify your (health) condition(s)?
b. Are you taking any medications for it? ☐ No ☐ Yes

IF YES…

a. could you specify?
_____

13. Does this/Do these health problem(s) or disability(ies) mean that you have substantial difficulties with any of the following areas of your life?
☐ Mobility (moving around at home and walking)
☐ Lifting, carrying or moving objects
☐ Manual dexterity (using your hands to carry out everyday tasks)
☐ Continence (bladder and bowel control)
☐ Hearing (apart from using a standard hearing aid)
☐ Sight (apart from wearing standard glasses)
☐ Communication or speech problems
☐ Memory or ability to concentrate, learn or understand
☐ Recognising when you are in physical danger
☐ Your physical co-ordination (e.g. balance)
☐ Difficulties with own personal care (e.g. getting dressed, taking a shower)
☐ Other health problem or disability. Please specify: _____

14. The following items are about activities you might do during a typical day. Does your **health now limit you** in these activities? If so, how much?
a. **Moderate** activities, such as moving a table, pushing a vacuum cleaner, bowling or playing golf
☐ Yes, limited a lot ☐ Yes, limited a little ☐ No, not limited at all
b. Climbing **several** flights of stairs
☐ Yes, limited a lot ☐ Yes, limited a little ☐ No, not limited at all

15. During the **past four weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of your physical health**?
a. **Accomplished less** than you would like ☐ No ☐ Yes
b. Were limited in the **kind** of work or other activities ☐ No ☐ Yes

16. During the **past four weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?
    a. **Accomplished less** than you would like ☐ No ☐ Yes
    b. Did work or other activities **less carefully than usual** ☐ No ☐ Yes

Are there any comments you would like to add about this section?

17. During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)?
    ☐ Not at all
    ☐ A little bit
    ☐ Moderately
    ☐ Quite a bit
    ☐ Extremely

18. These questions are about how you feel and how things have been with you during the **past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling.
    How much of the time during the **past 4 weeks**...?

	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
a. Have you felt calm and peaceful?	☐	☐	☐	☐	☐	☐
b. Did you have a lot of energy?	☐	☐	☐	☐	☐	☐
c. Have you felt downhearted and blue?	☐	☐	☐	☐	☐	☐

19. During the **past 4 weeks**, how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting friends, relatives, etc.)?
    ☐ All of the time
    ☐ Most of the time
    ☐ A good bit of the time
    ☐ Some of the time
    ☐ A little of the time

☐ None of the time

20. I am going to read five statements that you may agree or disagree with. Please indicate your level of agreement with each item using a 1 - 7 scale in which 7 means that you strongly agree with the statement, 6 - Agree, 5 - Slightly agree, 4 - Neither agree nor disagree, 3 - Slightly disagree, 2 – Disagree and 1 - Strongly disagree with the statement. Please be open and honest in your responding.
    ____ In most ways my life is close to my ideal.
    ____ The conditions of my life are excellent.
    ____ I am satisfied with my life.
    ____ So far I have gotten the important things I want in life.
    ____ If I could live my life over, I would change almost nothing.

21. Please indicate which statements best describe your overall quality of life at the moment for each of the five groups below.

    a. Feeling settled and secure
    ☐ I am able to feel settled and secure in **all** areas of my life
    ☐ I am able to feel settled and secure in **many** areas of my life
    ☐ I am able to feel settled and secure in **a few** areas of my life
    ☐ I am **unable** to feel settled and secure in **any** areas of my life

    b. Love, friendship and support
    ☐ I can have **a lot** of love, friendship and support
    ☐ I can have **quite a lot** of love, friendship and support
    ☐ I can have **a little** love, friendship and support
    ☐ I **cannot** have **any** love, friendship and support

    c. Being independent
    ☐ I am able to be **completely** independent
    ☐ I am able to be independent in **many** things
    ☐ I am able to be independent in **a few** things
    ☐ I am **unable** to be at all independent

    d. Achievement and progress*[6]
    ☐ I can achieve and progress in **all** aspects of my life
    ☐ I can achieve and progress in **many** aspects of my life
    ☐ I can achieve and progress in **a few** aspects of my life
    ☐ I cannot achieve and progress in **any** aspects of my life

    e. Enjoyment and pleasure
    ☐ I can have **a lot** of enjoyment and pleasure
    ☐ I can have **quite a lot** of enjoyment and pleasure
    ☐ I can have **a little** enjoyment and pleasure
    ☐ I cannot have **any** enjoyment and pleasure

[6] "I can" refers to what is available to you if you need it

22. Any comments on this section, or anything you want to add? [If disabled, please record the condition and any other details provided such as since when the participant suffers the condition. Also record if any other household member has a disability or chronic condition.

SECTION 3

These questions are about health and finance.

23. How much do your / your household's health conditions affect your household's finances?
    - ☐ Not at all
    - ☐ A little
    - ☐ Some
    - ☐ Very much
    - ☐ A lot

24. Now the other way round: How much does your / your household's financial situation affect your household's health?
    - ☐ Not at all
    - ☐ A little
    - ☐ Some
    - ☐ Very much
    - ☐ A lot

25. In the past 3 months, how many times did you miss an entire work day because of problems with your physical or mental health? (Please include only days missed for your own health, not someone else's health.)
    _____

    _____

    _____

26. During the past 12 months, was there any time when you or your household members needed medical care, but did not get it? ☐ No ☐ Yes ☐ Don't know
    a. IF YES, why? What did you do instead?

27. Any comments on this question, or anything you want to add? *(This box is also intended to clarify or further explore the reasons for replies in this section)*

SECTION 4

The next few questions are about risk.

