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# **Essex Local Delivery Pilot: Baseline Data Report**

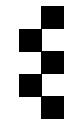
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**The University of Essex Evaluation Consortium**

**January 2020**

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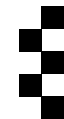


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# **1. Executive Summary**

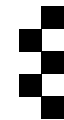
# Executive summary 1

- The Essex Local Delivery Pilot (LDP) is concerned with tackling persistent social inequalities, which prevent people in Essex from enjoying the physical, social and mental health benefits of an active lifestyle
- Its vision is to tackle the issues of inactivity in Essex head on, and for the county to become a beacon for best practice in reducing physical inactivity
- It is specifically targeting individuals who live within deprived areas (lowest 4 Index of Multiple Deprivation (IMDs)) in Basildon, Colchester and Tendring, and in particular families with dependent children, people aged 45 or older, and people experiencing poor mental health
- A baseline survey was designed which drew on questions from the national LDP framework, along with questions chosen specifically for the Essex LDP



# Executive summary 2

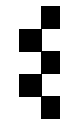
- Physical inactivity is high (57.3%) in the Essex LDP priority areas, but there is variation in (in)activity levels across areas and populations
- 33.6% of individuals who do no activity at all that raises their breathing rate, do perform lighter intensity activity
- The relationship between physical activity and personal wellbeing in the Essex LDP priority areas was weaker than at national level
- The Essex LDP priority areas, and Tendring particularly, generally have high satisfaction with local areas, strong sense of community, and social trust
- Capability and motivation are strong predictors of performing at least 30 minutes of moderate physical activity



# Executive summary 3

The Essex LDP and linked interventions should:

- Continue to focus on improving physical activity levels in the three priority areas (Basildon, Colchester and Tendring) and the three target populations (families with dependent children, people aged 45 or older, and people experiencing poor mental health)
- Encourage and enable individuals undertaking light activity to increase their intensity
- Target individuals' perceived capability and motivation towards physical activity, as 'just' providing opportunities may not be sufficient
- Embrace the strong community spirit to foster community engagement in interventions and support the creation of social movements to promote physical activity
- Further explore barriers and enablers to physical activity, in both the three priority areas and the three target populations



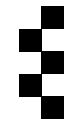


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## **2. Introduction to the Essex Local Delivery Pilot**

# Introduction

- As stated in the application to Sport England for funding, the Essex Local Delivery Pilot (LDP) is focused on tackling persistent social inequalities, which prevent 393,782 people in Essex from enjoying the physical, social, and mental health benefits of an active lifestyle
- The Active Lives Survey (2019), suggests one in four (25.2%) Essex residents are inactive and carry out less than 30 minutes of physical exercise each week, while people living in deprived areas are twice as likely to lead sedentary lifestyles
- The vision of the Essex LDP is to tackle the issues of inactivity in Essex head on and for the county to become a beacon for best practice in reducing inactivity. The Essex LDP also has four specific components that are central to its mission to learn what works and deliver sustainable, whole system change
- Previous Essex LDP reports can be found at:  
<https://www.activeessex.org/eldp-reports/>

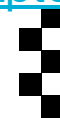




# Four Components of the Essex LDP

1. Leaders need to influence the systems, structures, and investments that they are responsible for, to ensure that physical activity is 'hard-wired' into decisions made at every level of the system
2. Communities need to be empowered to make decisions and be emboldened to remove barriers that prevent people from being active. The Essex LDP strives for a real shift in the decentralisation of power and resources, an increase in capacity, and the birth of social movements that address physical inactivity
3. Places such as parks, streets and buildings need to be 'owned' by the community and be transformed into vibrant active places, which enable people to live more active lifestyles
4. Data and insight need to be continuously collected, interpreted, shared, and acted upon, helping to shape the programme and provide robust evaluation

(Essex LDP - [Chapter Two](#), 2019)



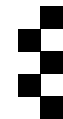
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# Three target populations

- The specific target populations of the Essex LDP are those who live within deprived areas in Basildon, Colchester, and Tendring who are:
  - I. Families with dependent children
  - II. Older people (>45 years old)
  - III. People with poor mental health

These groups often face the biggest challenges in being physically active, but also have the most to gain from increased physical activity. However, this does not mean that other Essex residents are left out – the Essex LDP acknowledges that it is important to strike a balance between targeted interventions and a universal offer, if changes in levels of physical activity across the population are to be achieved and sustained

(Essex LDP - [Chapter Two](#), 2019)



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# I. Families with dependent children

Children reflect activity in families and there is a significant fall in activity levels when children reach secondary school with only 20% of secondary school girls reaching the required level of activity.

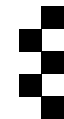
In Tendring 70% of children are driven to primary school providing the opportunity to increase levels of walking and cycling to school.

Young parents can also suffer from higher levels of poor mental health and isolation, and we need more tailored local solutions that use physical activity to help families with dependent children.

This group includes:

- All those within any extended family where an individual's activity impacts on another family member. It is therefore not restricted to family-based activities.
- This includes children encouraging their siblings, parents and grand-parents and vice-versa.
- Any activity that influences the family including school, community or work-based activities that encourage the child/parent/grandparent to increase activity to the rest of the family.

(Essex LDP - [Chapter Two](#), 2019)



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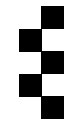
## II. Older people (over 45 years)

Physical inactivity increases rapidly in old age. In Essex, 31.5% of residents aged 65-74 are physically inactive. This increases to 54.7% for residents aged 75-84, and 79.2% for those aged over 85.

This group seeks to promote 'healthy ageing' and therefore includes:

- Middle age (45-65 years) in which the ageing process can be strongly influenced
- All those who are at risk of functional decline (this is not age-specific)
- Those at transition points (retirement, bereavement, relationship loss, moving to a new house etc)

(Essex LDP - [Chapter Two](#), 2019)



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# III. People with poor mental health

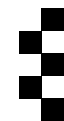
17,390 children and young people aged between 5-16 years have a mental disorder and 16% of the population aged 16-74 across Essex have a common mental health disorder.

Up to 40% of some groups of older people have depression. 25,290 people in Essex come into contact with specialist mental health services, 4,385 are on a Care Programme Approach and 160 are subject to the Mental Health Act.

