Work Package 1 questionnaire survey– descriptive statistics

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Introduction

This report contains statistics from an online questionnaire survey of 2,700 respondents regarding disruption, conducted by YouGov on behalf of the University of Aberdeen in September 2013. The purpose of the questionnaire was to establish public perceptions of disruption, particularly how disruption is viewed, experienced, and managed. The statistics reported here act as a precursor to more in depth multivariate analysis which will be reported in forthcoming publications.

Sampling

The sample consisted of registered panel members with the market research company YouGov. Based on home postcode data, prospective respondents were approached in six different UK Travel to Work Areas (TTWA); Aberdeen, Liverpool, London, Reading and Bracknell, Yeovil and Chard, and York. TTWA are statistically derived geographical regions based on UK Census data that describe self-contained labour markets where at least 75% of the area's resident workforce work in the area, and at least 75% of the people who work in the area also live in the area. Age and gender quotas were also applied by YouGov to ensure a representative sample.

For each TTWA a total of 400 respondents were sought, with the exception of London where 600 respondents were sought. The final sample sizes were as follows:

TTWA	*n*
Aberdeen	436
Liverpool	410
London	632
Reading and Bracknell	410
Yeovil and Chard	405
York	407
Total	**2700**

Analysis of statistics from individual TTWA will be made available in forthcoming publications. In this report data is referred to in aggregate form.

Questionnaire

The questionnaire was split into five sections (A to E), and lasted 20-25 minutes in total. The remainder of the report is organised according to these five 5 sections.

Section A. About you and your travel

Section B. Thinking about disruption

Section C. Disruptive scenarios

Section D. Managing disruption

Section E. Socio-demographics

A summary of key findings is presented at the start of each section followed by the relevant statistics.

Section A.

About you and your travel

Introduction

The opening section sought information pertaining to the respondent and their travel patterns. Specific information related to:

A1. Employment status
A2. Access to different modes of transport and the internet
A3. General frequency of travel by different modes
A4. The location of everyday activities relative to home and modes of transport used to access them
A5. The frequency with which these activities are disrupted
A6. The perceived ease with which these activities and associated journeys could be undertaken by a different mode, at a different time of the day, or re-arranged (i.e. perceived flexibility)

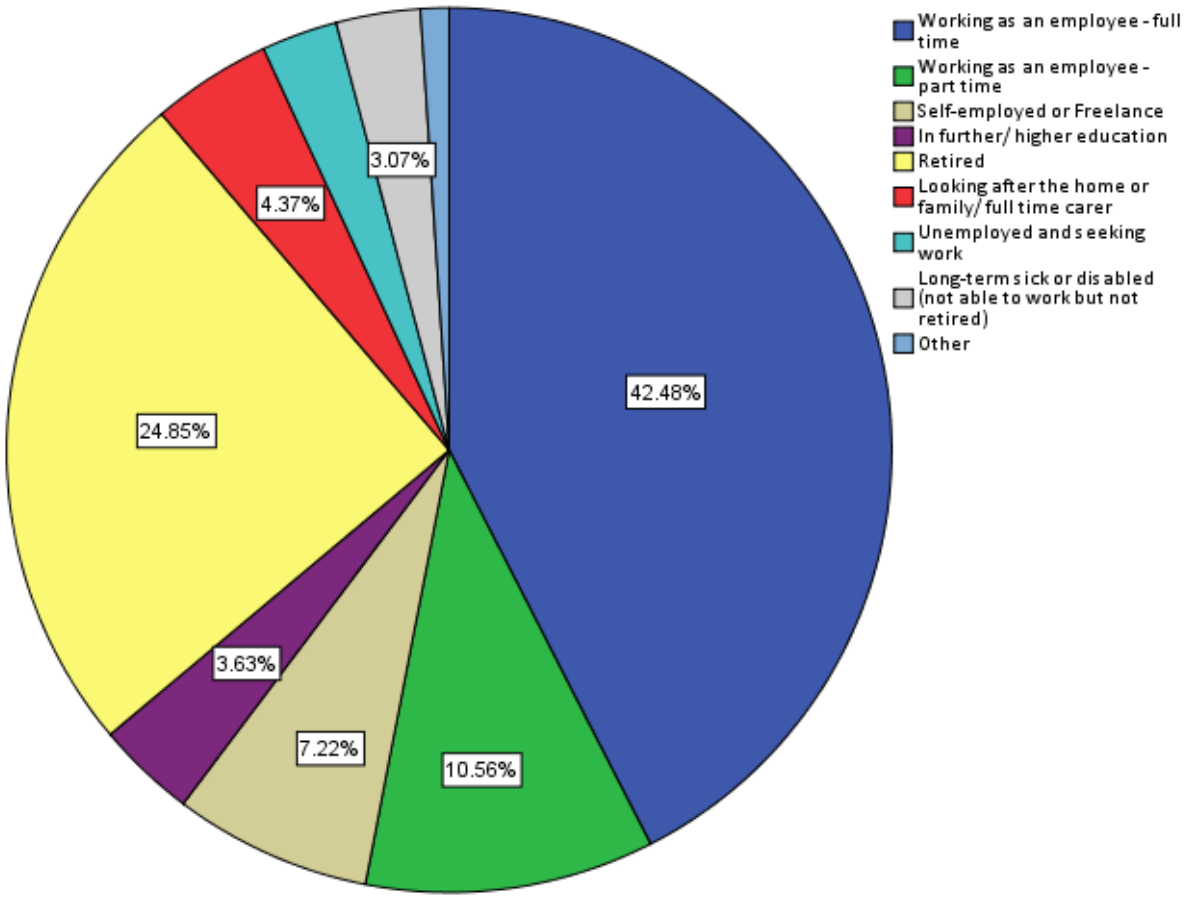
Summary

- Nearly three quarters (73.7%) of respondents had access to at least one motorised vehicle.
- Bike ownership tended to be 'as well as' a car, rather than 'instead of'.
- On average, private motorised vehicle journeys accounted for almost half (46.3%) of people's journeys.
- The single largest group in the sample were people who rely heavily on their car at the expense of using other modes.
- Respondents felt it was easier to change the time at which a journey was made rather than change the mode or postpone the trip entirely.
- The journey to work and school were seen as the least flexible trips, shopping was seen as the most flexible trip

A1. Employment status

Those in **full-time** employment constituted the single largest group **(42.5%)** followed by those who are **retired (24.9%)**. In total, people in some form of employment (full-time, part-time and self-employed) represented almost two thirds of the sample **(63.9%). Unemployed** people **(2.8%)** and those unable to work due to a disability or **long term health problems (3.1%)** accounted for **5.9%** of the sample.

Fig A1. Employment status

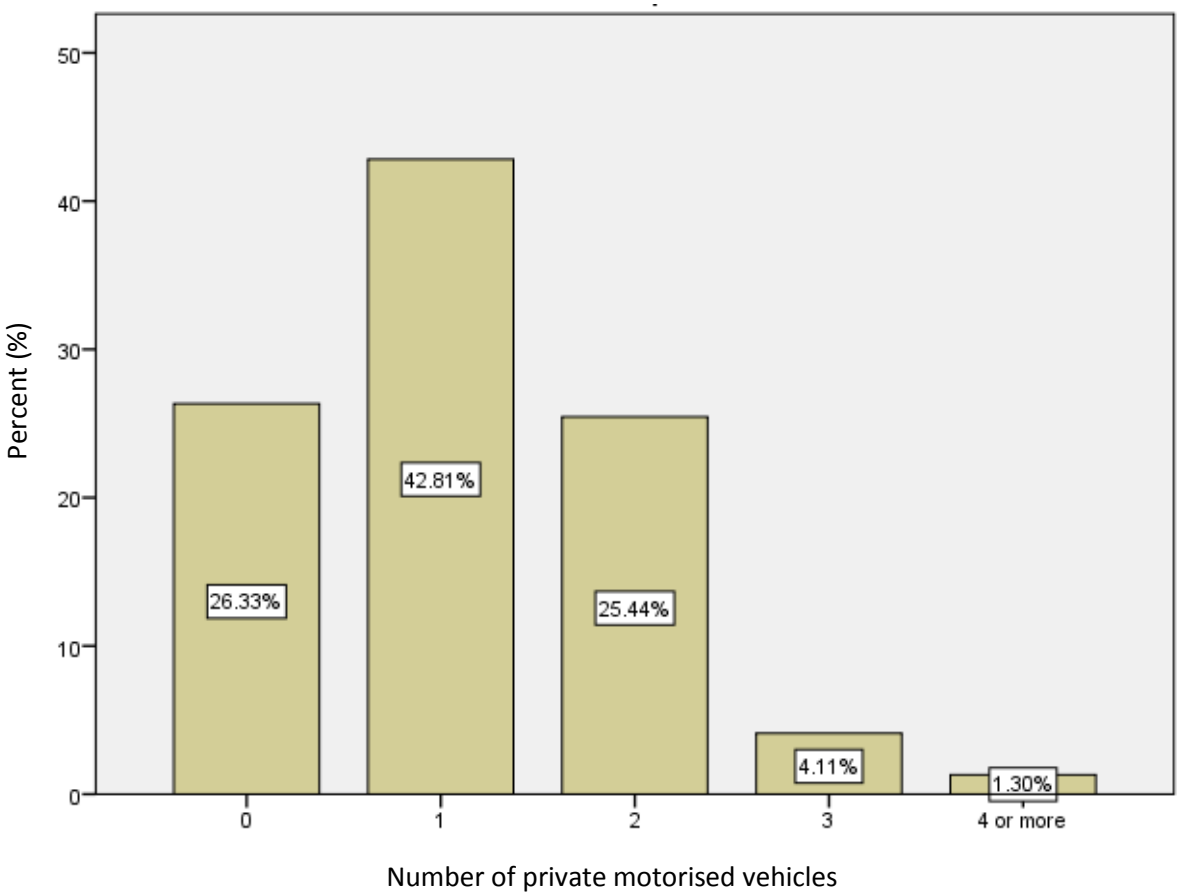


Of those in some form of employment, **43.6% worked from home** at least one day a week (i.e. 56.9% of people do not work from home). Overall, 11.1**%** of people in employment worked from home 5 days a week.

A2. Access to different modes of transport and the internet

Overall, **73.7%** of respondents had regular access to at least 1 private motorised vehicle (**car, van, motorcycle or moped)** as either a driver or passenger (i.e. 26.3% of respondents did not have regular access to these modes). **30.8%** of respondents had access to 2 or more of these modes.