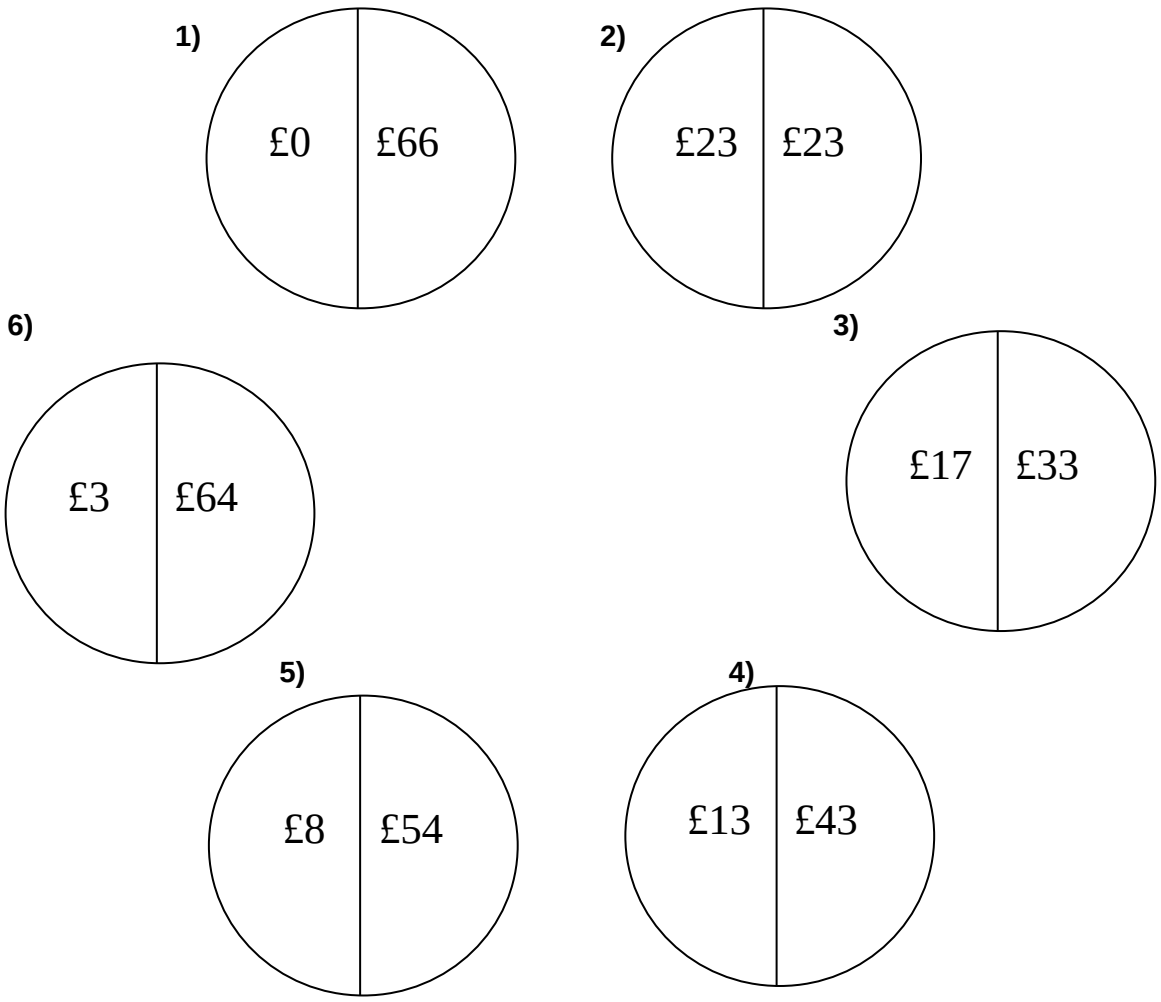
I'm going to present you with a set of choices that relate to decisions when outcomes are uncertain.

There is no real money involved, and there are no actual financial consequences of your choices. This is purely for research, and all of your answers are confidential.

But I want you to think about the questions as if they were real choices and there was real money at stake, so take as much time as you need to make your choices.

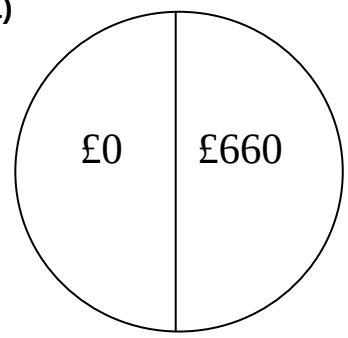
The possibilities reflect 50-50 chances, as if a coin had been flipped:

28. If you were offered one from these 6 choices, which would you choose? Each circle represents a possibility with a 50% chance of either number occurring (as if determined by flipping a coin). There is no real money involved, but take your time to think about it as if it were an actual choice. Select only one circle.



29. Now, I've changed the amounts. If you were offered one from these 6 choices, which would you choose? Each circle represents a possibility with a 50% chance of either number occurring. Select only one circle.

1)



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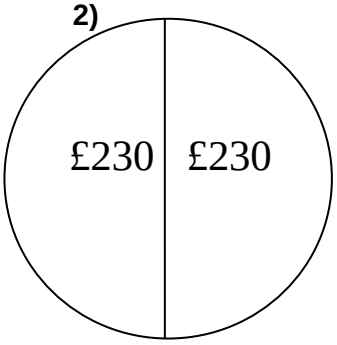

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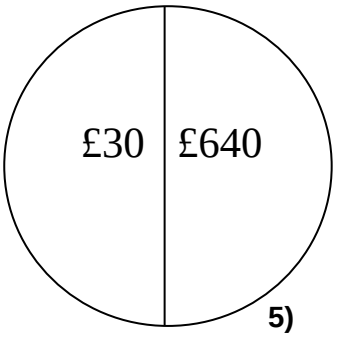

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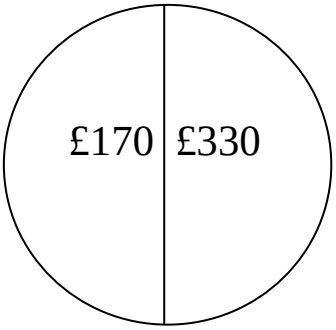

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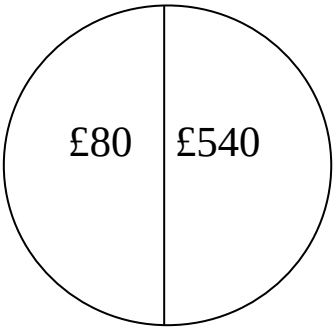

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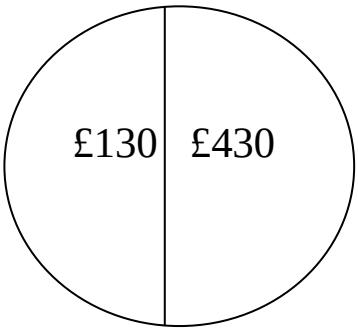
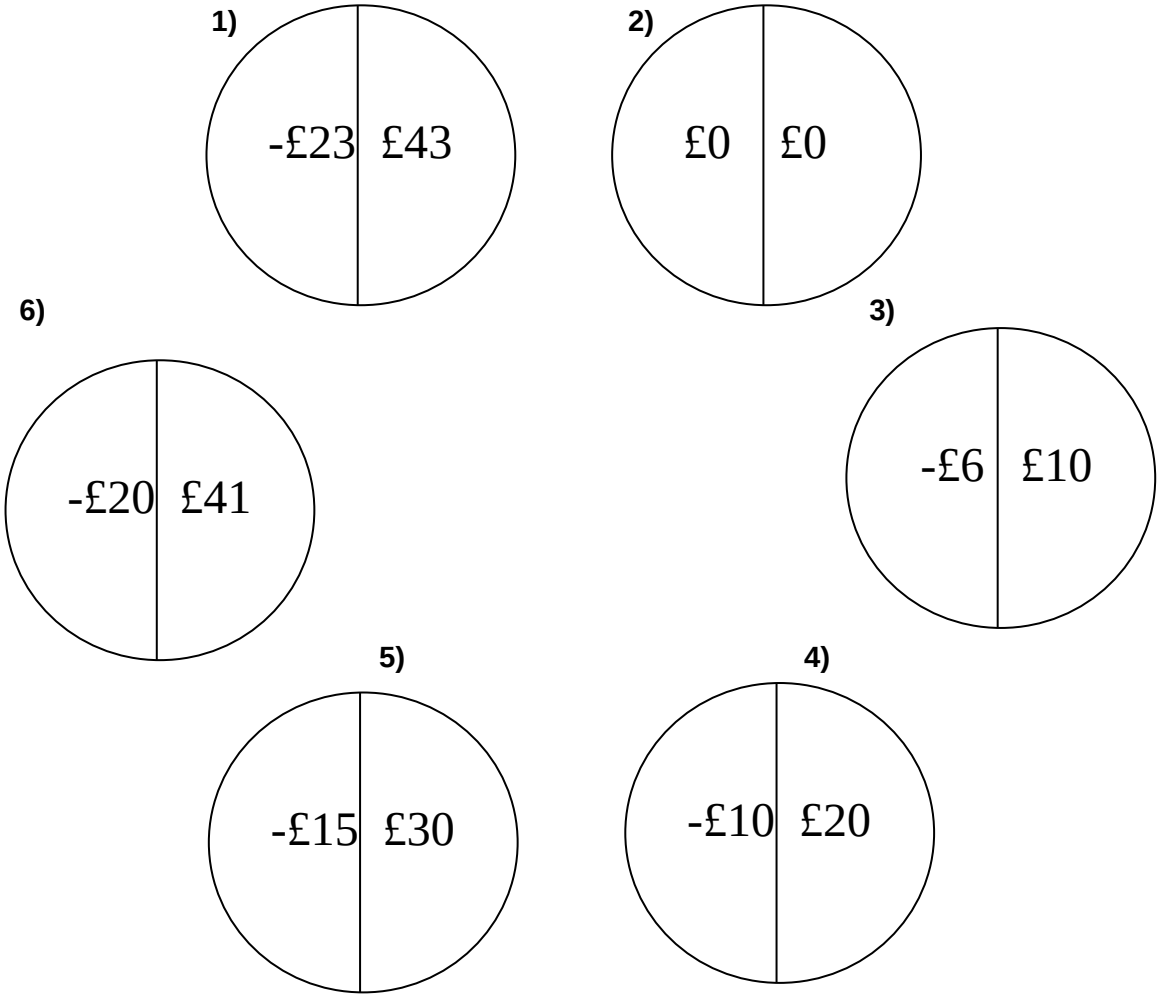