This group includes:

- The mental health and wellbeing of the whole population
- Those with more severe mental health problems requiring NHS treatment and who tend to be the least active
- All those with mild to moderate ill health diagnosed by a health professional or self-diagnosed. The aim is to use physical activity as a first line intervention in the care pathway

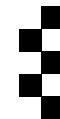
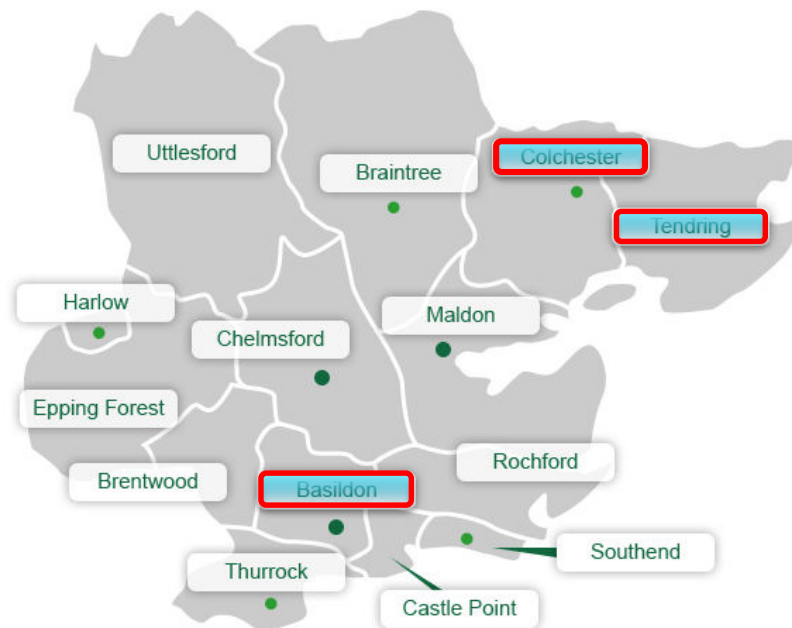
(Essex LDP - [Chapter Two](#), 2019)



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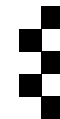
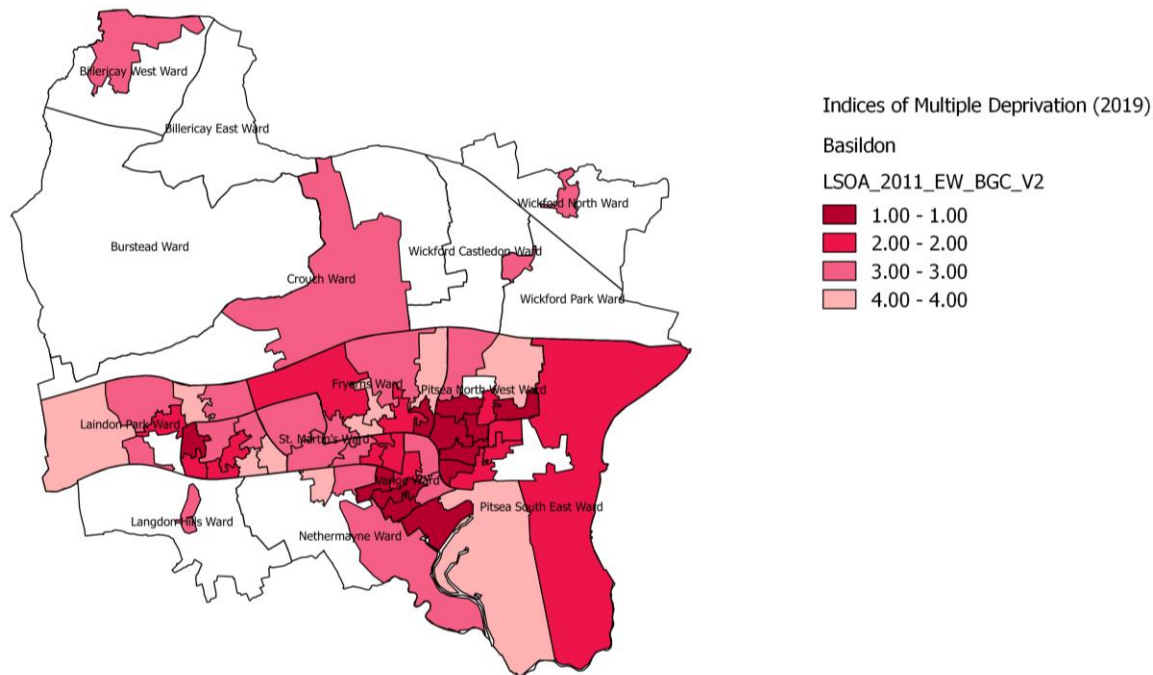
# Three areas of deprivation

- Basildon, Colchester and Tendring were chosen because of their high levels of inactivity and deprivation, which are directly linked
- There appears to be a lack of community and voluntary sector activity, and limited co-production within these local communities
- They were also chosen because they had unique place-based issues



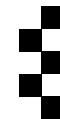
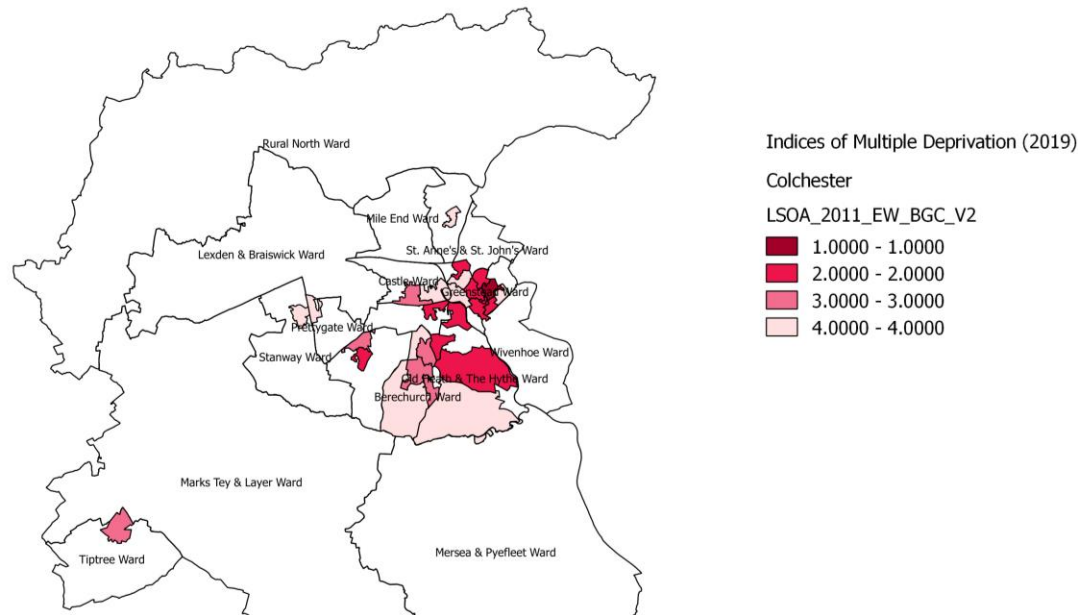
# I. Basildon

- Communities have suffered because of the austere physical infrastructure, built following World War 2, and challenges have come from changes in the fashion for town planning from the new town era



# II. Colchester

- The gap between areas of deprivation and other communities is widening at a rapid pace. The challenge is to be mindful of the needs of existing communities to ensure that growth benefits all.