Fig A2. Access to private motorised vehicles

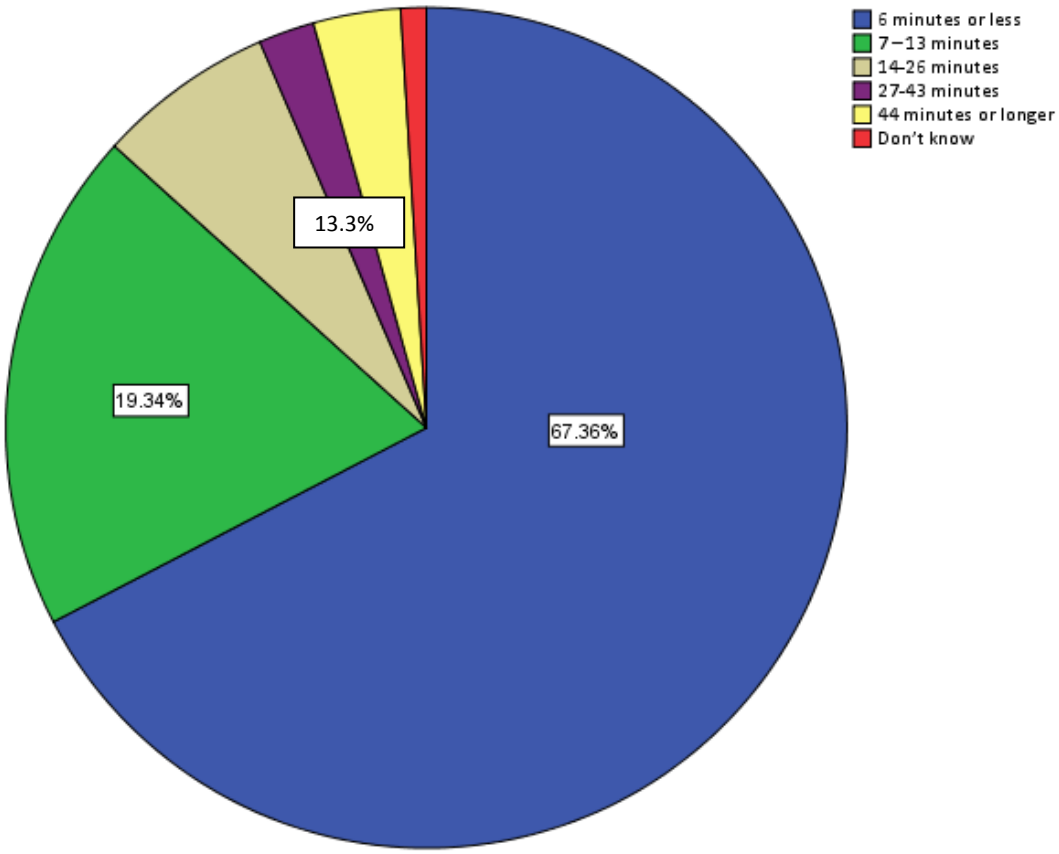


Of those with access to at least one private motorised vehicle, the average **annual mileage** undertaken was between **5,000 and 9,999 miles**.

45.5% of respondents had access to at least one **bicycle**. Bicycle access was marginally higher (47.2%) among people with access to at least one motorised vehicle than it was for people without access to a vehicle (41.1%).

For around two thirds **(67.4%)** of respondents (excluding wheelchair users), it would take them **6 minutes or fewer** to walk to their **closest public transport stop**. **13.3%** of respondents would need to walk for **14 minutes or more** to reach their closest stop.

Fig A3. Time taken to walk to closest public transport stop



Virtually all respondents (99.5%) reported that they had regular access to the **internet**, although this was unsurprising given the nature of the survey. Respondents were proportionally most likely to have access to the internet **at home (98.3%),** followed by **on the move (54.9%),** and **at work (45.6%).**

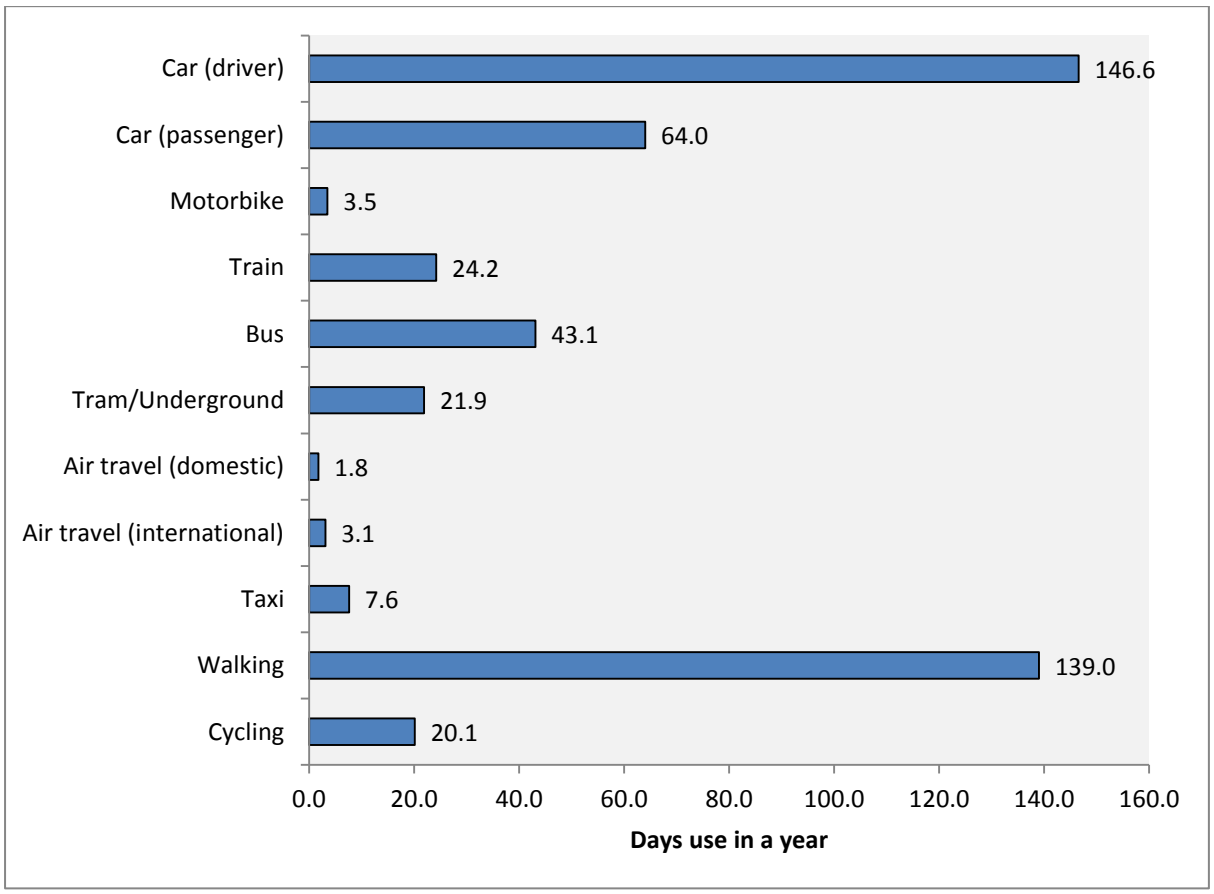
A3. General frequency of travel by different modes

Respondents estimated how **frequently** they used different modes of transport for every day journeys. From this, an estimate was made regarding the **number of days** each person would use a mode in a year. For example, it was estimated that someone who used their car '5 or more days a week' would equal 260 days over the course of the year (5 days a week x 52 weeks in a year). The various assumptions are as follows:

Reported use	Estimated number of days use in a year
5 or more days a week	260 (5 x 52)
2-4 days a week	156 (3 x 52)
About once a week	52 (1 x 52)
Less than once a week but at least once a month	12 (1 x 12)
A few times a year	6 (assumed to be once every 2 months, i.e. 1 x 6)
About once a year	1
Less than once a year	0
Never	0

It is important to note that **several modes may be used on the same day**. For example, if someone uses the train for 52 days in a year and the bus for 52 days in a year, it may be the case that these journeys were undertaken on the same 52 days.

Fig A4. Average use of different modes (days per year).



The most frequently used modes were **car (driver) (146.6 days)** and **walking (139.0 days)**, which was defined as walking for more than 10 minutes to/from a destination.

The next most frequently used modes were travelling as a **car passenger (64.0 days),** and the **bus (43.1 days).** Perhaps unsurprisingly, the average use of **air travel** (both domestic and international) was the lowest in the sample, 1.8 days and 3.1 days per year respectively. However, this masks the significant role of air travel for a very small minority of respondents who fly regularly.

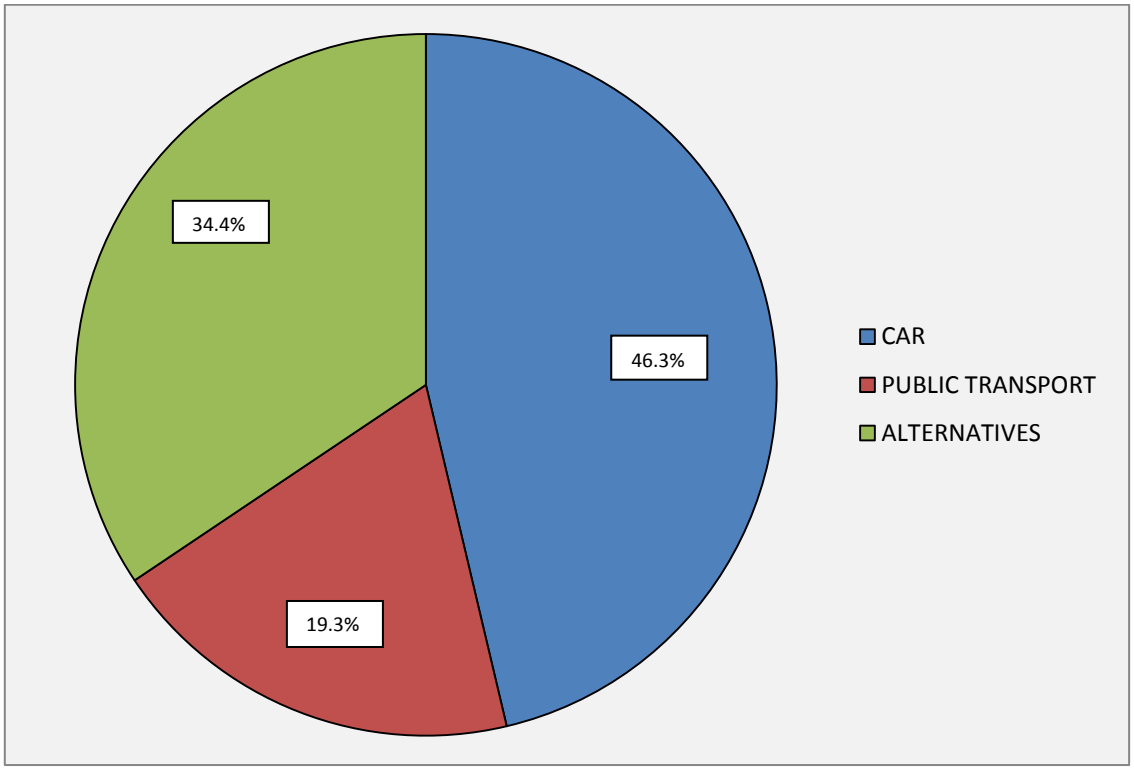
To examine the **relative share** of different modes, individual modes were grouped into three main categories.

Category*	Modes
CAR	Car (driver)
	Car (passenger)
	Motorbike
PUBLIC TRANSPORT	Train
	Bus
	Tram/Underground
ALTERNATIVE	Walking
	Cycling

*Taxi and Air Travel (both domestic and international) were omitted from this exercise.

The relative share of each category was calculated by dividing the total number of days for each category by the total number of days across all three categories. This indicates the share of journeys by different categories as a percentage of the total.

Fig A5. Relative share of CAR, PUBLIC TRANSPORT, and trips made by ALTERNATIVE modes



On average, **CAR** journeys accounted for the largest share of trips **(46.3%),** followed by journeys by **ALTERNATIVE** modes **(34.4%)**. On average, **PUBLIC TRANSPORT** trips accounted for **19.3%** of trips**.**

However, there was significant variation across the sample. This is illustrated in Fig A6, which plots relative mode share on a ternary plot for all respondents (n=2700). Individual respondents are shown as black dots. Respondents who claimed they never used any forms of travel do not appear on the plot.

It can be seen that there is a greater relative concentration of respondents in the bottom right hand corner of the plot (circled in red). These are respondents with **high CAR use** compared with PUBLIC TRANSPORT or ALTERNATIVES. This is to say that there is a greater reliance on CAR use among respondents in the sample than other modes.