30. If you were offered one from these 6 choices, which would you choose? Each circle represents a possibility with a 50% chance of either number occurring. The negative figures represent losses. Select only one circle.



31. Any comments on this section, or anything you want to add?

SECTION 5

The next questions concern getting money at different times. There is no real money involved, and there are no financial consequences of your choices. But I want you to think about the questions as if they were real choices and there was real money to be paid to you in cash. Take as much time as you need to make your choices.

32. For each row, please select whether you would prefer OPTION A or OPTION B

Option A	Option B	A or B?
£53 guaranteed today	£56 guaranteed in one month	
£49 guaranteed today	£56 guaranteed in one month	
£45 guaranteed today	£56 guaranteed in one month	
£42 guaranteed today	£56 guaranteed in one month	
£35 guaranteed today	£56 guaranteed in one month	
£28 guaranteed today	£56 guaranteed in one month	

33. For each row, please select whether you would prefer OPTION A or OPTION B

Option A	Option B	A or B?
£53 guaranteed today	£56 guaranteed in 6 months	
£49 guaranteed today	£56 guaranteed in 6 months	
£45 guaranteed today	£56 guaranteed in 6 months	
£42 guaranteed today	£56 guaranteed in 6 months	
£35 guaranteed today	£56 guaranteed in 6 months	
£28 guaranteed today	£56 guaranteed in 6 months	

34. For each row, please select whether you would prefer OPTION A or OPTION B

Option A	Option B	A or B?
£53 guaranteed in 6 months	£56 guaranteed in 7 months	
£49 guaranteed in 6 months	£56 guaranteed in 7 months	
£45 guaranteed in 6 months	£56 guaranteed in 7 months	
£42 guaranteed in 6 months	£56 guaranteed in 7 months	
£35 guaranteed in 6 months	£56 guaranteed in 7 months	
£28 guaranteed in 6 months	£56 guaranteed in 7 months	

35. Any comments on this section, or anything you want to add?

SECTION 6

The next questions are about your ability to organize and predict the activities in your life. If you are unsure about how to answer a question, please give the best answer you can.

36. My life is organized
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Unsure
    - ☐ Disagree
    - ☐ Strongly disagree

37. My life is unstable
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Unsure
    - ☐ Disagree
    - ☐ Strongly disagree

38. My routine is the same from week to week
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Unsure
    - ☐ Disagree
    - ☐ Strongly disagree

39. My daily activities from week to week are unpredictable
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Unsure
    - ☐ Disagree
    - ☐ Strongly disagree

40. Keeping a schedule is difficult for me
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Unsure
    - ☐ Disagree
    - ☐ Strongly disagree

41. I do not like to make appointments too far in advance because I do not know what might come up
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Unsure
    - ☐ Disagree
    - ☐ Strongly disagree

SECTION 7

The next few questions are about trust.

42. Is your neighbourhood a close-knit neighbourhood[7]?
- ☐ No
- ☐ Yes
- ☐ Don't know
- ☐ Somewhat

43. Do people in your neighbourhood share the same values?
- ☐ No
- ☐ Yes
- ☐ Don't know
- ☐ Somewhat

44. How often do you and other people in the neighbourhood ask each other advice about personal things such as child rearing or job openings?
- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often

45. Do you feel safe walking alone in the area near your home?

a. *During the day*
- ☐ Completely safe
- ☐ Fairly safe
- ☐ Neither safe or unsafe
- ☐ Fairly unsafe
- ☐ Not safe at all

b. *During the night*
- ☐ Completely safe
- ☐ Fairly safe
- ☐ Neither safe or unsafe
- ☐ Fairly unsafe
- ☐ Not safe at all

[7] A neighbour where everybody knows each other, looks out for each other.

46. How many close friends would you say you have? Think about people who are not members of your family and you could rely on for help (family problems, financial, health). People you would resort to in a difficult situation.
Please enter the number of people _____

47. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?
☐ You can't be too careful
☐ Most people can be trusted
☐ Don't know

48.  Please look carefully at the following list of organisations. For each of them, please say which, if any, you belong to and which, if any, you are currently doing unpaid work for?

	Do not belong	Belong to ONLY	Belong to AND volunteer
a. Social club	☐	☐	☐
b. Sports club and/or team	☐	☐	☐
c. Community organisation – tenants association, community centre, neighbourhood campaign/watch etc.	☐	☐	☐
d. Church, Mosque or religious organisation	☐	☐	☐
e. Political party and/or pressure group	☐	☐	☐
f. School Parent Teacher Associations	☐	☐	☐
g. Support groups or welfare organisations	☐	☐	☐
h. Hobby or interest groups	☐	☐	☐
i. Pensioners club, lunch club	☐	☐	☐
j. Gym	☐	☐	☐
k. Other groups. Please specify: _____	☐	☐	☐

We have reached the end of the questionnaire. Do you have any comments on any of these questions, or anything you want to add?

Thank you for your time.

Baseline Financial questionnaire

a. Date:
b. Participant code:
c. Interviewer code:

Thank you for agreeing to take part in the study and for your time today. This questionnaire should take about **30 minutes**, but you have as much time as you need to answer the questions. Your participation is completely voluntary, if we should come to any question that you do not want to answer, just let me know to continue onto the next question.

The questionnaire includes **45** questions about your financial situation, financial management, financial knowledge and financial behaviour.

Your responses will be anonymised and treated confidentially. Anything you say that may make you identifiable to others will not be shared outside the FinWell London research team.

At the end, I will give you time to share any general comments or thoughts on the questions today.

Do you have any questions? Are you ready to begin?