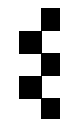


- Widespread inequalities and low-incomes directly linked to the demise of local coastal economies, symbolised by Jaywick Sands (it is the number one area for deprivation in the UK)



# Public Health England data on the three areas

	England	Essex	Basildon	Colchester	Tendring
<b>Life Expectancy at Birth (years) (males) (2015-17)</b>	79.6	80.2	79.6	80	77.8
<b>Life Expectancy at Birth (years) (females) (2015-17)</b>	83.1	83.3	82.7	83.2	81.5
<b>Under 75 Mortality Rate (per 100,000) from All Causes (Persons) (2016-18)</b>	330	308	350	298	400
<b>Emergency hospital admissions Ratio (per 100) for all causes, all ages (2013/14 - 17/18)</b>	100	89.6	90.4	97.2	100.3
<b>Rate (per 100,000) of Hospital Admissions for Violence (inc sexual violence) (2015/16 - 17/18)</b>	43.3	28.8	34.5	34.9	50.8



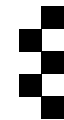


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# **3. The Essex LDP Baseline Data Collection**

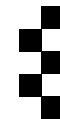
# The Essex LDP baseline data survey

- The baseline survey questionnaire was designed by the University of Essex Evaluation Consortium. It incorporates a number of questions from the national LDP framework to enable direct comparison with other LDP sites, along with questions chosen specifically for the Essex LDP.
- In an effort to compare the feasibility of different methods of data collection and to gain participation from all the groups in the specific areas to be targeted, three survey data collection methods were employed (door knocking, targeted community locations, and online via social media).



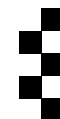
# National framework

Outcome	Indicator	Measure(s)
Physical wellbeing	Physical activity	Short Active Lives (SALS)
Personal wellbeing	Life satisfaction Happiness Worthwhile Anxiety	ONS4
Individual development	Self-efficacy	'I can achieve most of the goals I set myself'?
Social and community development	Social trust	To what extent do you agree or disagree that most people in your local area can be trusted?



# Demographic variables

Variable	Measure(s)
Sex	Male, Female, Other, Prefer not to say
Age	Years (precise number)
Ethnicity	White; Mixed; Asian or Asian British; Black or Black British; Other Ethnic Group
Physical or mental health conditions	<ul style="list-style-type: none"><li>• Physical or mental health conditions or illnesses that have lasted/expected to last 12 months or more</li><li>• Substantial effect on ability to do normal daily activities</li><li>• Areas</li></ul>
Socio-economic status	Postcode aligned to IMD



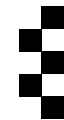
# Additional Essex LDP measures

Outcome	Measure(s)	Source
<b>Physical activity</b>	In the past week, on how many days have you done a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate? This may include sport, exercise, and brisk walking or cycling for recreation or to get to and from places, but should not include housework or physical activity that may be part of your job.	Milton et al. (2011)
<b>Capability, opportunity and motivation to be active</b>	<ul style="list-style-type: none"> <li>• I feel that I have the ability to be physically active</li> <li>• I feel that I have the opportunity to play sport</li> <li>• I find exercise enjoyable and satisfying</li> </ul>	Active Lives
<b>Neighbourhood satisfaction</b>	Overall, how satisfied or dissatisfied are you with your local area as a place to live?	Community Life
<b>Sense of community action</b>	When people in this area get involved in their local community, they really can change the way that their area is run.	Community Life
<b>General health</b>	In general, would you say your health is...?	USOC
<b>Volunteering</b>	In the last 12 months, have you given any unpaid help or worked as a volunteer for any type of local, national or international organisation or charity?	Bespoke
<b>Family</b>	Do you live with any members of your family?	Bespoke
<b>Household</b>	Including yourself, how many people age 16 or older live in your household? How many people under the age of 16 live in your household?	Active Lives
<b>Working status</b>	What is your current working status?	Active Lives

# I. Random stratified sample – ‘Door knocking’



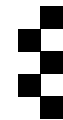
- A fieldwork company (Fieldwork Assistance) was commissioned to undertake face-to-face survey data collection from specific households within deprived areas
- A randomised sampling strategy was used, informed by IMD data
- Respondents were given a choice of either completing the survey themselves on a tablet device, or with the support of an interviewer
- Two individuals (aged 18 years or over) per household could participate





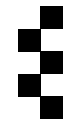
## **II. Convenience sample 1 - Targeted community locations**

- Face-to-face survey data collection was undertaken in relevant areas of deprivation via a tablet device
- These locations included community groups for socially isolated older people, facilities that offer advice to people who are experiencing difficulties with their mental health, a park café near a playground, and a centre offering support for people who are unemployed
- Respondents were given a choice of either completing the survey themselves on a tablet device, or with the support of an interviewer



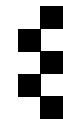
# **III. Convenience sample 2 – Social Media**

- Survey data collection was undertaken via the distribution of an online survey link
- The link was distributed via relevant email networks and social media platforms



# Comparison of three methods of data collection

- Specific learning that was acquired from the comparison of these three methods of survey data collection are detailed later in this report in Section 8.



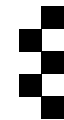


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# **4. Respondents in the baseline data: door knocking**

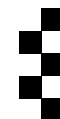
# Sample Design for door knocking

- Probability selection of postcode unit
- If <20 units, adjoining postcodes were combined
- Probability proportionate to size of postcode
- All units within a postcode were used
- Stratified by council, town, and LSOA