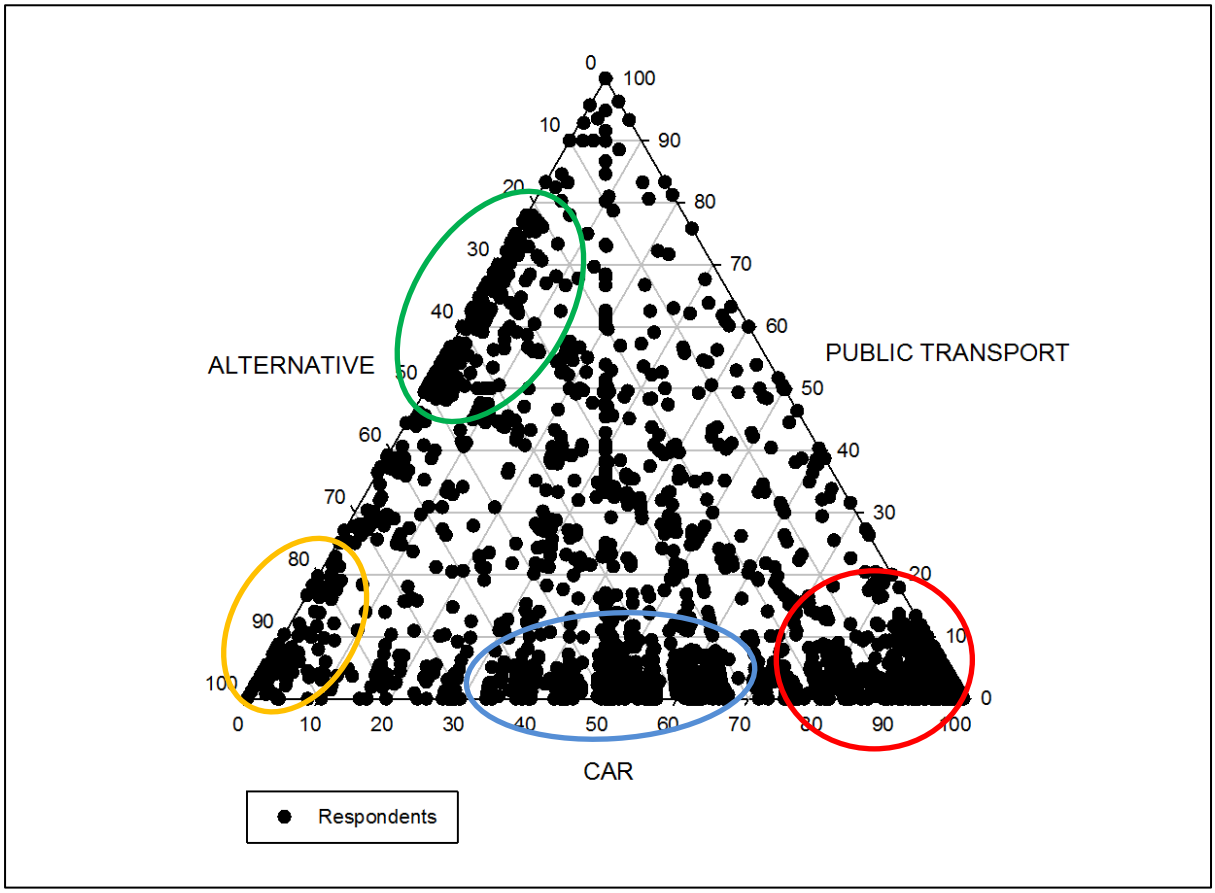
Respondents located in the blue circle share trips **fairly evenly between CAR use and ALTERNATIVES**, but have very low PUBLIC TRANSPORT USE.

Respondents in the green circle make the **majority of their journeys by PUBLIC TRANSPORT**, with the remainder of their trips made by ALTERNATIVE modes. This group make very few journeys by CAR.

Respondents in the yellow circle make the vast **majority of their journeys by ALTERNATIVE** modes.

There are relatively few respondents located towards the top of the plot. This is to say that **relatively few people in the sample rely heavily on PUBLIC TRANSPORT** for the majority of their journeys.

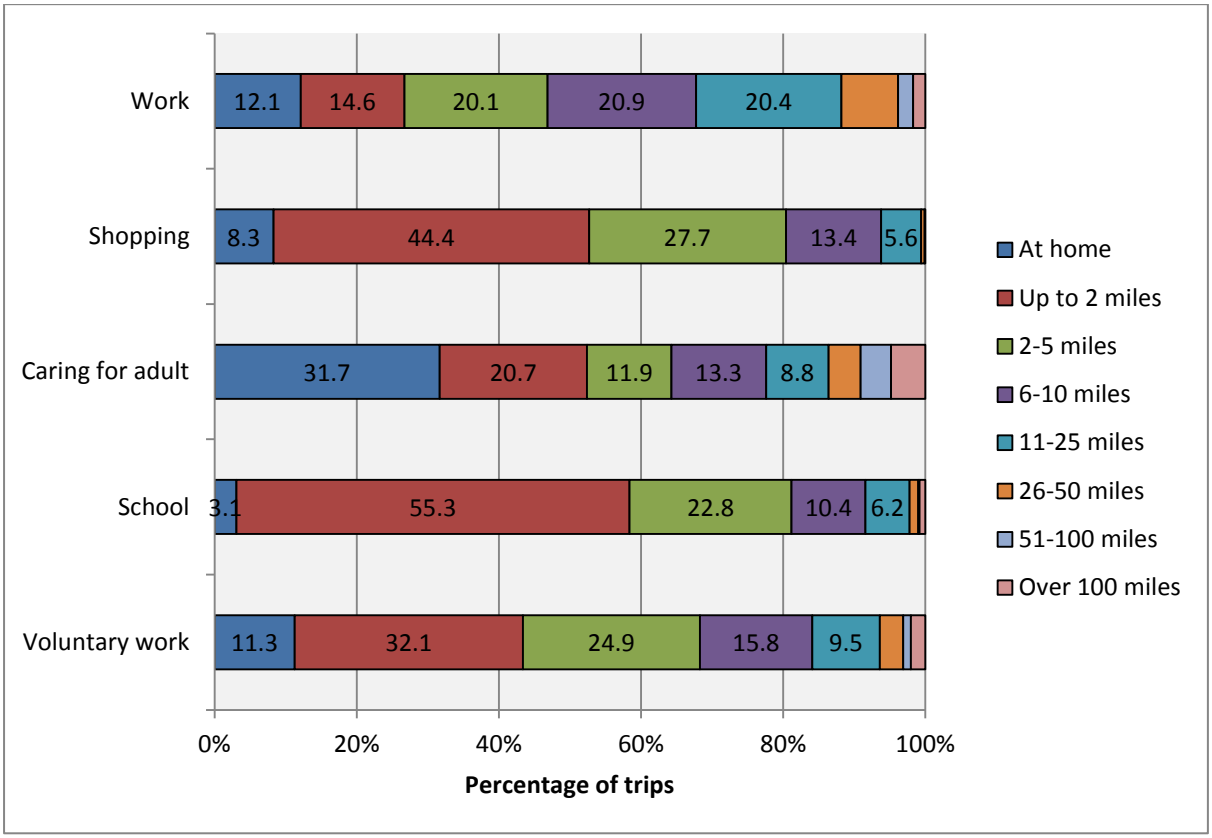
Fig A6. Ternary plot of relative mode share



A4. The location of everyday activities relative to home and modes of transport used to access them

Respondents were asked how far, if at all, they had to travel to 5 different activities; work, shopping, caring for an adult, taking children to school and voluntary work. Where the respondent did not undertake the activity in question the field was left blank.

Fig A7. Location of everyday activities

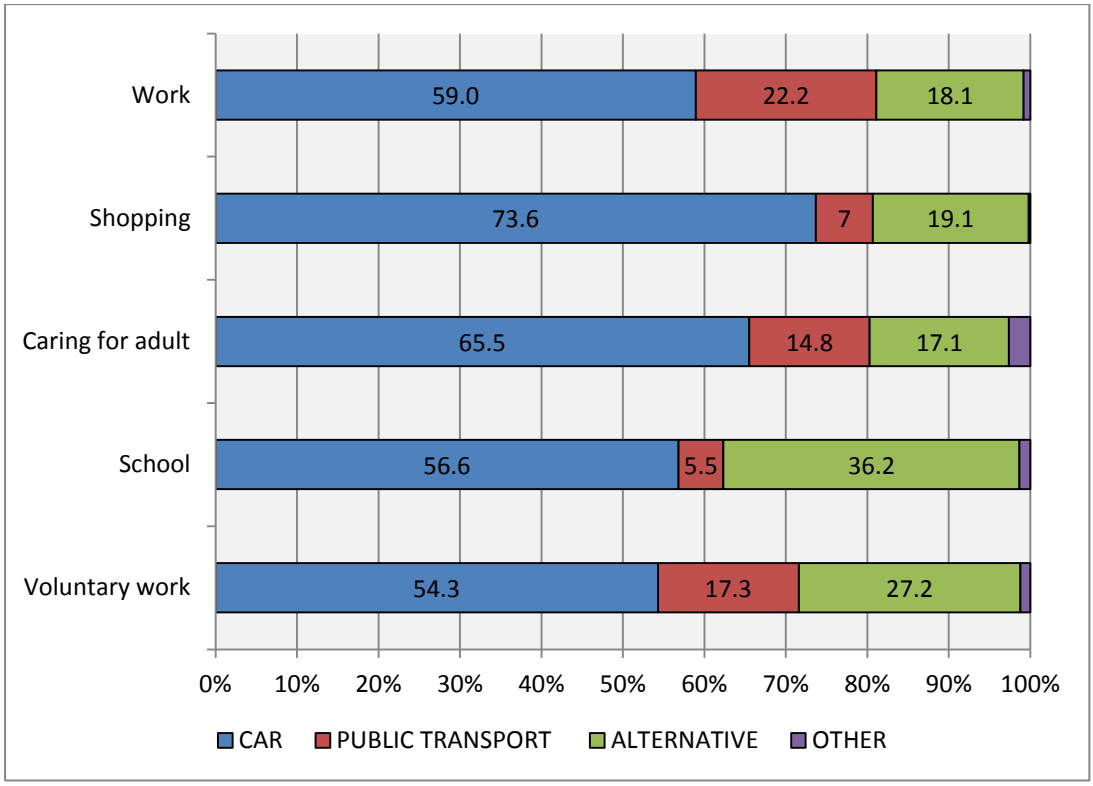


The journey to **work** (*n*=1601) was more likely to entail a **longer journey** than other activities. Overall, nearly a third of respondents (32.3%) travelled further than 11 miles to work.

In contrast, **shopping** (n=2622) and trips to **school** (n=483) were journeys more likely to be undertaken **locally**. 44.4% of respondents undertook their regular shopping trip within 2 miles of their home. 55.3% of journeys taking children to school were 2 miles or fewer, albeit with a much smaller sample size.

There is also evidence of people conducting activities **at home.** 12.1% of people in paid employment worked from home, and 8.3% of shoppers undertook this activity at home. The activity most likely to be undertaken at home was **caring for an adult** (31.7%). This makes sense, given that caring responsibilities may fall to spouses or other close family members of the person in question.

Fig A8. Mode share for every day activities



CAR journeys accounted for the significant majority of all trips. Shopping trips were proportionally the most likely to be undertaken by CAR (68.3%), followed by school trips (55.3%) and the journey to work (54.0%).

PUBLIC TRANSPORT was used most for the journey to work (20.3%) and voluntary work (15.8%). IN contrast, these journeys represented only a small share of shopping (6.5%) and school journeys (5.4%).