SECTION 1

1. For this project you would be asked to keep records of your income and expenditure, do you already record household income and expenditure on a monthly basis?
   - ☐ No
   - ☐ Yes, household income
   - ☐ Yes, personal income
   - ☐ Other (please specify): _____

2. People organise their family finances in different ways, which of these ways comes closest to the way you organise yours?
   - ☐ I look after all the household's money (except some personal spending money for my partner, if any)
   - ☐ My partner looks after all the household's money (except my personal spending money, if any)
   - ☐ I am given a housekeeping allowance, my partner looks after the rest of the money
   - ☐ We share and manage our finances jointly
   - ☐ We keep our finances completely separate
   - ☐ Some other way - please specify: _____
   - ☐ Not applicable – live alone

3. Are you comfortable with reporting the income and expenditure of your household?
   - ☐ No
   - ☐ Yes, and will be able to estimate it accurately

☐ Yes, but will only be able to give an approximate estimate

4. Do you separate the money for the household from that of the business?
   ☐ No
   ☐ Yes

5. Do you keep records of your sales and withdrawals?
   ☐ No
   ☐ Sometimes
   ☐ Always

SECTION 2

The next few questions are about financial choices and knowledge.

6. How strongly do you agree or disagree with the following statement?
   Considering what you already know about personal finance, you could still benefit from some advice and answers to everyday financial questions from a professional.
   ☐ Strongly agree
   ☐ Somewhat agree
   ☐ Somewhat disagree
   ☐ Strongly disagree
   ☐ Do not know
   ☐ Refuse

7. Have you ever received financial advice?
   ☐ Yes
   ☐ No

   IF YES: When? From which organisation/who? And what for?

8.

9. If the chance of getting a disease is 10 percent, how many people out of 1,000 would be expected to get the disease? _____

10. Let's say you have £200 in a savings account. The account earns 10 percent interest per year. How much will you have in the account at the end of two years?

    Answer in GBP : £_____

    ☐ Do not know
    ☐ Refuse

11. Annual percentage rate (APR) takes into account all fees attached to a loan.

☐ True
☐ False
☐ Don't know

12. Which of the following credit card users is likely to pay the GREATEST amount in finance charges per year, if they all charge the same amount per year on their cards?

☐ Jessica, who pays at least the minimum amount each month and more when she has the money
☐ Vera, who generally pays off her credit card in full but occasionally, will pay the minimum when she is short of cash
☐ Megan, who always pays off her credit card bill in full shortly after she receives it
☐ Erin, who only pays the minimum amount each month
☐ Don't know

13. You will improve your creditworthiness by:

☐ Visiting your local commercial bank
☐ Showing no record of personal bankruptcies in recent years
☐ Paying cash for all goods and services
☐ Borrowing large amounts of money from your friends
☐ Donating money to charity
☐ Don't know

SECTION 3

The next questions concern housing and assets.

14. In which of these ways do you occupy your accommodation?

☐ Owned by member of household with a mortgage/loan
☐ Owned by member of household outright
☐ Part rent/part mortgage
☐ Rented from a housing association
☐ Rented from housing association – please specify:_____
☐ Rented from a private landlord
☐ Living here rent free
☐ Other – please specify:_____

IF RENTING

15. If you do not own your own home, why not?
☐ Can't afford to
☐ Can't obtain a mortgage
☐ Bad time to buy
☐ Other - please specify:

16. Is your current accommodation sufficient or insufficient for your current needs?
(This is just in terms of physical space only rather than about other dimensions of adequacy such as environment, noise, quality of maintenance, security, etc.)

- ☐ More than sufficient
- ☐ Sufficient
- ☐ Insufficient
- ☐ Very insufficient

ONLY IF INSUFFICIENT OR VERY INSUFFICIENT

a. Are you prevented from moving home for any reason?
   - ☐ Yes- Can't afford it
   - ☐ Yes- Council won't rehouse me
   - ☐ Yes- Family responsibilities
   - ☐ Yes- Health reasons - please specify: _____
   - ☐ Yes- Other reason -please specify: _____
   - ☐ No

17. If your home is <u>owned</u>, please give an estimate of its market value (to the nearest £5,000):

    _____

18. If your home is <u>owned with a mortgage</u>, how much is your monthly mortgage payment?:

    _____

19. If your home is <u>rented</u>, how much is your monthly rental? : _____

20. In total, how many cars, vans, motorcycles or scooters are owned, or are available for private use, by you or members of your household? Include any company cars or vans available for private use.

    Owned by you – please specify: _____
    Owned by other household members – please specify: _____

SECTION 4

The next questions are about your income from employment, benefits, and other sources. We need to have information that is as detailed as possible.

	You	Your partner	Other adult
JOB 1			
Income from work (net)	£	£	£
Income from work (gross)	£	£	£
JOB 2			
Income from work (net)	£	£	£
Income from work (gross)	£	£	£
JOB 3			
Income from work (net)	£	£	£
Income from work (gross)	£	£	£

21. What is your occupation?

    _____

22. How much do you take home per month from this job, after tax and National Insurance have been deducted (i.e. net pay)?

23. What was your total pay per month before any deductions for tax, national insurance, union dues and so on (including overtime, bonuses, commission or tips i.e. gross pay)?

24. What is his/her occupation?

    _____

25. Do you know how much does he/she takes home per month from this job, after tax and National Insurance have been deducted?

26. Do you know how much is his/her total pay per month before any deductions for tax, national insurance, union dues and so on (including overtime, bonuses, commission or tips)?

27. What is his/her occupation?

    _____

28. Do you know how much does he/she takes home per month from this job, after tax and National Insurance have been deducted?

29. Do you know how much is his/her total pay per month before any deductions for tax, national insurance, union dues and so on (including overtime, bonuses, commission or tips)?

30. About how much income after tax and other deductions {do you/your partner/other adult} take out of the business for use? (By income, I mean money drawn from the business which is used for personal, domestic, non-business use, in other words, what you have to live on).

_____

31.  I'd like to talk about income from sources other than work. Are you {or your partner or any other adult in the household} receiving any benefits?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know
    - ☐ Refused

    a. Which benefits do you {or your partner or any other adult in the household} receive?
    b. How much do you {or your partner or any other adult in the household} receive for each?
    c. How often do you {or your partner or any other adult in the household} receive it?

	You	**Your partner**	**Other Adult**	**Regularity**
Income-Related				
a. Income Support				
b. Employment and support allowance (ESA)				
c. Working Tax Credit				
d. Child Tax Credit				
e. Jobseeker's Allowance (JSA) New style				
f. Jobseeker's Allowance (JSA) Income based				
g. Jobseeker's Allowance (JSA) h. Contribution based				
i. Universal credit				
j. Housing Benefit				
k. Council Tax Benefit (Council tax reduction)				
l. Guardian's Allowance				
m. Child Benefit				
n. Statutory Adoption Pay				
o. Maternity Allowance				
p. State Retirement Pension				
q. Pension Credit				

r. Statutory Maternity Pay				
s. Statutory Paternity Pay				
t. War Pension Scheme				
u. War Widow[er] Pension				
v. Bereavement Allowance, Bereavement Payment or Bereavement Support Payment				
w. Winter fuel payment				
x. Warm home discount				
Health-Related				
a. Disability Living Allowance Care Component				
b. Disability Living Allowance Mobility Component				
c. Personal Independence Payment Mobility Component				
d. Personal Independence Payment Daily Living Component				
e. Industrial Injuries Disablement Benefit				
f. Carer's Allowance				
g. Disablement Benefit				
h. Severe Disability Premium				
i. Statutory Sick Pay				
j. Armed Forces Compensation Scheme				
k. Attendance Allowance				
l. Constant Attendance Allowance				
m. Armed Forces Independence Payment				
n. Funeral Expenses Payment				
o. Exceptionally Severe Disablement Allowance				
p. Any other state benefit not already mentioned – please specify:				

32. Do you know the total value of the benefits received by your household per week?

£

33. Do you {or any other member of your household} receive any other regular income or payment from any of these sources?