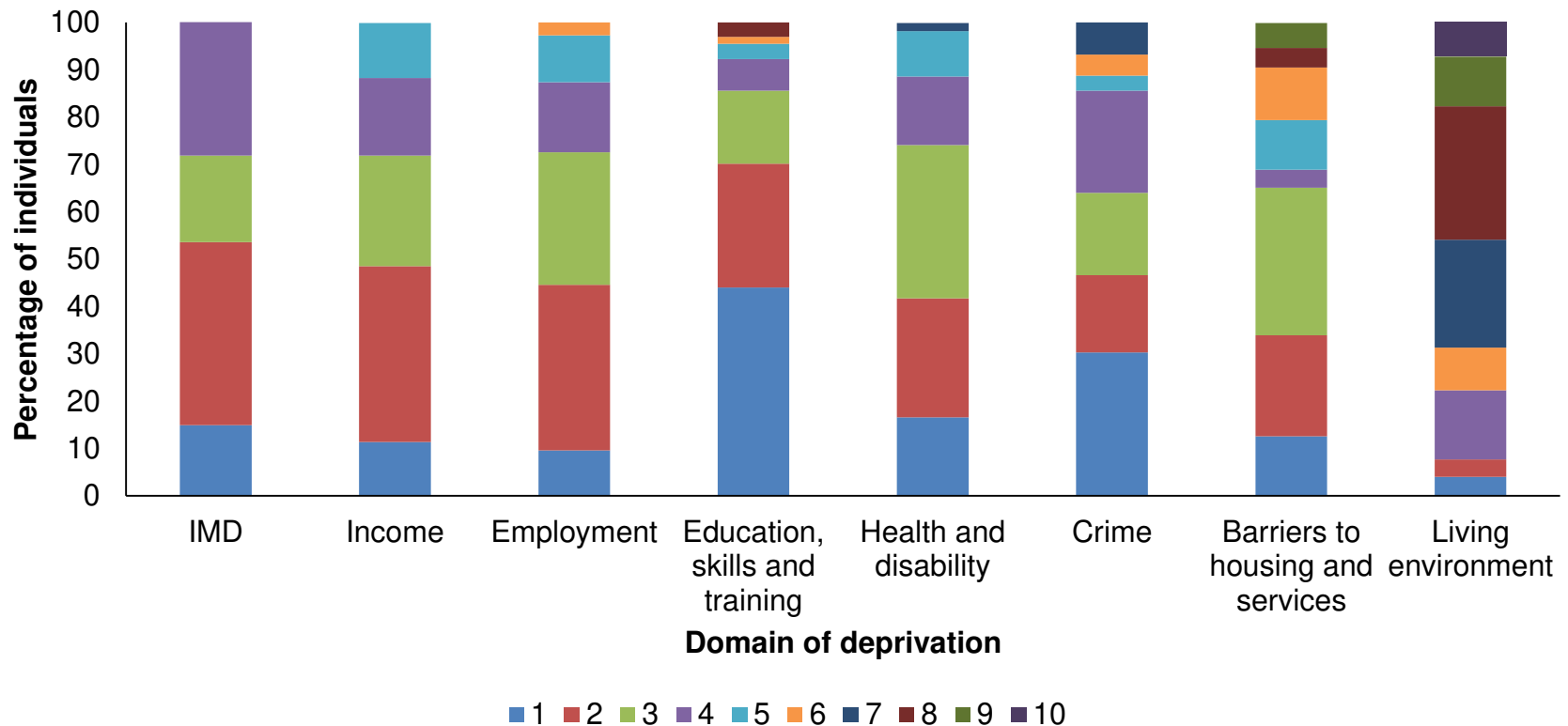
# Door knocking - Demographics of respondents

Variable	Category	Percentage
Sex	Male	46.4%
	Female	53.5%
Age	<45	37.7%
	45+	62.3%
Live with family	Yes	82.8%
Ethnicity	White	90.5%
	Other	9.5%
Long-term physical/mental health condition	Yes	38.5%
Employment	Working	43.1%
	Not working	50.5%
	Student	6.5%



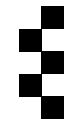
# Indices of deprivation were generally high (i.e., deciles 1-4)

- The figure shows the percentage of individuals within each decile for overall IMD and each specific domain of deprivation.



# **Making the sample representative of the population**

- Weights Raked were used with three factors: IMD, Area, and Sex
- Proportions based on population data
- Area: B - 0.42; C - 0.23; T - 0.36
- IMD: 1 – 0.21; 2 – 0.24; 3 – 0.24; 4 – 0.30
- Sex: M – 0.49; F – 0.51





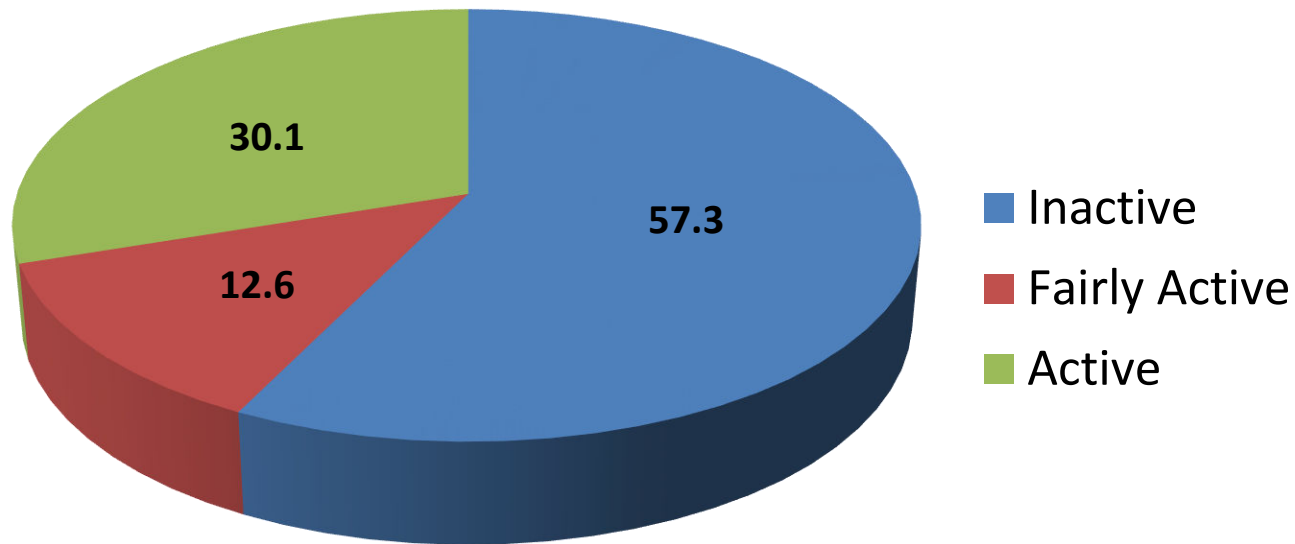


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# 5. Physical activity: Levels, types and intensities

**NB. The primary analyses and data focuses (section 5, 6, 7) on the random stratified sample ('door knocking') unless otherwise stated**

# There are high levels of inactivity in the Essex priority areas

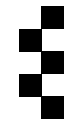


- The majority of adults in the Essex LDP priority areas (57.3%) do not perform 30 minutes of moderate activity in a week
- This inactivity estimate is significantly higher than estimates for Essex (25.2%) and England (24.8%) from Active Lives data (May 18/19)

# Inactivity is high across all areas, particularly Tendring

Area	Inactive (< 30 mins)	Fairly Active (30-149 mins)	Active (150+ mins)
Overall	57.3%	12.6%	30.1%
Basildon	50.1%	16.0%	33.9%
Colchester	47.7%	19.1%	33.2%
Tendring	69.6%	5.9%	24.5%

- Physical inactivity is an issue in the Essex LDP priority areas and should be strategically targeted



# Inactivity levels are also high in the Essex priority groups

Group	Inactive (<30 mins)	Fairly Active (30-149 mins)	Active (150+ mins)
Families	56.0%	12.7%	31.3%
Older (45+ years)	63.5%	12.1%	24.4%
Chronic poor mental health	67.8%	8.4%	23.8%
Very high anxiety	66.8%	23.8%	20.0%

Why are inactivity levels so high?