ALTERNATIVE modes were proportionally most likely to be used for journeys to school (35.2%) and voluntary work (24.9%). These represented 16.6% and 17.7% of work and shopping trips, respectively.

Other modes referred to journeys by taxi and by air, and represent a very small proportion of journeys.

Respondents who stated that they usually undertook the activity at home were assumed not to use a mode of transport and were therefore omitted.

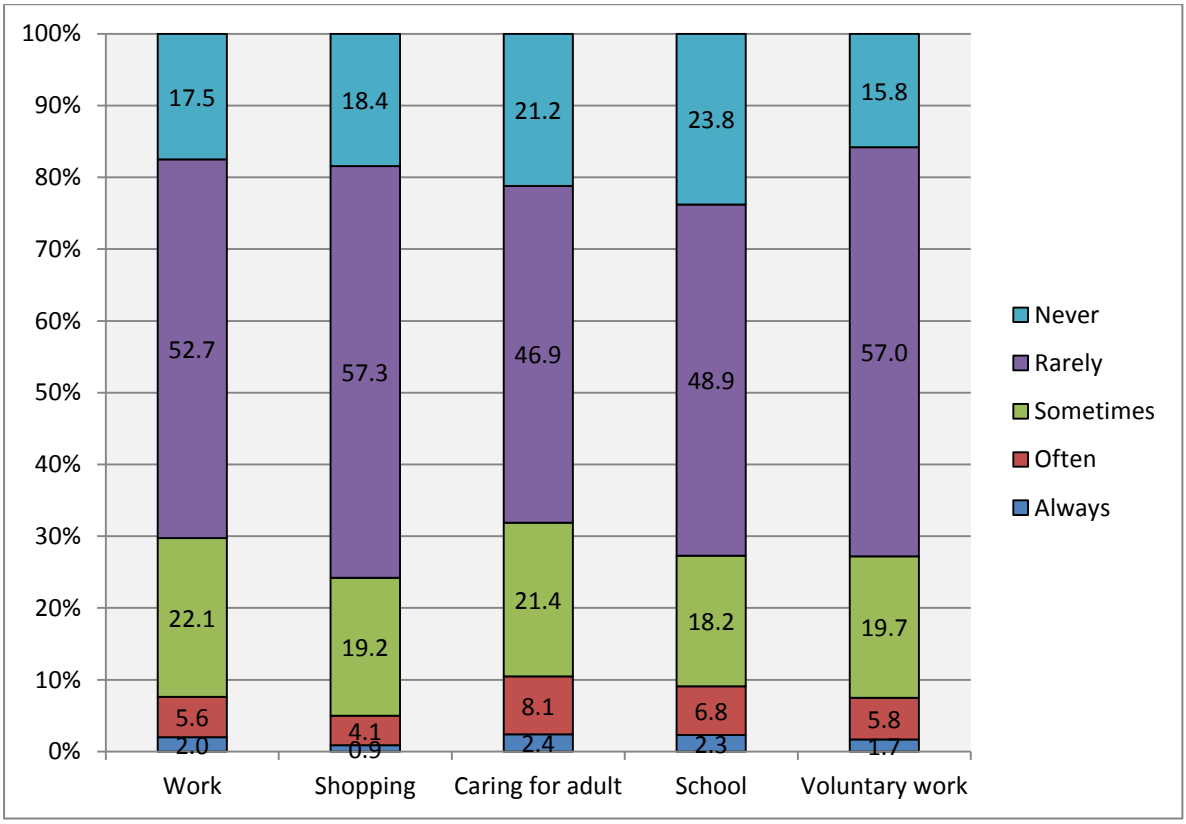
A5. The frequency with which everyday activities are disrupted.

Levels of disruption for everyday activities were relatively low amongst the sample.

For the journey to **work**, 7.6% of respondents stated that they were 'always' or 'often' disrupted, with an additional 22.1% noting that they were 'sometimes' disrupted.

Shopping journeys were reportedly the least likely to be disrupted, three quarters of respondents (75.7%) stated that they were 'never' or 'rarely' disrupted. It is possible that this is a result of the reduced time pressures generally associated with these trips.

Fig A9. Frequency with which everyday activities are disrupted



When all journeys are taken into account in combination, however, it can be seen that **11.3%** of respondents were **'always' or 'often' disrupted for at least one of the journeys** they undertook. This is to say that just over **1 in 10 people** in the sample have to **deal with disruption regularly as part of their everyday life.**

A6. The perceived ease with which activities and associated journeys could be undertaken by a different mode, at a different time of the day, or re-arranged (i.e. perceived flexibility)

Respondents were asked to think about the last time, if at all, they had undertaken the 5 activities listed above and rate how easy/difficult it would have been for them to have:

- used a **different mode** from the one they used
- travelled at a **different time** of the day
- **cancelled** or **postponed** the trip

The rating scale was as follows:

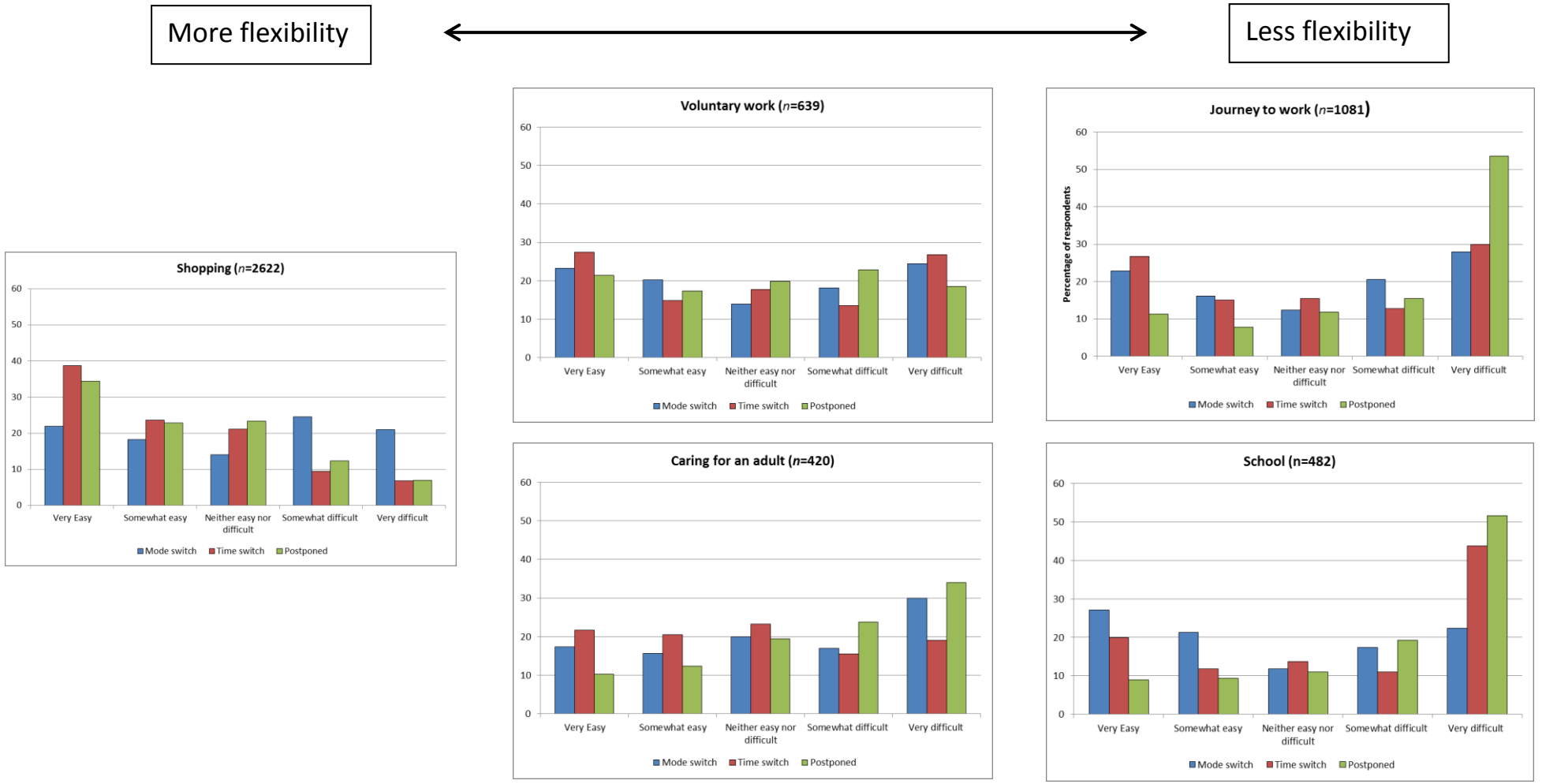
1= Very easy, 2= Somewhat easy, 3= Neither easy nor difficult, 4= Somewhat difficult, 5= Very difficult

Generally speaking, respondents felt that it would have been **easiest to travel at a different time** of the day. Across the five journey types (while noting the varying sample sizes), on average **26.9%** of respondents thought that it would have been **'very easy' to have travelled at a different time** of the day. Similarly, on average **22.5%** of respondents thought that it would be very easy for them to have used a **different mode**. On average, **17.2%** of respondents considered it to be very easy to have **postponed** their trip.

However, there was significant variation across the different journey types. Perhaps unsurprisingly, the journey to **work** and the trip to **school** were considered to have the **least flexibility** in terms of the potential to switch modes, travel at a different time, or postpone the trip entirely, presumably because of the strict time pressures and associated penalties related to these trips.

For the journey to work, 28.0% of respondents felt it would be 'very difficult' to switch modes, 30% felt it would be very difficult to travel at a different time of day, and 53.6% considered it very difficult to postpone the trip entirely. For the journey to school, while 51.6% and 43.7% thought that it would be very difficult to postpone the trip or change the journey time, respectively, only 22.4% of respondents thought that it would be very difficult to change modes. In contrast, 27.1% thought it would be very easy to change modes for this trip.

Fig A10. Ease with which everyday journeys could be made by a different mode, at a different time, or postponed



Shopping trips were perceived to have the **greatest flexibility** in terms of the time at which the journey is taken or if it could be postponed. Over a third of respondents felt that it would be very easy to travel at a different time (38.8%) or postpone the trip (34.4%). This makes sense given that these journeys will rarely have the same time pressures associated with them as other journeys. However, this is not so much the case with regards to switching modes (22.0%).

For respondents who conduct **voluntary work** or **care for an adult** there was a fairly even distribution in terms of flexibility.