	You	Your partner	Other adult	Regularity
Formal				
a. Employer-based pension				
b. Benefit from annuity, trust or covenant				
c. Maintenance payments				
d. Rent from property or sub-letting				
e. Benefit from accident/sickness scheme				
f. Investment income (e.g. dividends from shares/interest from savings)				
g. Grant (educational or otherwise)				
Informal				
h. Receive money from other household members (as gifts or borrowed)				
i. Regular non-work income from any other source - please specify:				
j. Other - please specify:				

34. What is the total income (monthly/annually) coming into this household, after tax, including any benefits or pensions?

Weekly	**Annual**
☐ Nil	Nil
☐ Up to £69	Up to £3,599
☐ £70-£129	£3,600-£6,599
☐ £130-£189	£6,600-£9,599
☐ £190-£249	£9,600-£12,599
☐ £250-£309	£12,600-£15,599
☐ £310-£379	£15,600-£19,199
☐ £380-£479	£19,200-£23,999
☐ £480-£599	£24,000-£29,999
☐ £600-£719	£30,000-£35,999
☐ £720-£859	£36,000-£42,999
☐ £860-£999	£43,000-£49,000
☐ £1000-£1499	£50,000-£74,999
☐ £1500 or more	£75,000 or more

SECTION 5

This section is about your bank accounts and savings.

35. Do you have a current account?
- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

a. Which of these accounts do you have?
b. What is the name of the account provider?
c. How much have you saved in each?
d. How often do you save?
e. Do you get any interest rate from these accounts? If so, do you know how much?

	Name of Provider	**Size of Savings**	**Regularity of payment**	**Interest rate**
Bank Accounts				
a. Current account				
b. Savings account				
c. Building society account				
d. Credit Union account				
e. Post Office account				
f. Individual Savings Account (ISA)				
g. Other (*please specify*)				

36. Do you have any shares, bonds or other investments?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

a. Which type of investment do you have? *(eg. National Savings certificates and bonds / shares / insurance / bonds / employee shares and options / other investments?)*
b. What is the name of the provider?
c. What is the size of the investment?
d. How often do you get dividends / payments from the investment?
e. How much interest are you earning?

Type of investment	**Name of provider**	**Size of investment**	**Regularity of payment from investment**	**Interest amount/rate**

37. I'm going to read out a list of some of the ways in which people save money. Do you save money in any of these ways?

- ☐ A Christmas Club or similar run by a local shop
- ☐ Informally in a '*ménage'* or 'money-go-round' with work colleagues or friends
- ☐ Putting money by in a jar or envelope (or somewhere else)
- ☐ Asking a relative or friends to save or look after money for you
- ☐ Lending money to friends or family as a way of saving
- ☐ In conjunction with something you already pay e.g. loan/credit card/BrightHouse
- ☐ Another way - please specify: _____
- ☐ None
- ☐ Don't know
- ☐ Refused

a. How much do you have in savings in total in any of these ways *(sum to date)*?

£

38. Any comments on this section, or anything you want to add?

SECTION 6

The next few questions are about debt.

39. Have you ever been bankrupt?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

40.  Do you have any debt?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know
    - ☐ Refused

        a. Do you have any debts with any of the following lenders?
        b. What is the name of the credit provider?
        c. What was the reason for taking the loan?
        d. What was the initial loan amount?
        e. How much is remaining? What is the outstanding amount?
        f. What is the amount and regularity of the instalments?
        g. What is the interest rate?

	Examples	**Provider**	**Reason**	**Initial amount**	**Debt remaining**	**Instalment**	**Interest rate**
Formal/Regulated							
a. Responsible providers	*Fair Finance, Adage Credit*						
b. Internet/Payd-ay loans/High-Cost loans (No Credit Check. Quick application procedure.)	*QuickQui-d, Amigo Loans, Oakam*						
c. Bank Loans (Through a formal bank.)	*HSBC, Barclays, NatWest*						
d. Loan from your company or employer (Anything going through	*Pay Advance*						

company books.)							
e. Credit Cards (Through a formal bank.)	*Barclayca-rd, Capital One, First Direct*						
f. Doorstep Loans (Small regular payments at high interest rates and commonly flexible repayment schedules.)	*Provident ('Provi'), Light Finance, First Choice*						
g. Store Cards (Credit cards to be used at certain shops - not 'points' cards.)	*Debenha-ms, Argos, New Look*						
h. Rent to Own/ Hire purchase/Week-ly payment store	*BrighHou-se, PerfectHo-me*						
i. Catalogue/ Mail order schemes	*Park Christma-s, Littlewoo-ds*						
j. Credit Union Loans	*London Capital Credit Union*						
k. Student loan	*Student Loans Company*						
l. Overdraft (Through formal bank.)	*HSBC, Barclays, Natwest, Lloyds*						
Informal/ Unregulated							

m. Logbook Loan (Loan secured against vehicle.)	*Ramsdens, Varooma, Auto-Money*						
n. Loans from Friends or Family							
o. Individual Lenders							
p. Pawn Shop (Cash paid against material security for short time. May also issue postal orders/ non-bank guarantees.)	*Cash Converter-s, H&T Brixton, The Luxury Hut, Prestige*						
q. Other – please specify:							

41. Any comments on this section, or anything you want to add?

SECTION 7

This is the last section; the next questions are about unexpected events and financial experiences.

42. Has there been a particular event which has affected your household in the past year that has led to a worsening of your financial situation? For example, has anyone been ill or become unemployed?
    - ☐ Unemployment, redundancy, short time working
    - ☐ Ill health
    - ☐ Became pregnant, had a child
    - ☐ Family break up
    - ☐ Partner left
    - ☐ Death of member of household
    - ☐ Domestic violence
    - ☐ Other (please specify)
    - ☐ No

a. When did it occur?

43. How often would you say you have been worried about money during the last few weeks?
- ☐ Almost all the time
- ☐ Quite often
- ☐ Only sometimes
- ☐ Never

44. If you had a financial emergency and needed £1000 in a hurry, what do you think you would do?

_____
_____
_____
_____

_____

45. Before we end, I want to give you a chance to share any other thoughts about the kinds of issues we discussed today, or any connections to your own life and concerns.

Thank you very much for your time.

8.3 Appendix 3 Final questionnaire

a. Date:
b. Participant code:
c. Interviewer code:

Thank you for agreeing to take part in the study and for your time today. This survey should take about half an hour, but you have as much time as you need to answer the questions. This interview is completely voluntary, if we should come to any question that you don't want to answer, just let me know to continue on to the next question.

The survey includes questions about your personal and household characteristics, financial situation, financial behaviour, financial management, financial knowledge, health and wellbeing.