A number of factors.....

# I. Hard to reach population living in deprived areas

- Existing Active Lives data reveals a trend for higher inactivity in the most deprived deciles (see below - Source: Active Lives data May 18-May 19).

Area	Inactive	Fairly Active	Active
Basildon	27.3%	12.5%	60.3%
Colchester	22.6%	13.5%	63.9%
Tendring	30.5%	15.7%	53.9%
Essex	25.2%	13.1%	61.7%
Essex (IMDs 1-4)	28.2%	13.6%	58.2%
England	24.8%	12.0%	63.2%

## II. Demographics of priority groups are linked with inactivity

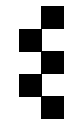
- Existing Active Lives data reveals a trend for higher inactivity in older adults, those with disabilities, and those in lower social groups  
(Source: Active Lives data May 18-May 19)

Demographic	Category	Inactive
Age	16-34	18.2%
	35-54	21.1%
	55-74	26.9%
	75+	49.5%
Disability (long term, limiting)	No disability	20.2%
	Disability	40.2%
Social status	NS SEC 1-2: Higher social groups	16.2%
	NS SEC 3-5: Middle social groups	24.2%
	NS SEC 6-8: Lower social groups	33.0%
	NS SEC 1-2: Students and other / unclassified	19.3%

# III. Seasonal variation

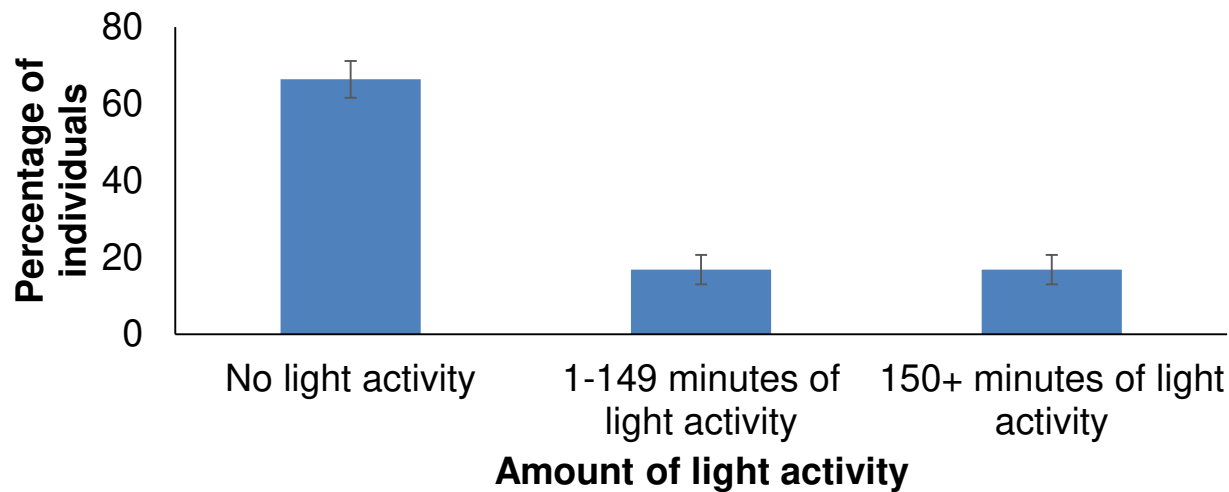
- Baseline data were collected in Nov-Dec 2019.
- Existing data reveals a trend for lower levels of physical activity in the winter months (Full Active Lives: All activity including gardening)

Months	All activity (150+ minutes of MVPA)
Nov-Feb	63.2%
Feb-Mar	66.4%
May-Aug	72.2%
Aug-Nov	70.8%

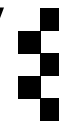


# Inactive does not mean no activity

- The figure below shows the level of light activity performed by 'inactive' individuals (< 30 minutes of moderate activity).



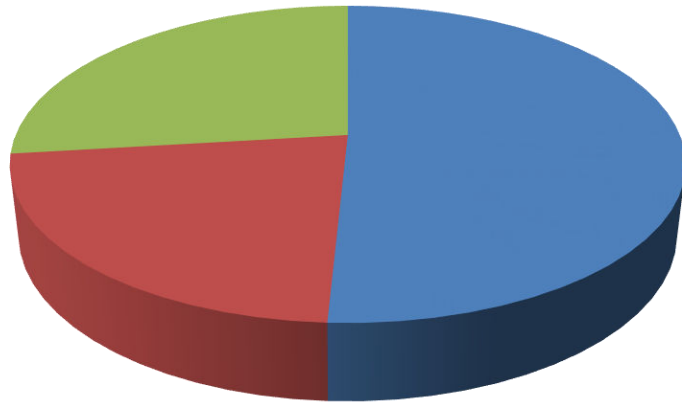
- The Essex LDP and interventions should encourage and enable individuals undertaking light activity to increase their intensity
- However, 66% of 'inactive' individuals perform no activity whatsoever





# Walking: Participation and intensity

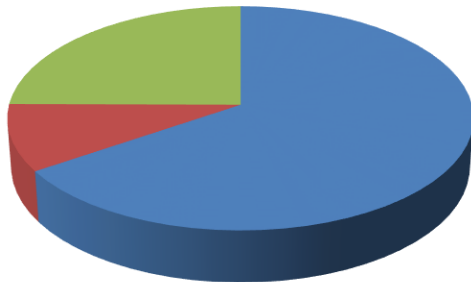
Overall



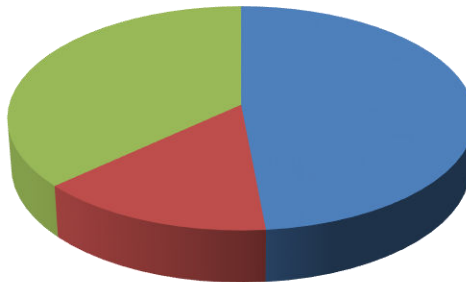
■ No walking ■ Light walking ■ Moderate walking

- The figures show the percentage of individuals who engage in walking and at what intensity.
- Residents of Tendring often walk, but at lower intensity.
  - Can they be encouraged to increase their intensity?