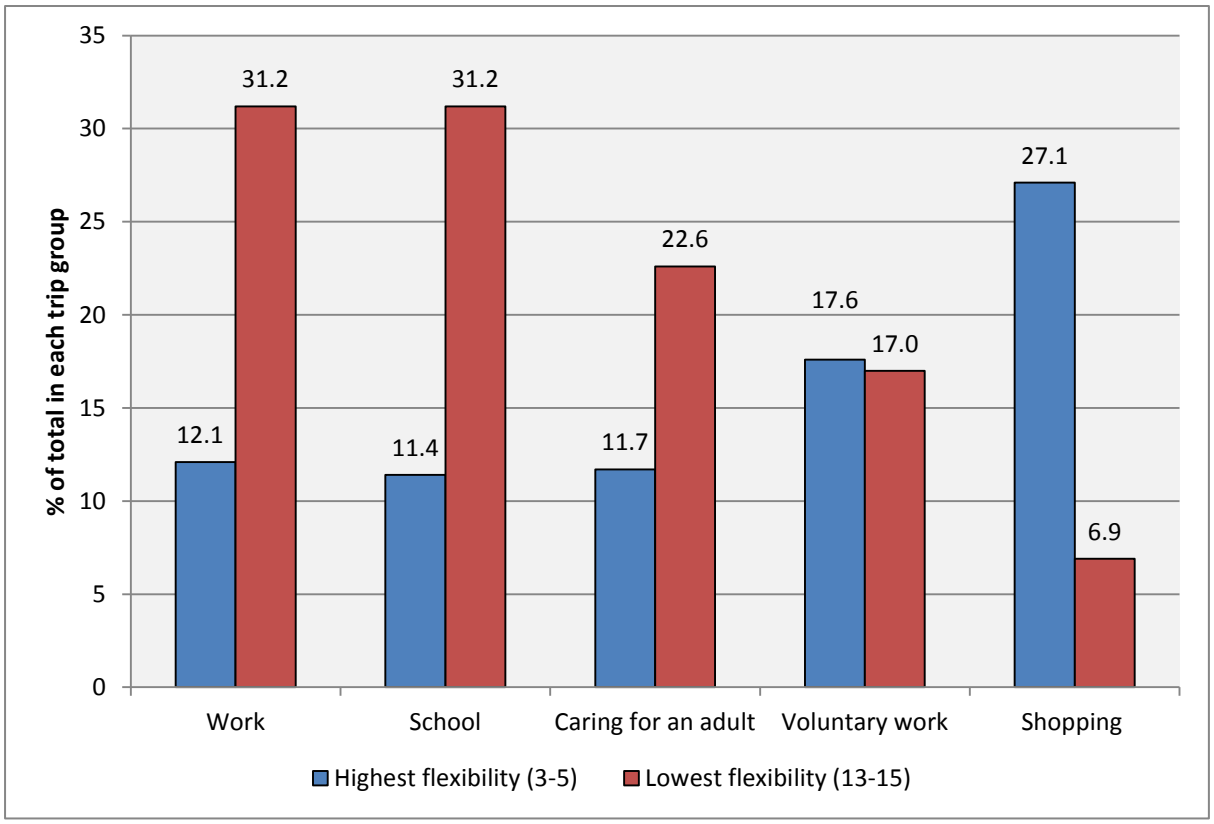
Overall scores were then calculated for each respondent for each journey type. This was done by **summing the ratings provided for the three items** relating to ease of mode switch, time change, and postponement (as described above). As each item was measured out of 5, the maximum score a respondent could receive was 15 (3 x 5), and the minimum score was 3 (3 x 1). Those with low scores were considered to be the most flexibility in terms of changing their journey, whereas those with higher scores were considered to be less flexible. In addition, respondents scoring 3, 4 or 5 were considered to represent respondents with the 'highest flexibility', whereas respondents scoring 13, 14 or 15 were considered to exhibit the 'lowest flexibility'.

Fig A11 compares the relative flexibility (highest v lowest) of respondents for the five different journeys. It can be seen that **shopping is the trip associated with the greatest level of flexibility.** This is to say that a relatively large proportion of shoppers (27.1%) felt they were highly flexible with regards to undertaking this trip. In contrast, only 11.4% of respondents travelling to school, and 12.1% of respondents travelling to work, considered that they were highly flexible for this journey. For these trips, 31.2% of respondents are in the lowest flexibility category (i.e. they could not easily change the time, mode or cancel their trip). Caring for an adult may also be considered an inflexible journey, given that 22.6% of respondents conducting this journey were in the lowest flexibility category.

It is important to remember that this refers to the flexibility of the journey, not the individual. It is quite possible that perceived flexibility will vary for different journeys depending on a wide variety of complex, interacting factors. Having

said that, it is also possible that certain people have made conscious decisions to allow themselves greater levels of flexibility in their travel, and/or may have personalities/character traits that incline them to being more flexible than others.

Fig A11. Comparison of relative share of respondents with 'Highest' v 'Lowest' flexibility for different journey types.



Section B.

Thinking about disruption

Introduction

The second section sought to ascertain how people conceptualise disruption and included a number of different attitudinal statements. Respondents were also asked to describe in their own words the types of events that cause them the most disruption, and how often they occur.

B1. How is disruption conceptualised?
B2. What type of events cause the greatest disruption?
B3. How often does disruption occur and what impact does it have?

Summary

- Disruption was something respondents felt they had little control over and could not be anticipated.
- Experiencing disruption was most likely to cause anger, yet at the same time there was a relatively high level of acceptance of disruption.
- The actions or health of family, friends, colleagues, pets or other people was the largest source of disruption for respondents in the survey, followed by road/traffic conditions, and the weather.
- Disruption severely affected around 1 in 5 respondents in the survey.

B1. How is disruption conceptualised?

A number of **attitude statements** were included in the questionnaire relating to five different aspect of disruption.

- **negative emotional** impacts caused by disruption
- perceptions about the **frequency** with which disruption occurs
- feelings of **control** (or lack of) and **acceptability**
- **positive consequences** that can arise from disruption
- perceived **causes** of disruption

Respondents were asked to state the extent to which they agreed or disagreed with 17 attitude statements, measured on a 5 point Likert scale (1=Strongly disagree, 5-Strongly agree). Mean scores for each statement are shown in Fig B1.

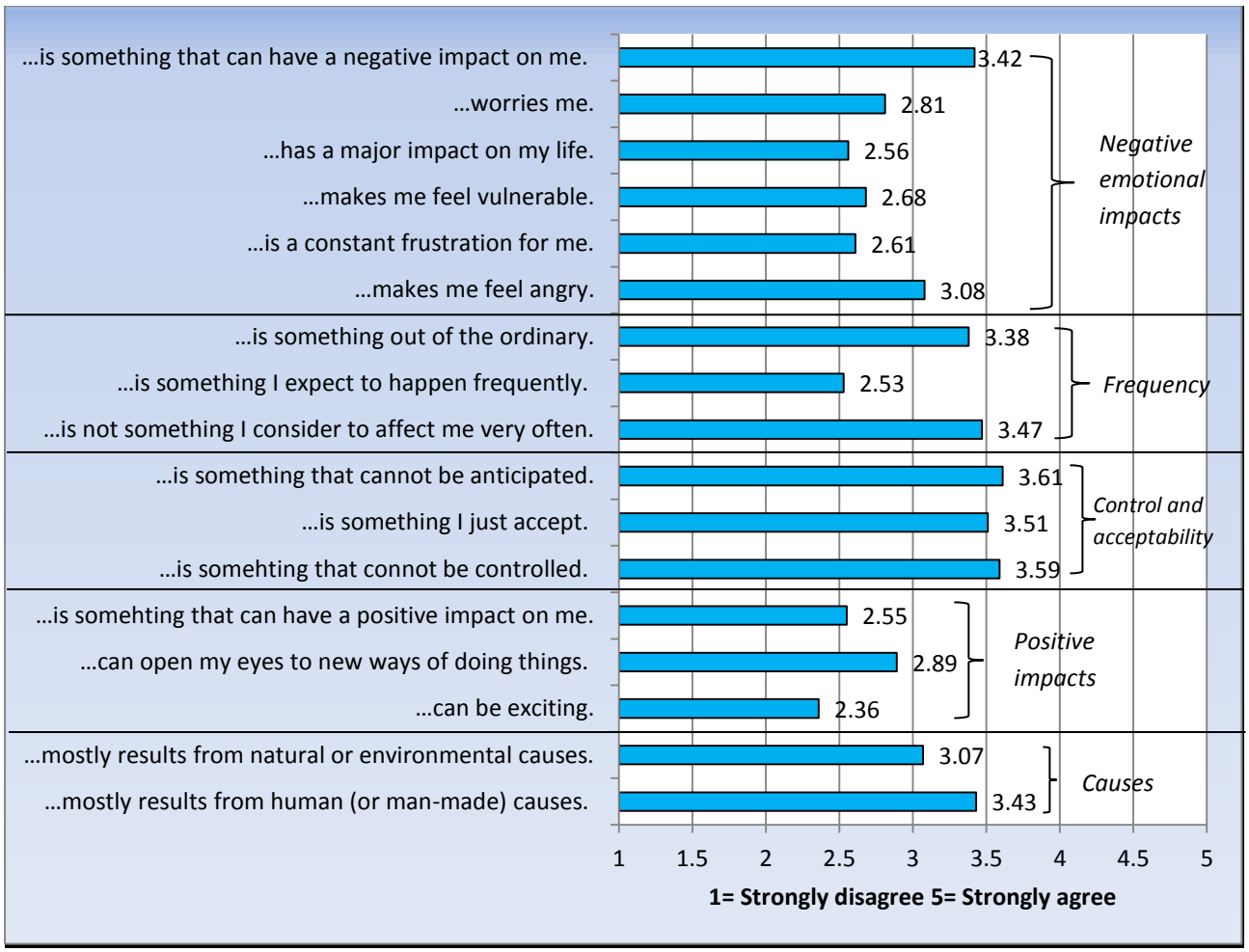
Overall, mean scores for attitude statements in this section suggest that disruption is something that people feel they have **little control** over and something that **cannot easily be anticipated**, indicated by the higher mean scores (and thus levels of agreements) for these statements.

It could also be inferred that **anger** is the most likely emotional response to disruption, given the higher mean score for this item compared with other items. Interestingly, at the same time there also appears to be a relatively high level of **acceptance** of disruption.

Disruption is also seen generally as something that is **out of the ordinary**, suggesting that disruption is not something that has a prominent role in everyday life.

Perceived positive impacts of disruption appear limited from analysis of the attitude statements in this section.

Fig B1. Mean scores for statements relating to conceptualisation of disruption.



B2. What types of events cause the greatest disruption?

Respondents were asked to describe in their own words the types of events that cause the most disruption in their life. Responses were found to fall broadly into 1 of 9 categories.

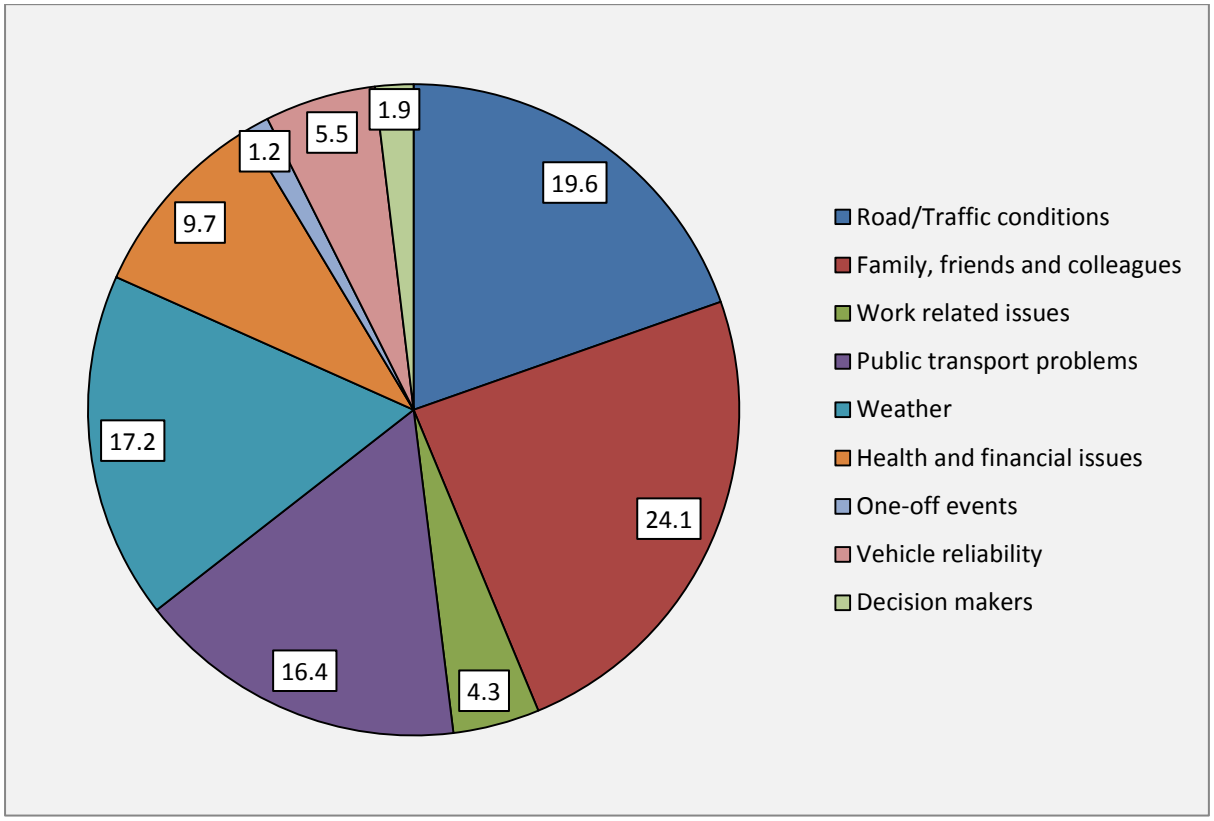
1. **Road or traffic** conditions including parking availability.
2. Actions/health of and/or responsibilities relating to, **family, friends, colleagues**, pets or other people.
3. **Work** related issues such as working hours or work load.
4. Disruptions related to **public transport**.
5. **Weather**.
6. Personal **health** and/or **financial** issues.
7. Unexpected and/or infrequent '**one-off' events**.
8. **Private vehicle reliability** and/or maintenance issues (including bicycles and the internet)
9. **Decision makers** and/or policy makers.