Your responses will be confidential. Anything you say that might mean that people would be able to identify you will not be shared with anyone outside the FinWell London research team.

At the end I'll give you time to share any general comments or thoughts on the questions today and the FinWell London project in general.

Do you have any questions?

SECTION 1

We will start with an update about your employment status.

49. Which is your current employment situation?
- ☐ Employee in full time job (30 hours or more)
- ☐ Employee in part time job (less than 30 hours)
- ☐ Self-employed – full or part time
- ☐ Government supported training
- ☐ Unemployed and available for work
- ☐ Wholly retired from work
- ☐ Full time education (school, college, university)
- ☐ Looking after family/home
- ☐ Permanently sick or disabled
- ☐ Casual work / cash in hand work
- ☐ Other (please specify)]

SECTION 2

The next few questions are about health and wellbeing.

50. In general, would you say your health is:
- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor

51. The following items are about activities you might do during a typical day. Does your **health now limit you** in these activities? If so, how much? *(show card)*
    c. **Moderate** activities, such as moving a table, pushing a vacuum cleaner, bowling or playing golf
    ☐ Yes, limited a lot ☐ Yes, limited a little ☐ No, not limited at all

    d. Climbing **several** flights of stairs
    ☐ Yes, limited a lot ☐ Yes, limited a little ☐ No, not limited at all

52. During the **past four weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of your physical health**?
    c. **Accomplished less** than you would like
    ☐ No ☐ Yes

    d. Were limited in the **kind** of work or other activities
    ☐ No ☐ Yes

53. During the **past four weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?
    c. **Accomplished less** than you would like
    ☐ No ☐ Yes
    d. Did work or other activities **less carefully than usual**
    ☐ No ☐ Yes

54. During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)?
    ☐ Not at all
    ☐ A little bit
    ☐ Moderately
    ☐ Quite a bit
    ☐ Extremely

55. These questions are about how you feel and how things have been with you during the **past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling.
    How much of the time during the **past 4 weeks**…

	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
d. Have you felt calm and peaceful?	☐	☐	☐	☐	☐	☐
e. Did you have a lot of energy?	☐	☐	☐	☐	☐	☐

f. Have you felt downhearted and blue? ☐ ☐ ☐ ☐ ☐ ☐

56. During the **past 4 weeks**, how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting friends, relatives, etc.)? *(show card)*

☐ All of the time
☐ Most of the time
☐ A good bit of the time
☐ Some of the time
☐ A little of the time
☐ None of the time

57. I am going to read five statements that you may agree or disagree with. Please indicate your level of agreement with each item using a 1 - 7 scale:

7 means that you strongly agree with the statement, 6 - Agree, 5 - Slightly agree, 4 - Neither agree nor disagree, 3 - Slightly disagree, 2 – Disagree and 1 - Strongly disagree with the statement.

Please be open and honest in your responding.

____ In most ways my life is close to my ideal.
____ The conditions of my life are excellent.
____ I am satisfied with my life.
____ So far I have gotten the important things I want in life.
____ If I could live my life over, I would change almost nothing.

58. Please indicate which statements best describe your overall quality of life at the moment for each of the five groups below.

a. Feeling settled and secure
☐ I am able to feel settled and secure in **all** areas of my life
☐ I am able to feel settled and secure in **many** areas of my life
☐ I am able to feel settled and secure in **a few** areas of my life
☐ I am **unable** to feel settled and secure in **any** areas of my life

b. Love, friendship and support
☐ I can have **a lot** of love, friendship and support
☐ I can have **quite a lot** of love, friendship and support
☐ I can have **a little** love, friendship and support
☐ I **cannot** have **any** love, friendship and support

c. Being independent
☐ I am able to be **completely** independent

☐ I am able to be independent in **many** things
☐ I am able to be independent in **a few** things
☐ I am **unable** to be at all independent

d. Achievement and progress

☐ I can achieve and progress in **all** aspects of my life
☐ I can achieve and progress in **many** aspects of my life
☐ I can achieve and progress in **a few** aspects of my life
☐ I cannot achieve and progress in **any** aspects of my life

e. Enjoyment and pleasure

☐ I can have **a lot** of enjoyment and pleasure
☐ I can have **quite a lot** of enjoyment and pleasure
☐ I can have **a little** enjoyment and pleasure
☐ I cannot have **any** enjoyment and pleasure

59. Any comments or anything you want to add?

SECTION 3

The next questions concern your finances and money worries.

60. What is the total income coming into this household, after tax, including any benefits or pensions?

£

Weekly	**Annual**
☐ Nil	Nil
☐ Under £60	Under £3000
☐ £60-£119	£3000-£5999
☐ £120-£199	£6000-£9,999
☐ £200-£299	£10,000-£14,999
☐ £300-£479	£15,000-£24,999
☐ £480 or more	£25,000 or more

61. Considering all of the sources of income coming into your household each month, would you say that your household income is regular and reliable?
    ☐ Yes
    ☐ No
    ☐ Don't know

62. How often would you say you have been worried about money during the last few weeks?
    ☐ Almost all the time
    ☐ Quite often
    ☐ Only sometimes
    ☐ Never

SECTION 4

The following questions concern social capital and trust.

63. How many close friends would you say you have? Think about people who are not members of your family and you could rely on for help (family problems, financial, health).

    _____

64. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?
    - ☐ You can't be too careful
    - ☐ Most people can be trusted
    - ☐ Don't know

65. Please look carefully at the following list of organisations *(show card)*. For each of them, please say which, if any, you belong to and which, if any, you are currently doing unpaid work for?

	Do not belong	Belong to ONLY	Belong to AND volunteer
l. Social club	☐	☐	☐
m. Community group – choir, toddler group	☐	☐	☐
n. Women's Institute	☐	☐	☐
o. Sports club/team	☐	☐	☐
p. Community organisation – tenants assoc, community centre, neighbourhood campaign, neighbourhood watch, etc.	☐	☐	☐
q. Church, Mosque or religious organisation	☐	☐	☐
r. Political party	☐	☐	☐
s. School Parent Teacher Associations	☐	☐	☐
t. Support groups or welfare organisations	☐	☐	☐
u. Hobby or interest groups	☐	☐	☐
v. Pensioners club, lunch club	☐	☐	☐
w. Other groups. Please specify: _____	☐	☐	☐

SECTION 5

This section concerns coping strategies.

66. If you had a financial emergency and needed £1000 in a hurry, what do you think you would do?

_____
_____
_____

If the respondent replies 'I couldn't cope', please record here:

We have reached the end of the questionnaire. Do you have any comments on any of these questions, or anything you want to add?
Do you have any more general comments on the FinWell project?
Is there anything you think we should have talked about during the course of the project but haven't?

Thank you for your time and for your participation in the project.

8.4 Appendix 4 Topic guide for the interviews

Introduction

Thank you for agreeing to take part in this interview. This interview should last no longer than 1 hour, but you have as much time as you need to answer the questions. This interview is completely voluntary, if you are asked anything you are uncomfortable answering or you don't want to answer, just let me know and we will move on to another question.

This interview is going to explore whether you think there is a relationship between your health and income-based initiatives, such as receiving a loan from Fair Finance, and the other way around.