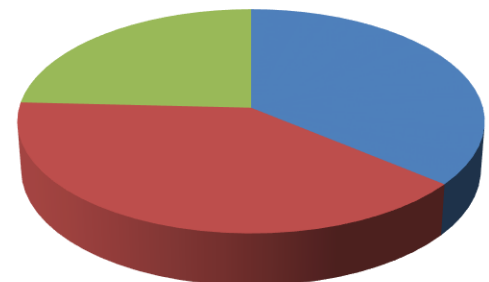
Basildon



Colchester

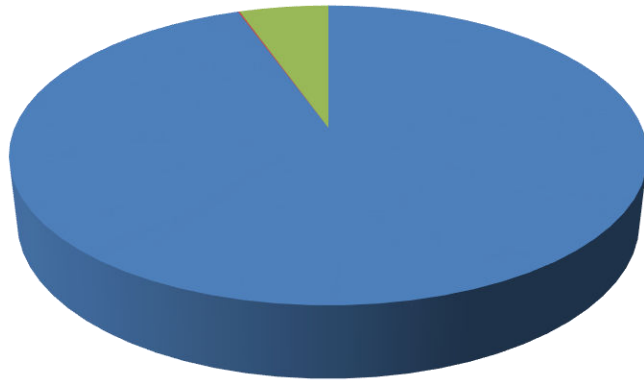


Tendring



# Cycling: Participation and intensity

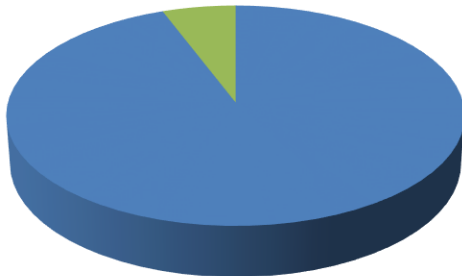
Overall



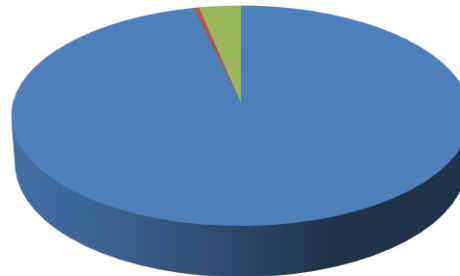
- The figures show the percentage of individuals who engage in cycling and at what intensity.
- Rates are consistently low across the areas.

■ No cycling ■ Light cycling ■ Moderate cycling

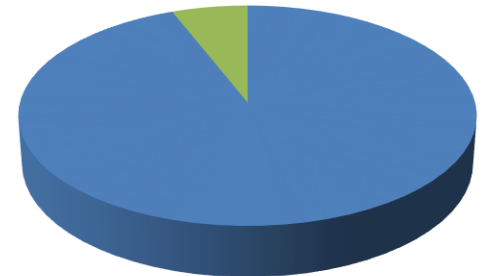
Basildon



Colchester

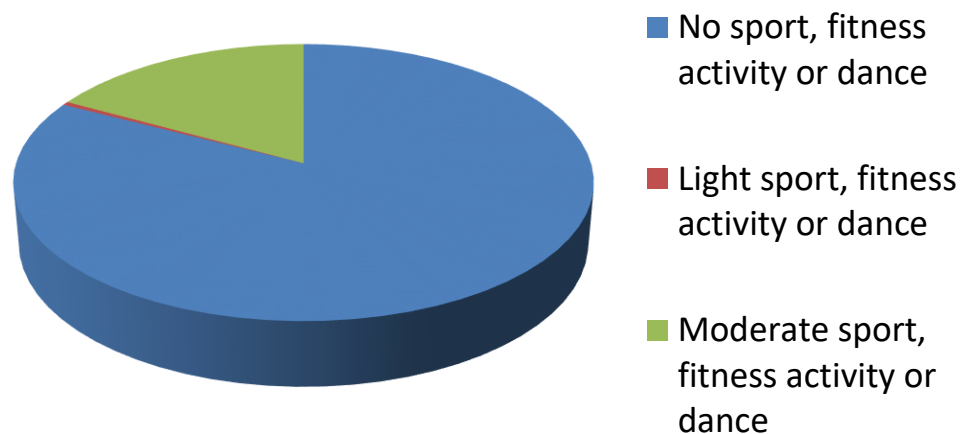


Tendring



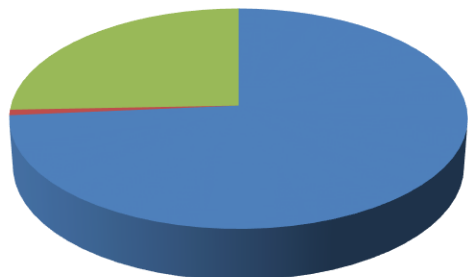
# Sport, fitness activity, or dance: Participation and intensity

**Overall**

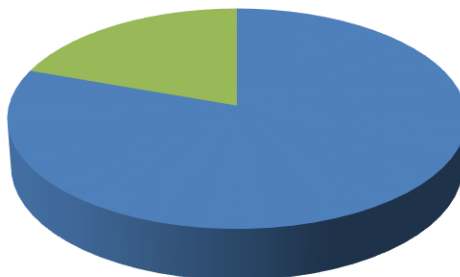


- The figures show the percentage of individuals who engage in sport, fitness activity or dance and at what intensity.
- Residents of Tendring perform significantly less sport, fitness activities and dance.