Overall, 68.1% of respondents completed this question (n=1840). Nearly a quarter **(24.1%)** of these felt that the actions or health of **family, friends, colleagues**, pets or other people was the largest source of disruption in their life. This commonly included family or friends failing to keep agreed appointments or arriving unexpectedly, having to fit around the plans of other family members, having to care for family members who had long term illnesses, or caring for children who were sick for a shorter period of time.

19.6% (around 1 in 5) said that **road/traffic conditions** were the biggest source of disruption in their life. This almost exclusively related to problems of traffic congestion due to overcrowding on the roads.

The **weather** was listed as the largest source of disruption by **17.2%** of respondents. Unsurprisingly, this related predominantly to the difficulty associated with travelling in snow or freezing conditions, as well as problems associated with heavy rain and flooding.

Fig B2. Types of events that cause the greatest disruption



16.4% of respondents said that **public transport problems** were the greatest source of disruption. These included delays on rail and London Underground services caused by repair works and maintenance, overcrowding and reduced services during weekends and other off-peak periods. Poor frequency of bus services was noted by a number of respondents, often with specific reference to poor service provision of rural bus services.

Personal **health** or **financial** issues was noted by **9.7%** of respondents (nearly 1 in 10) as the largest source of disruption in their life. Long standing illnesses were the primary source of disruption for respondents in this category. These included mental illnesses such as depression or other psychological problems such as severe anxiety or panic attacks as well as possible physical constraints. A much smaller share of respondents stated that their lives were dependent on their financial situation, which could fluctuate significantly.

Other sources of disruption included **work related issues (4.3%),** typically, alterations in shift patterns or working hours or unusually large workloads. **5.5%** stated that **vehicle reliability** (typically cars breaking down or internet

outages) was the largest source of disruption. **Decision makers, 1.9%** (often in relation to specific companies/operators or government departments) and **one-off events, 1.2%** (for example, very large sporting events or building work being done at home) were addressed by a smaller share of respondents.

B3. How often does disruption occur and what impact does it have?

Respondents were asked to describe in their own words how often disruption affected them and what impact it had on their life. Responses indicating that disruption occurred regularly (at least once a month) and/or had a major impact on their life were coded as 'High Impact'. Where disruption was reported to occur less frequently and/or have little impact on their life, it was coded as 'Low Impact'.

Overall, 2,038 (75.5%) of the sample responded to the question. Of these, **21.4% (n=437)** were classed as **'High Impact'**. This is to say that just over 1 in 5 people who responded to the question felt that disruption affected them frequently and/or had a major impact on their life.

Section C.

Disruptive Scenarios

Introduction

The third section presented respondents with 5 hypothetical disruptive scenarios. For each scenario 5 options were provided describing different actions for managing it, and respondents were asked to rank the likelihood of them choosing each one (1=Most, 5=Least). Each option related to 1 of 5 different *types* of adaptations; journey time alteration, mode change, delegation, cancellation, or business as usual (i.e. carrying on as normal).

The purpose of the exercise was to explore how attitudinal and situational characteristics were reflected in the choices people made when facing a disruption.

While the scenarios were hypothetical, to try and ensure as much as possible that respondents were making decisions relevant to their current situation, some respondents were excluded from some of the scenarios. For example, only respondents who stated that they sometimes had to travel as part of their work responded to Scenario D about travelling to business meeting.

Scenario A- "Important hospital appointment."
Scenario B- "Travelling to visit friends or family for a special occasion."
Scenario C- "Getting to work through severe road works."
Scenario D- "Important business meeting."
Scenario E- "Taking children to school."

Summary

- Although the scenarios were largely exploratory in nature, respondents appeared to favour altering the time of their journey when faced with disruption. This is consistent with findings from Section A.

Scenario A- "Important hospital appointment."

Selection criteria: All respondents (n=2700)

Imagine you have a health appointment at the hospital at 09:00 on a weekday morning about five miles from your home. You have been waiting for this appointment for several months.

Imagine on the day of the appointment there has been heavy snowfall overnight and more snow is forecast for that day.

Please rank the following options from 1 through to 5, with 1 being your first choice (most favoured), and 5 being your fifth choice (least favoured).

Table C1. Important hospital meeting

Category	Option description	% 1st choice
Journey time alteration	*"Leave early to give you longer to make your journey."*	68.6
Mode change	*"Attempt to make your journey using a different mode of transport."*	7.5
Delegation	*"Ask a friend or relative if they could come and pick you up and take you to the hospital and bring you back again."*	5.1
Cancellation	*"Phone and cancel the appointment."*	12.1
Business as usual	*"Leave home at the time you originally intended and try to use your chosen mode of transport as usual."*	6.7
		n=2700

Scenario B- "Travelling to visit friends or family for a special occasion."

Selection criteria: All respondents (n=2700)

Imagine you are travelling from the UK for a very special occasion to join family or friends who live near Paris in France.

Imagine when you arrive at the airport/train station/ ferry terminal in the UK, you find out that staff working for the travel company you have booked with have gone on strike. They are saying that while they will do everything they can to make sure that services go ahead, there are likely to be significant delays as well as possible cancellations. In response to this news, the price of travelling to Paris from the UK with other travel companies has increased significantly. You are not sure whether you will get a full refund for your journey if you try to cancel it.

Please rank the following options from 1 through to 5, with 1 being your first choice (most favoured), and 5 being your fifth choice (least favoured).

Table C2. Travelling to visit friends or family for a special occasion

Category	Option description	% 1st choice
Journey time alteration	*"Come back tomorrow and try again to avoid any possible disruption even if it means missing some of the family/friends celebrations."*	4.1
Mode change	*"Leave the airport/ferry terminal/train station and attempt to make the trip by other modes."*	16.3
Delegation	*"Try to book a ticket to a different destination in the region of France and ask your family to collect you from the airport/ferry terminal etc."*	12.6
Cancellation	*"Cancel the trip entirely."*	10.3
Business as usual	*"Wait at the airport/train station/ferry terminal and hope that your flight is not too badly affected."*	56.3
		n=2700

Scenario C- "Getting to work through severe road works."

Selection criteria: Respondents who drop-off/pick-up children from school or nursery as part of their journey to/from work (i.e. excluding people not in employment) (n=159)

Imagine it is during the school term and the local council are planning major road works which will involve closing a number of roads (including disruption to walking routes) that you use to make this journey for the next two weeks. This will probably lead to problems of traffic congestion on other routes too.

Please rank the following options from 1 through to 5, with 1 being your first choice (most favoured), and 5 being your fifth choice (least favoured).

Table C3. Getting to work through severe road works

Category	Option description	% 1st choice
Journey time alteration	*"Continue to use your normal transport mode(s), but leave home and work much earlier than normal so that you have more time to make your journey."*	60.4
Mode change	*"You and your child(ren) take a different mode of transport (e.g. cycle, walk, bus) to work/school for the duration of the planned road works."*	16.4
Delegation	*"Ask friends or relatives to escort your child(ren) to/from school."*	9.4
Cancellation	*"Take paid leave so that you know that you will be able to escort your child(ren) from school."*	3.1
Business as usual	*"Continue to use your normal transport mode by leaving at the usual time, but try and manage the situation as best as you can."*	10.7 n=159

Scenario D- "Important business meeting."

Selection criteria: Respondents who have to travel outside of their normal workplace to attend meetings or fulfil other work related duties (n=746)

Imagine you are travelling to a town about 100 miles away to give a business presentation to prospective clients as part of your work. Because you would like to practice your presentation beforehand on your computer, you decide to travel by train. The journey is supposed to take 1.5 hours with 1 change of trains en route. On the first leg of your journey your train is severely delayed due to a signal failure ahead. This means that you miss your connecting train and will likely be late for the presentation.

Please rank the following options from 1 through to 5, with 1 being your first choice (most favoured), and 5 being your fifth choice (least favoured).

Table C4. Important business meeting

Category	Option description	% 1st choice
Journey time alteration	*"Try and contact the prospective clients and ask them if they can delay the meeting until later on in the day."*	64.1
Mode change	*"Take a taxi from the intermediate station directly to the client's offices; you believe you will be able to charge the fare to your company later."*	25.9
Delegation	*"Ask a junior work colleague who will also be attending the meeting, and can get there on time, to give the presentation for you."*	5.6
Cancellation	*"Cancel your attendance at the meeting."*	1.2
Business as usual	*"Wait for the next available train at your intermediate station and hope that you are not too late for the meeting."*	3.2
		n=746

Scenario E- "Taking children to school."

Selection criteria: Respondents who normally drop-off/pick-up children from school as part of their day (excluding people in employment) (n=107).

Imagine you fall ill and this makes it hard for you to travel for a few days.

Please rank the following options from 1 through to 5, with 1 being your first choice (most favoured), and 5 being your fifth choice (least favoured).

Table C5. Taking children to school

Category	Option description	% 1st choice
Journey time alteration	*"Continue to use your normal transport mode(s), but leave home and work much earlier than normal so that you have more time to make your journey."*	10.3
Mode change	*"You and your child(ren) take a different mode of transport (e.g. taxi) to school for the duration of your illness."*	1.9
Delegation	*"Ask your partner, friends or relatives to escort your child(ren) to/from school."*	74.8
Cancellation	*"Keep your child(ren) at home for the duration of your illness."*	0.0
Business as usual	*"Continue to use your normal transport mode by leaving at the usual time, but try and manage the situation as best as you can."*	13.1
		n=107

Table C6. Collated responses for disruptive scenarios (first choice)

	Journey time alteration (% 1st choice)	Mode change (% 1st choice)	Delegation (% 1st choice)	Cancellation (% 1st choice)	Business as usual (% 1st choice)
"Important hospital appointment."	68.6	7.5	5.1	12.1	6.7
"Travelling to visit friends or family for a special occasion."	4.1	16.3	12.6	10.3	56.3
"Getting to work through severe road works."	60.4	16.4	9.4	3.1	10.7
"Important business meeting."	64.1	25.9	5.6	1.2	3.2
"Taking children to school."	10.3	1.9	74.8	0.0	13.1
Average	***41.5***	***13.6***	***21.5***	***5.3***	***18.0***

Overall, **journey time alteration** was the **most commonly favoured** option. **Cancellation** was the **least favoured** option.