Your responses will be confidential and any information that you give will be anonymised. During the interview we may talk about some things that you have mentioned in your financial diaries. This is so we can explore them in more depth here.

Do you have any questions? Are you ok that this interview is recorded?

Finances:

To start with could you tell me about your financial situation:

- Has money ever been an issue? Why?
- Has money ever caused you problems? Can you describe these?

Have there been occasions recently when you didn't have enough money to get by?

- If so, what did you do?
- Why did you/ did you not approach banks or moneylenders or family/friends?
- How often did this happen?

What was this experience like? How did this make you feel?

Finances and Health

Thinking about your financial situation and your health. Do you think there is a connection between your financial situation and your health?

- Why do you think that?

Could you describe a situation in which your finances have affected your health?

- What happened? What would have helped you in this situation?
- [Depending on initial answer] Can you think of any positive/negative experiences?

Could you describe a situation in which your health has affected your finances?

- What happened? What would have helped you in this situation?
- [Depending on initial answer] Can you think of any positive/negative experiences?

You've previously talked about your different health conditions, such as (*provide examples that are known about respondents*) … is there anything related to your financial life that you think made your health worse? Why do you think that?

Still thinking about your own health, is there anything related to your financial life that would have:

- improved your health when you first became ill?
- stopped you from developing multiple health conditions?
- helped you to manage your illness(es) OR slowed down progression of your illnesses?

You've previously described that your children have health conditions. What do you think caused these health conditions? What do you think would have helped stopped your children from developing these health conditions?

- Thinking about your financial situation, do you see a connection between this and the health and well-being of your children? *If yes*: could you explain a bit more?

Experience of Fair Finance (or Scot Cash):

From our previous discussions you've mentioned that you've received *XX* loans from Fair Finance.

How did you find out about Fair Finance?

- Why did you decide to approach them (rather than another lender)?

How did you use the loan?

Can you describe to me the process/stages you went through before receiving a loan from Fair Finance?

- What did you have to do?
- What was this experience like? How did it make you feel?

Could you tell me about receiving the loan?

- How did receiving the loan make you feel?

How has the repayment process been?

- How do you feel about making repayments? Have you experienced any issues? Has anything helped you to make repayments?

Overall, how was your experience of using Fair Finance?

- What did you like/dislike about the experience? Why?

How would you feel about approaching another lender now?

- Has that changed? Why do you feel this way?

Fair Finance and Health:

Do you think receiving a loan from Fair Finance has impacted your life?

- What happened? What changed for you?
- How has it helped? Has it had any negative impact?
- How is your financial situation now? How do you feel about it? Has it changed?

How has receiving a loan affected you/your relationships with family/friends/community? financial situation? employment status?

- How does that make you feel? Has it enabled you to do anything you previously wouldn't have been able to do?

A number of people interviewed so far have mentioned that getting a loan from Fair Finance has affected their health and wellbeing… what do you think about that?

- Why do you think that?
- In what ways do you think getting a loan could affect someone's health and wellbeing? Why?
- Has your health and wellbeing ever been affected by getting a loan? Or using another financial product? In what way?

Do you think there is anything a lender, such as Fair Finance, could do that would benefit your health and wellbeing? Why?

How do you think your health affects your use of financial products and services, such as those provided by Fair Finance?

- What works well? What doesn't work well?

End of interview

Those are all the questions I have, but do you think there are things that I have missed which you think are important to mention?

Would you like to clarify anything?

Do you have any questions for me?

8.5 Appendix 5 'Causes' and 'Solutions' statement sets and factor scores

'Causes' Statement Sets and Factor Scores

#	Health is worse in low-income communities because… Statement	F1	F2	F3
1	…people are unable to access space or places to meet others	-1*	2	0
2	…people don't have good support networks	0*	3*	-1*
3	…people feel like they are excluded from the rest of society	0	0	2
4	…there isn't enough community spirit	-3*	0*	-2*
5	…of low levels of education	3*	-1*	0*
6	…of unpredictable finances	4*	0	1
7	…there is a lack of insight into what these communities need	1	3*	0
8	…people see others in society with status symbols like expensive cars which make them feel bad about their own situation because they can't afford them	-2	-1	0
9	…of the stress of making hard decisions like "do we eat?" or "do we heat?"	1	1	3*
10	…people don't get to experience the outdoors like being in the mountains, forests or by the sea	0	-2*	0
11	…there is a lack of good quality, affordable housing	4	2	2
12	…there aren't things for young people to do in their community	1*	4*	-1*
13	…of how the welfare system works	2*	0	1
14	…people struggle to get access to services that are available	2	0	1
15	*…many people don't have jobs that are secure meaningful or that give them a sense of purpose*	*3*	*3*	*4*
16	…people feel a sense of hopelessness from not being in control	0	1	4*
17	*…people lack the ability to look after themselves*	*-2*	*-1*	*-2*
18	…people can struggle with complicated family life, sexual, emotional or physical abuse	2	2	1
19	*…the culture of the community means people don't have ambitions or goals*	*-3*	*-3*	*-3*
20	…people are labelled, stereotyped and talked down to, they are not treated as individuals	-1*	1	2
21	…the views of these communities aren't taken into account	1	1	0*
22	*…it is difficult to leave an area to start a new life*	*-1*	*0*	*-1*
23	…the people in these communities can't cope with unexpected events or costs	1	-1*	3*
24	…these communities tend to be dirty, polluted or in poor condition	2*	-3*	-1*
25	…people don't have a way to travel, can't afford car or public transport	-1	-1	2*
26	…having less money increases the cost of things people need like electricity or loans	0	1	3
27	*…of poor parenting*	*-3*	*-2*	*-2*
28	…people in these communities don't follow health advice	-1	-2	-2
29	…people don't feel safe where they are living	0	-2*	-1

30	*…there is a culture of dependency and laziness in these communities*	*-4*	*-4*	*-4*
31	…people in these communities don't take responsibility for their own health	-2	-4	-4
32	…governments don't invest in these communities	3	4	1*
33	…people have too many children	-4	-3	-3
34	…people focus on short-term pleasures rather than thinking about the future	-2*	2*	-3*

*Indicates distinguishing statements at p<0.01. Italics indicate consensus statements non-significant at p>0.05.

'Solutions' Statement Sets and Factor Scores

#	**Health could be improved in low-income communities by… Statements**	**F1**	**F2**	**F3**
1	*…making free childcare available and accessible*	*2*	*1*	*1*
2	…spending more on the NHS	3*	-1	-1
3	…providing better support to rehabilitate prisoners, ex-offenders or people who have had addiction problems	2*	-1*	-3*
4	…supporting industries, companies or sectors that can provide 'good work'	1*	-2	-3
5	*…investing in community activities and groups which give people something to do*	*0*	*1*	*0*
6	…focusing on how we better support vulnerable individuals like young men, young mums or older people	4	4	1*
7	*…increasing the availability of, and access to, social care services in these areas*	*2*	*1*	*2*
8	…helping people to develop their strengths	-1*	3	4
9	…helping people to make relationships with others so that they have someone to look out for them or to turn to when things get hard	0	2	4
10	…making it possible for people to access affordable, flexible loans when they need them	-1*	0*	-4*
11	…increasing the tax on things that are bad for people like alcohol, sugary food and drink or fatty foods	-3*	-4*	0*
12	…improving the quality of housing for people on low incomes	5*	3	3
13	…making sure that people have enough money each month to pay their basic needs like rent, food, clothing, heat for their home	5*	0	3
14	*…cutting welfare benefits*	*-5*	*-5*	*-5*
15	…making sure that everyone who wants a job can get a job	1*	-2	-1
16	…legalising drugs	-2*	-4	-4
17	…making sure that everyone in society has similar opportunities	4*	-2*	0*
18	…by raising the taxes that people pay in a fair way	0*	-3*	2*
19	…providing ways for people to talk about and deal with mental health issues	3	2	0*
20	…better educating children about health from a young age	1*	3	4
21	…making sure communities have a say in any decisions that will affect them	2	5	3