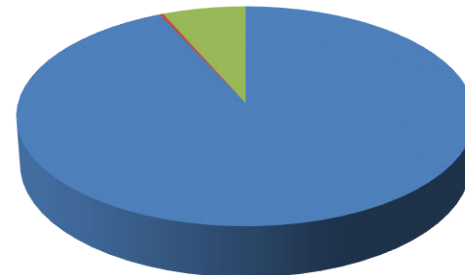
**Basildon**



**Colchester**

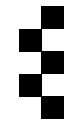
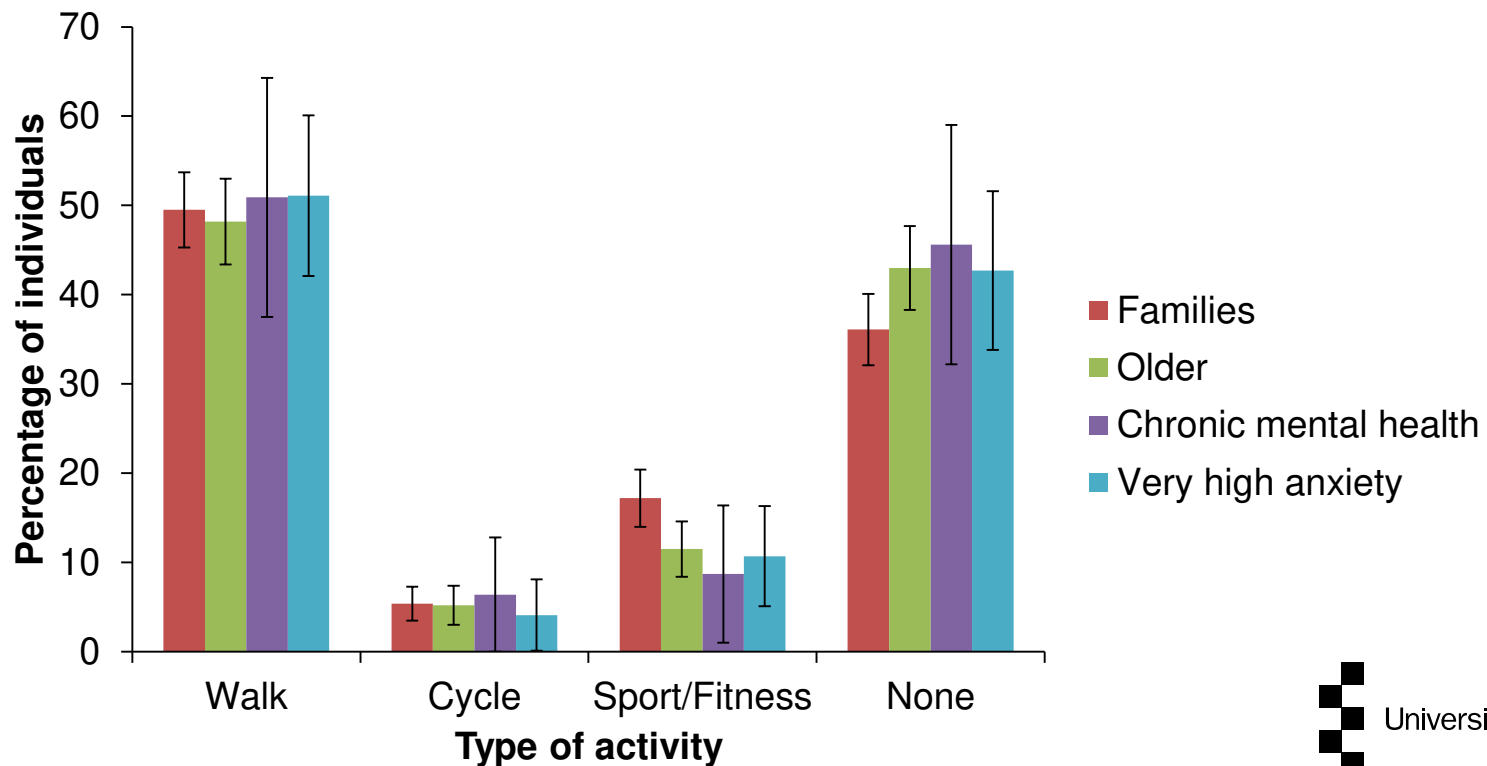


**Tendring**



# Type of activities by target population

- The figure below shows the type of activities performed by the target populations of the Essex LDP.



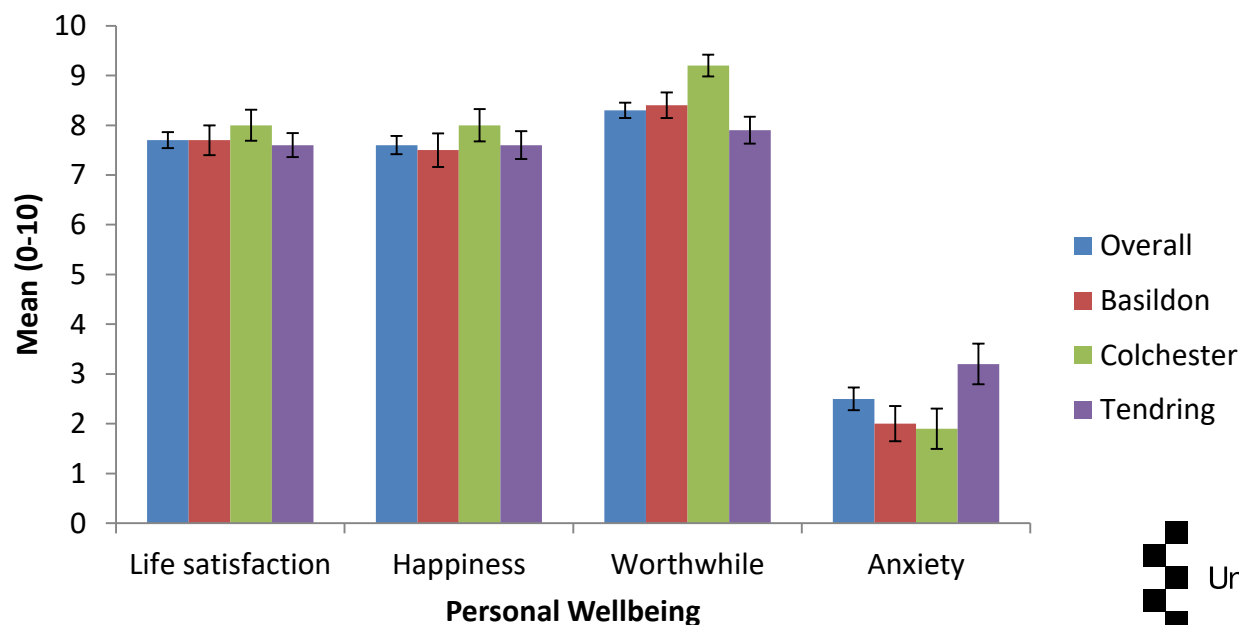


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# **6. Personal wellbeing, individual development, and social development: door knocking**

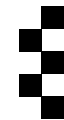
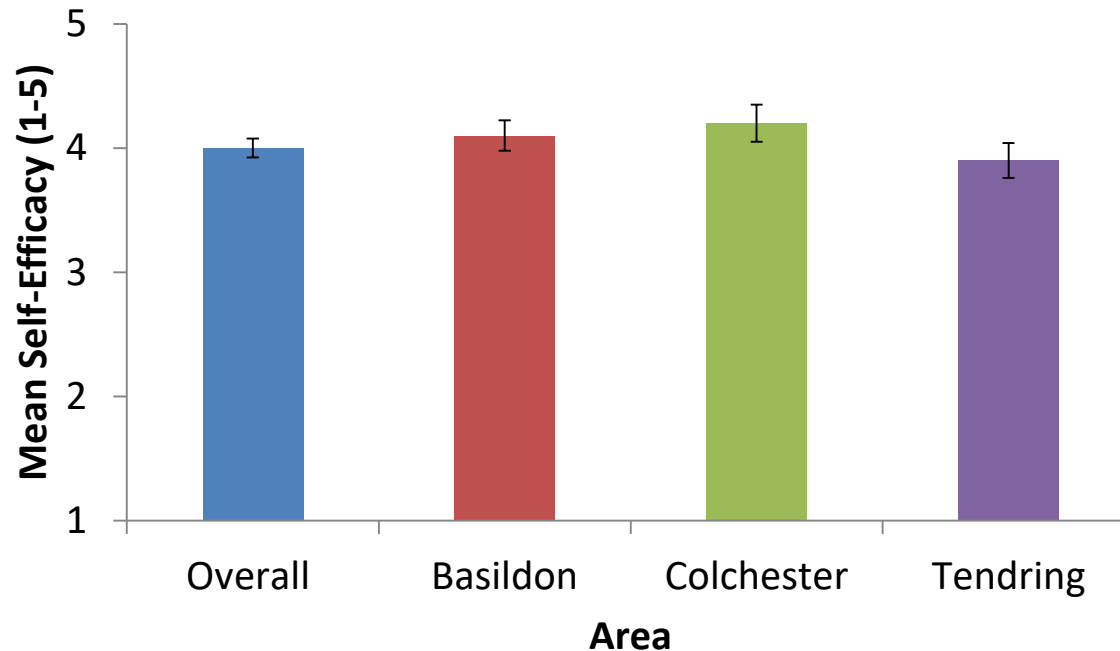
# Personal wellbeing levels are generally positive