There was significant variation between the different scenarios. Longer journeys (such as those by air) appear to be more 'fixed' in that a greater share of respondents adopted a 'business as usual' approach for this scenario.

Section D.

Managing Disruption

Introduction

The penultimate section sought to examine how people manage disruption. Questions were included to elicit information regarding the perceived disruption of different types of events, the last time certain events occurred and the perceived likelihood of these same events occurring again in the future. A number of attitude statements were also included exploring experiences of disruption, as well as one question detailing different sorts of adaptive behaviours.

D1. Which events are most disruptive?
D2. When was the last time certain disruptions occurred and how likely are they to occur again?
D3. How is disruption experienced and managed?
D4. What types of adaptive behaviours are employed to minimise exposure to disruption?

Summary

- Overall, being unable to access the internet for three days was considered to be more disruptive than bad weather, a fuel shortage or disruption to the transport system.
- Around a half of respondents (49.4%) had been disrupted in the month preceding the survey.
- Of the different events that were examined, respondents were most likely to have been disrupted by road works in the year preceding the survey.
- Overall, respondents were generally confident in their ability to cope with disruption.
- The high cost and inflexibility of public transport tickets were considered to hinder effective management of disruption.
- Generally speaking, respondents agreed that owning a car made managing disruption easier.
- Respondents also agreed that they often built in extra time into their journey to account for possible disruption.
- Out of 10 different types of adaptive behaviour, belonging to a road-side assistance provider (60.3%) and having a travel insurance policy (38.7%) were the most common.
- Overall, 14.4% of respondents did not conduct any of the 10 behaviours.

D1. Which events are most disruptive?

Respondents were asked to rate how disruptive they thought different events would be to their life (5=Extremely disruptive, 1= Not at all disruptive).

Table D1. Perceived disruption caused by different events

	Event	Score (avg)
Most	Unable to access the internet for three days	3.92
↑	Bad weather made travelling by all modes of transport difficult for three days	3.51
↕	Had to care for a friend or relative for three days at short notice	3.16
↕	A fuel shortage at all petrol stations for three days	2.85
↕	Local bus network was out of action for three days	2.04
↓	Local rail network was out of action for three days	1.83
Least	A problem caused all flights to be grounded in the UK for three days.	1.66

- Being **unable to access the internet** for three days was considered to be the event most likely to cause the greatest disruption. This highlights the important role of the internet in everyday life.

- **Bad weather** and **fuel shortages** were also considered to be fairly disruptive.

D2. When was the last time certain disruptions occurred and how likely are they to occur again?

Respondents were asked when the last time, if at all, their daily activities had been affected by the following events.

- Bad weather conditions
- Industrial strike action
- Road works
- Accident or mechanical failure on public transport
- Having to care for a friend or relative (including children)

Table D2. Experience of different disruptive vents

	Within the past month (%)	More than a month ago, but within the past year (%)	More than a year ago, but within the past 5 years (%)	More than 5 years ago (%)	Never (%)
Bad weather conditions	3.9	56.1	30.4	4.2	5.5
Industrial strike action	0.9	12.2	28.3	24.8	33.8
Road works	42.3	30.0	12.1	4.6	11.0
Accident or mechanical failure on public transport	12.0	22.5	22.5	15.9	27.1
Having to care for a friend or relative (including children)	9.2	18.7	16.8	14.1	41.1

Respondents were most likely to have been disrupted by **road works** in the month preceding the questionnaire. Overall, **72.3%** of respondents had been disrupted by road works in the preceding year.

60% of respondents had been disrupted by **bad weather** in 12 months prior to the survey. It is of course likely that more respondents would have experienced disruption from bad weather more recently had the survey been conducted in the winter months.

Respondents were **least likely** to have been disrupted by having to **care for a friend or relative** (41.1%) or **industrial strike action** (33.8%).

The cumulative number of disruptions experienced in the month prior to the survey was also considered.

Nearly half (49.4%) of respondents **had not been disrupted** by any of the listed events in the previous month.

35.9% of respondents had been disrupted by **one** of the events.

The remaining **14.6%** of respondents had experienced **two or more** of the listed events.

Respondents were then asked to rate how likely they thought they were to be disrupted by the same five events in the following 12 months (5= Very likely, 1= Very unlikely).

Table D3. Perceived likelihood of disruptive events occurring in next year

	Very unlikely (%)	Somewhat unlikely (%)	Neither (%)	Somewhat likely (%)	Very likely (%)	Avg score
Bad weather conditions	5.6	7.1	16.0	40.0	31.2	3.84
Industrial strike action	22.6	18.3	31.2	20.8	7.1	2.71
Road works	8.0	7.6	15.8	29.5	39.1	3.84
Accident or mechanical failure on public transport	19.2	16.8	29.2	21.6	13.2	2.93
Having to care for a friend or relative (including children)	26.3	19.6	27.1	17.6	9.5	2.64

- Overall, respondents felt that they were **most likely to be disrupted** by **bad weather** or **road works** (3.84) in the following 12 months.

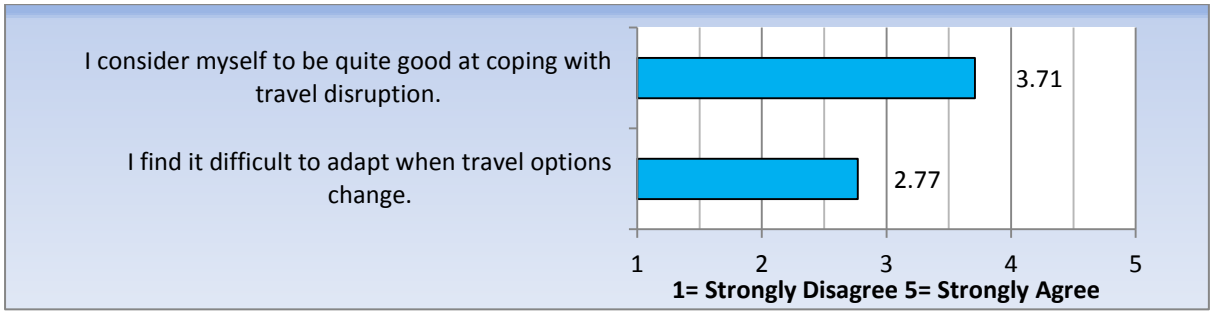
- Nearly **40%** of respondents (39.1%) considered that it was **'very likely'** that they would be disrupted by road works in the following 12 months.

D3. How is disruption experienced and managed?

Respondents were asked to state to what extend they agreed or disagreed with a number of attitude statements relating to how they experienced and managed disruption. These statements were designed broadly around X key themes.

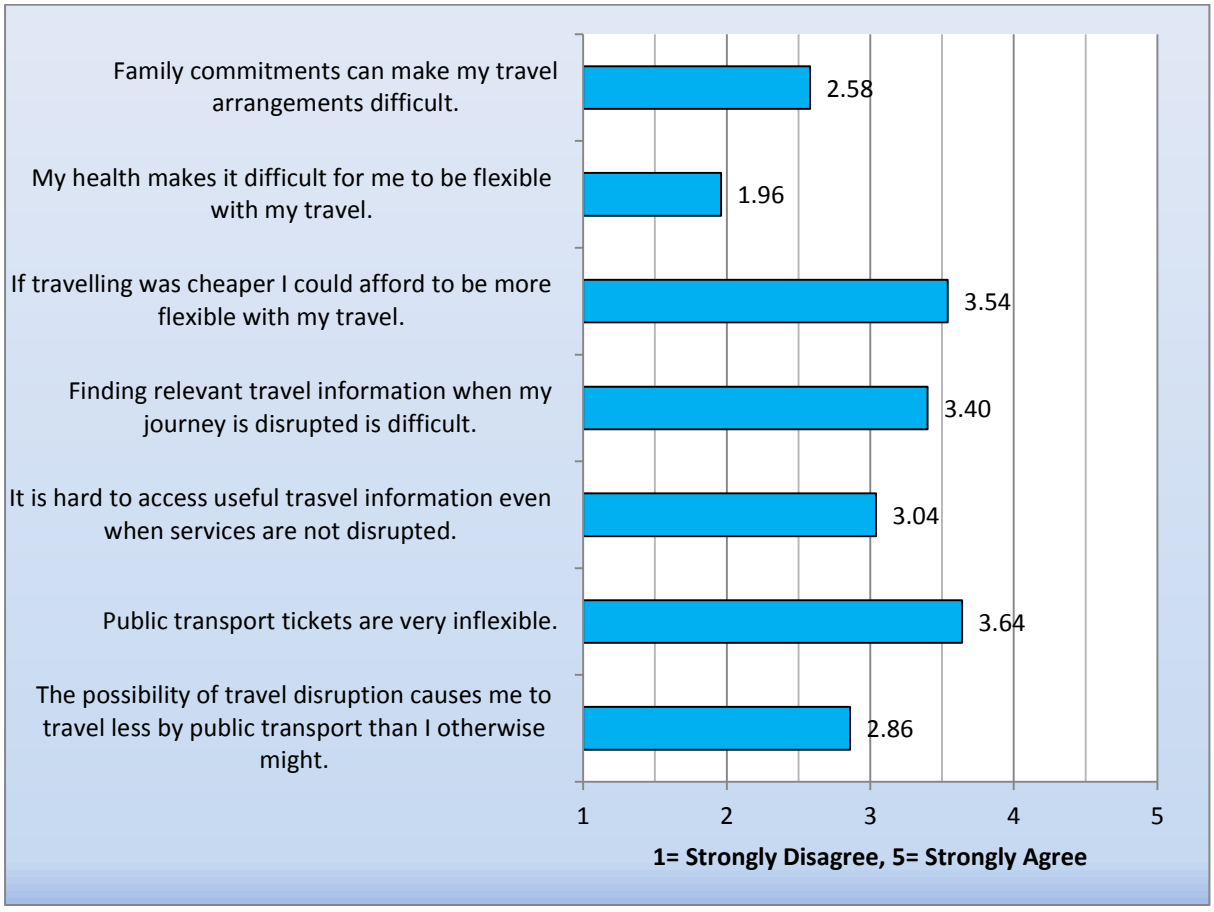
- perceived **coping capacity** to effectively manage disruption
- perceived **barriers** to effectively managing disruption
- **enabling factors** or those that help manage disruption
- the extent of **habitual behaviour** with regards to managing disruption
- attitudes towards **different transport sectors**
- attitudes relating to **work conditions** and **the views of colleagues** (for those in employment only)

Coping capacity



Overall, respondents were generally **confident** in their ability to cope with disruption.