22	…providing services that help people to organise their money like financial advice	-1	2	1
23	…providing safe ways for individuals to own their home, a car, things like that without getting into debt that they can't repay	-2	-1	-4*
24	…encouraging children to have goals and to have confidence to meet them	0*	2*	5*
25	…having more health campaigns	-3*	0*	-1*
26	…people taking responsibility for themselves	-4*	4	2
27	…finding more ways for people from different groups or different communities in society to mix together	-1	-1	1
28	…improving the availability and price of public transport	-1	1*	-1
29	…helping communities to own land, buildings or other assets in their community	-2	0*	-2
30	…reducing the price of things that are good for you like healthy food	0*	-1*	5*
31	providing coaching sessions for good parenting	-2*	1	2
32	*…denying healthcare to people who are responsible for their own condition like smokers or fat people*	*-5*	*-4*	*-5*
33	…stopping benefit payments to those spending their money on things that are bad for own health	-4	-3	-2*
34	…why should we do anything? if people want to make bad choices for their health then let them	-4	-3	-3
35	…improving the environment of the community so that it is easier for people to be active outside	1	4*	0
36	…by controlling what shops in these communities can sell	-3	-5	-2*
37	…making more funding available for good primary health care, such as GP surgeries or community pharmacists, in these areas	4	5	1*
38	…these communities deciding what needs to be done to improve health and then doing it	3*	0*	-2*
39	…preventing payday or doorstep lenders from taking advantage of vulnerable individuals	1	-2	-1

*Indicates distinguishing statements at p<0.01. Italics indicate consensus statements non-significant at p>0.05.

8.6 Appendix 6 Factor solutions

Factor Loadings

Respondent ID	'Causes'				'Solutions'		
	Factor 1	Factor 2	Factor 3		Factor 1	Factor 2	Factor 4
CP01	-0.0206	0.2658	-0.0047		0.2889	**0.3515**	**0.4399**
CP02	0.2149	**0.6519X**	0.1226		**0.333**	**0.6976X**	0.2422
CP03	**-0.4603**	**-0.5012**	**-0.3378**		**0.4075**	**0.5011X**	-0.1734
CP04	0.0664	0.0194	**-0.494**		0.2181	**0.5529X**	**0.3863**
CP05	0.2521	**0.5315X**	0.2418		**0.6082X**	0.2942	-0.0441
CP06	0.1629	0.1594	**0.4137X**		-0.0669	0.072	**0.3769X**
CP07	**0.5797X**	0.2006	0.2707		**0.6126X**	**0.4762**	0.1704
CP08	0.145	0.1689	0.1634		0.0381	0.0701	**0.4831X**
CP09	-0.0459	0.3122	**0.6803X**		0.3004	-0.1212	**0.3203**

CP10	**0.5566X**	0.0914	-0.0973		**0.3474**	**0.4813**	**0.4454**
CP11	0.2496	**0.39X**	0.1126		**0.6279X**	**0.3342**	0.0742
CP12	**0.7363X**	0.2804	0.1707		**0.688X**	0.2314	0.2501
CP13	0.1833	0.2916	0.1445		0.2608	0.3118	**0.5448X**
CP14	0.0405	0.1871	**0.4103X**		0.0464	**0.5409X**	0.1271
CP15	0.2721	0.1231	0.0102		**0.4006X**	-0.1426	0.1679
CP16	0.058	**0.3551**	**0.5759X**		**0.3289**	**0.6023X**	0.1469
CP17	0.0801	**0.3708X**	0.2392		**0.5082X**	0.1964	0.2182
CP18	0.2119	**0.4545**	**0.5922X**		**0.7057X**	0.2244	0.2044
CP19	0.2774	**0.6047X**	0.176		**0.4075X**	0.1953	0.0244
CP20	-0.0775	-0.309	0.3194		0.0077	**0.5588X**	**0.3307**
PS01	**0.582X**	0.0639	**0.4917**		**0.6648X**	**0.3675**	-0.0224
PS02	**0.4186X**	0.1525	0.1151		0.1868	**0.7261X**	0.0457
PS03	0.2939	**0.4885**	**0.5963X**		**0.4143**	**0.4626**	**0.4706**
PS04	**0.6544X**	0.163	**0.4964**		**0.742X**	0.1153	0.2203
PS05	**0.5718**	0.1889	**0.6296X**		**0.8264X**	0.0753	0.0408
PS06	**0.6428**	0.294	**0.5771**		**0.8528X**	**0.3643**	0.1028
PS07	0.0394	0.1992	0.0732		0.0529	**0.3779**	**0.5019X**
PS08	**0.7199X**	0.2417	**0.5197**		**0.6031X**	**0.3941**	-0.0222
PS09	**0.5929X**	**0.3687**	0.3007		**0.7512X**	0.147	0.1235
PS10	**0.4719**	**0.4003**	**0.5832**		**0.7289X**	0.1417	**0.3392**
PS11	**0.4533**	0.1389	**0.7115X**		**0.7293X**	**0.3725**	0.0023
PS12	**0.4736**	**0.5425**	0.2713		**0.7716X**	**0.3394**	0.1504
PS13	**0.4586**	0.1227	**0.7272X**		0.1909	**0.5579X**	0.2894
PS14	**0.341**	0.3195	**0.599X**		**0.7981X**	**0.3801**	-0.0033
PS15	**0.6306X**	0.2375	**0.5637**		**0.7251X**	0.1279	0.1298
PS16	**0.4172**	0.2372	**0.4638**		**0.5494X**	**0.3837**	0.075
PS17	**0.7863X**	0.2211	0.2663		**0.5234X**	0.1348	0.2322
PS18	0.3077	0.0532	**0.5793X**		**0.7008X**	-0.0672	0.3001
PS19	**0.54**	0.2856	**0.505**		**0.4541**	0.2443	**0.6218X**
PS20	**0.7215X**	-0.0154	-0.0895		**0.4714**	**0.5075**	0.3028
%Explained Variance	19	10	18		28	14	8

The factor loadings of exemplars are indicated with an X. These loadings meet the following two criteria: (i) the loading are significant ($p<0.05$). The significance level is calculated as 1.96*(SE). SE represents standard error that is defined as $1/\sqrt{N}$ where N is the number of statements in the statement set. For 'Causes', 1.96*(SE) = 1.96 ($1/\sqrt{34}$) = 0.33614. For 'Solutions', 1.96*(SE) = 1.96 ($1/\sqrt{39}$) = 0.31385. ii) the square of the loading for a factor is larger than the sum of the square loadings for all other factors. Significant factor loadings are shown in bold. 'PS' = Professional Stakeholders. 'CP' = Community Participants