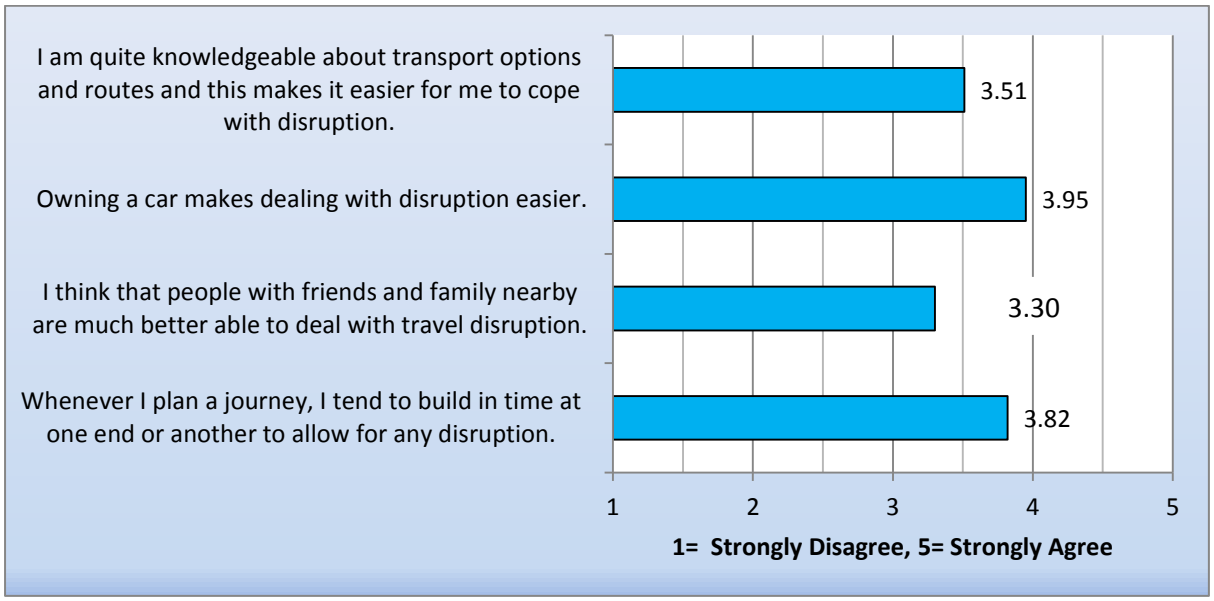
Barriers



The **high cost** and **inflexibility** of public transport **tickets** were considered to hinder effective management of disruption, although there was not especially strong agreement with these statements.

There was also a certain level of agreement that finding **travel information** during disruption was difficult.

Enabling factors

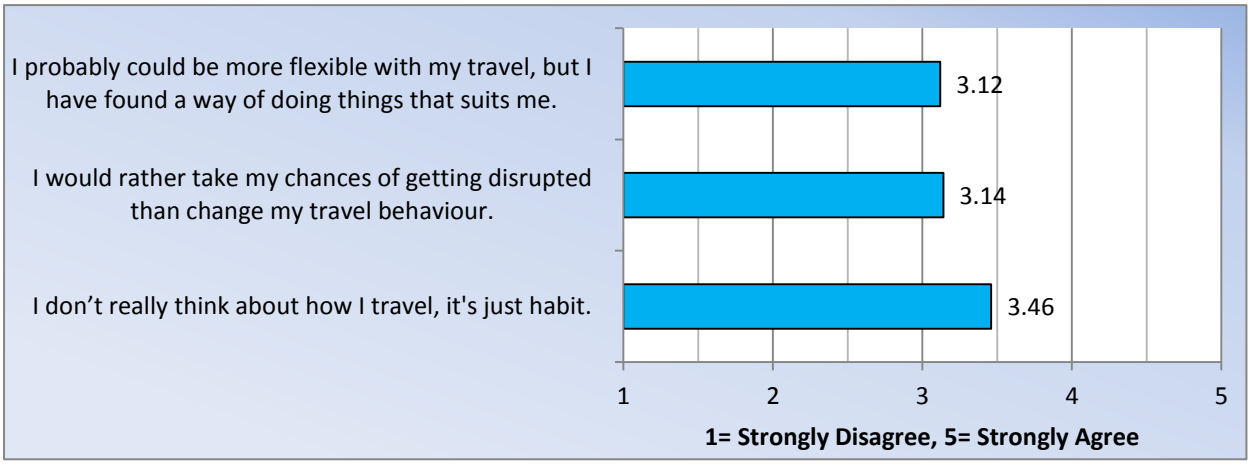


Generally speaking, respondents agreed that **owning a car** made managing disruption easier.

Respondents also agreed that they often **built in extra time** into their journey to account for possible disruption.

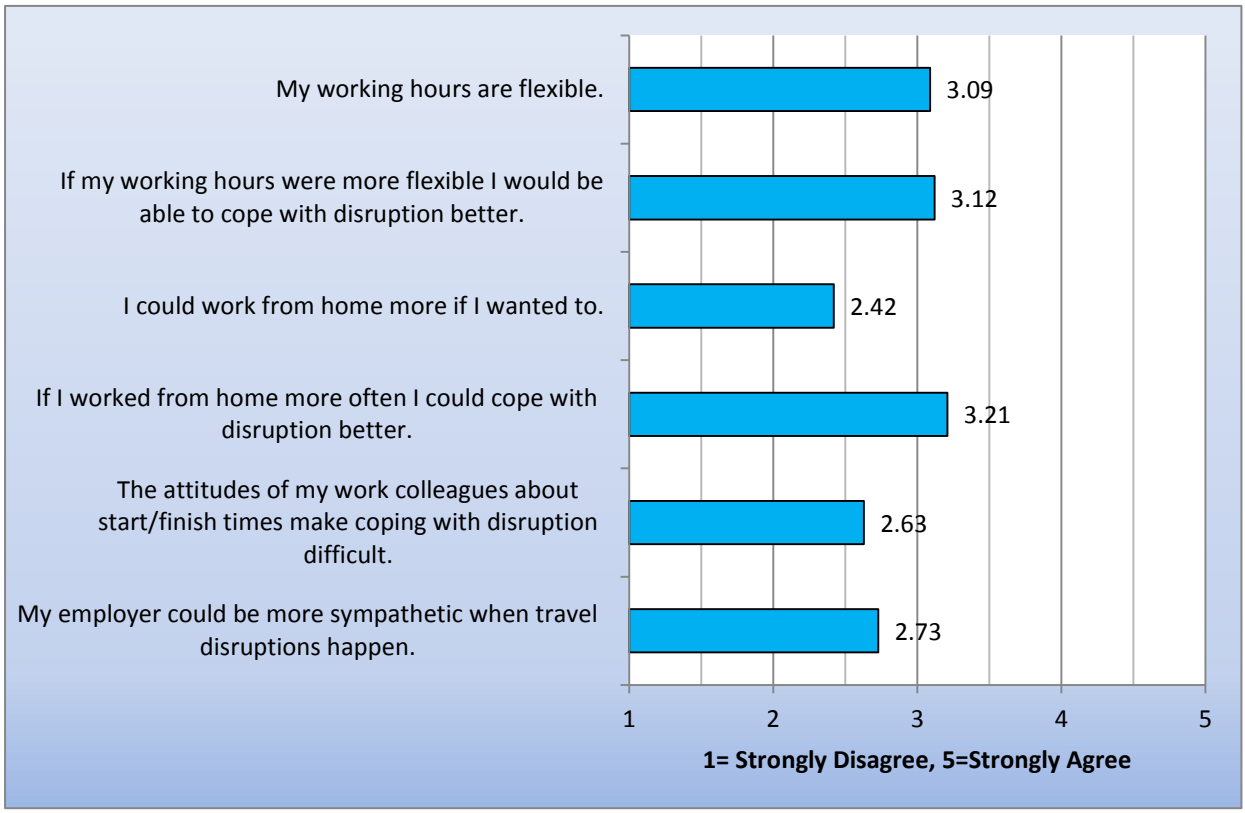
In addition, respondents also generally felt they were quite **knowledgeable about transport options** which made managing disruption easier.

Habits



There was neither particularly strong agreement nor disagreement with regards to statement about habitual travel behaviour.

Work conditions and opinions of colleagues



Overall, people who were currently in employment **did not think** that they would be able to **work from home more often,** but, if there were, that this would help them deal with disruption better.

D4. What types of adaptive behaviours are employed to minimise exposure to disruption?

Respondents were asked to state if they owned/did 10 different items/types of behaviours that could help minimise the impact of disruption.

Behaviour	Share of respondents (%)
Own winter tyres.	5.6
Mostly purchase flexible public transport tickets (e.g. open returns).	11.9
Keep a repair kit and tool box in your vehicle at all times.	24.3
Have the telephone numbers of transport operators/information services saved in your mobile/smart phone.	11.7
Have the website/ 'apps' of the transport operators saved in your mobile/smart phone.	21.1
Have a travel insurance policy.	38.7
Belong to a road-side assistance provider.	60.3
Keep a small amount of loose change with you in case you need to use the bus.	30.7
Keep a spare pair of clothes at work in case you need to stay overnight somewhere at short notice.	3.1
Have a mobile phone purposely for emergencies.	31.0

Of the 10 behaviours, belonging to a **road-side assistance provider** (60.3%) and having a **travel insurance policy** (38.7%) were the most common.

Overall, **14.4%** of respondents **did not conduct any** of the 10 behaviours.

Section E.

Socio-demographics

Introduction

The final section of the survey elicited key socio-demographic information.

E1. Age and Gender
E2. Living arrangements
E3. Health
E4. Income and Education

Summary

- Age and gender splits were evenly distributed.
- The majority of respondents (66.1%) were living with a partner of spouse.
- The most common household structure was a couple living without children.
- Households with children accounted for 19.5(%) of respondents in total.
- Nearly half (49.6%) of respondents had lived in their current place of residence for more than 10 years.
- 13.9% of respondents stated that they had a disability or prevailing health condition that impaired their mobility.
- Of these people, 12.5% were wheelchair users (1.7% of total respondents).

E1. Age and Gender

Quotas were purposefully implied by YouGov to ensure an **even distribution** of age and gender in the data.

Age	%
19-29	13.4
30-39	17.6
40-49	17.8
50-59	19.6
60-69	23.0
70+	8.7

Gender	%
Male	49.9
Female	51.1

E2. Living arrangements

Around **two thirds of respondents** were living with a **spouse or partner**.

People living **alone** accounted for **20.3%** of respondents (roughly 1 in 5 people).

Status	%
Living with spouse/partner	66.1
Living with parents	6.7
Living with friends	3.0
Living alone	20.3
Other	4.0

Using information relating to the number of residents currently living in the household, it was possible to derive a measure of **household structure**.

Household structure	%
Single adult (under 65)	15.5
Single senior (65 and over)	4.9
Two or more unrelated adults, no children	3.0
Couple (18 or over), no children	40.6
Couple (18 or over) with child/children (17 or younger)	16.9
Lone parent (18 or over) with child/children (17 or younger)	2.9
Other	16.3

The **largest** share of respondents were living with a **spouse or partner with no children** (40.4%)**.**

Households with **children** accounted for **19.5(%)** of respondents in total.

The precise structure of households in the **'Other'** category was hard to determine from the data, but may include, but may include households where there is an elderly relative living with a larger family group.

Nearly half (49.6%) of respondents had lived in their current place of residence for **more than 10 years**.

8.2% of respondents had lived in their current place of residence for **less than a year**.

E3. Health

13.9% of respondents stated that they had a **disability** or prevailing health condition that impaired their mobility.

Of these people, 12.5% were wheelchair users (1.7% of total respondents).

Respondents were also asked to rate their overall health.

Health status	%
Very good	28.8
Good	42.3
Fair	21.9
Bad	5.6
Very bad	1.4

E4. Income and Education

Respondents were asked to state their combined household income.

Income band	%
Less than £20,000	18.3
£20-49,999	38.1
£50-74,999	12.2
£75,000+	9.3
Withheld	22.1

Respondents were also asked to state the highest education qualification they had received.

Highest qualification	%
No formal qualifications	4.8
GCSE or A Levels	23.2
Undergraduate or Postgraduate degree	42.6
Other including professional, trade and apprenticeships	27.2
Don’t know or withheld	2.1