- Colchester residents have significantly higher ratings of 'worthwhile' than Tendring residents
- Tendring residents have significantly higher levels of 'anxiety' than Basildon and Colchester residents.
- With the exception of the anxiety levels of Tendring residents, these metrics are all significantly higher than the mean estimates for England in the Active Lives survey (May 18/19).



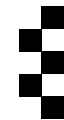
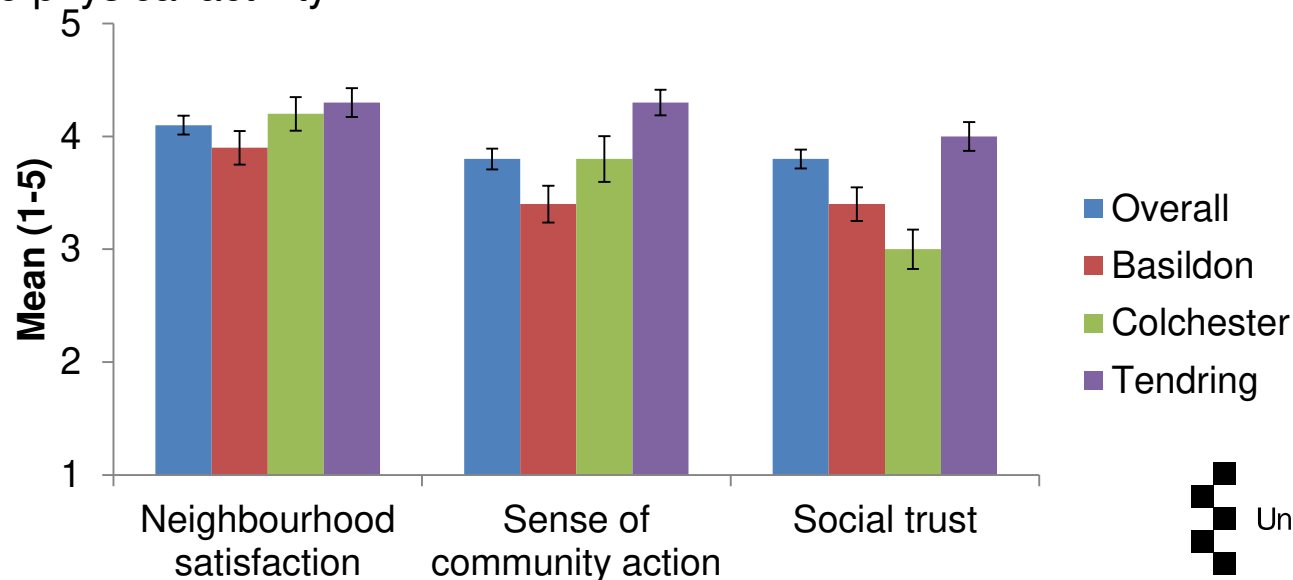
# Individual development is generally positive

- Colchester residents have significantly higher self-efficacy than Tendring residents.
- Basildon and Colchester estimates are significantly higher than the mean estimates for England in the Active Lives survey (May 18/19).



# Social development is generally positive

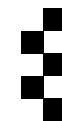
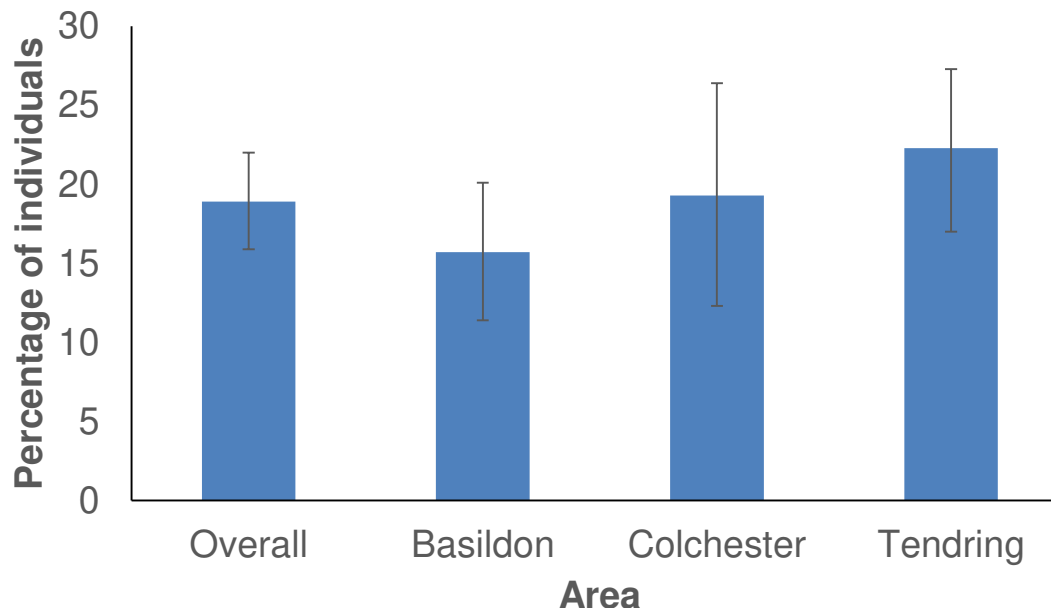
- Overall social factors are moderate to high across all areas, but:
- Tendring residents have significantly higher levels of neighbourhood satisfaction (vs. Basildon only), sense of community action and social trust than the other priority areas.
- Colchester and Tendring estimates for social trust are significantly higher than the mean estimates for England in the Active Lives survey (May 18/19).
- The Essex LDP should embrace the strong community spirit to foster community engagement in interventions and support the creation of social movements to promote physical activity





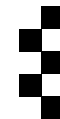
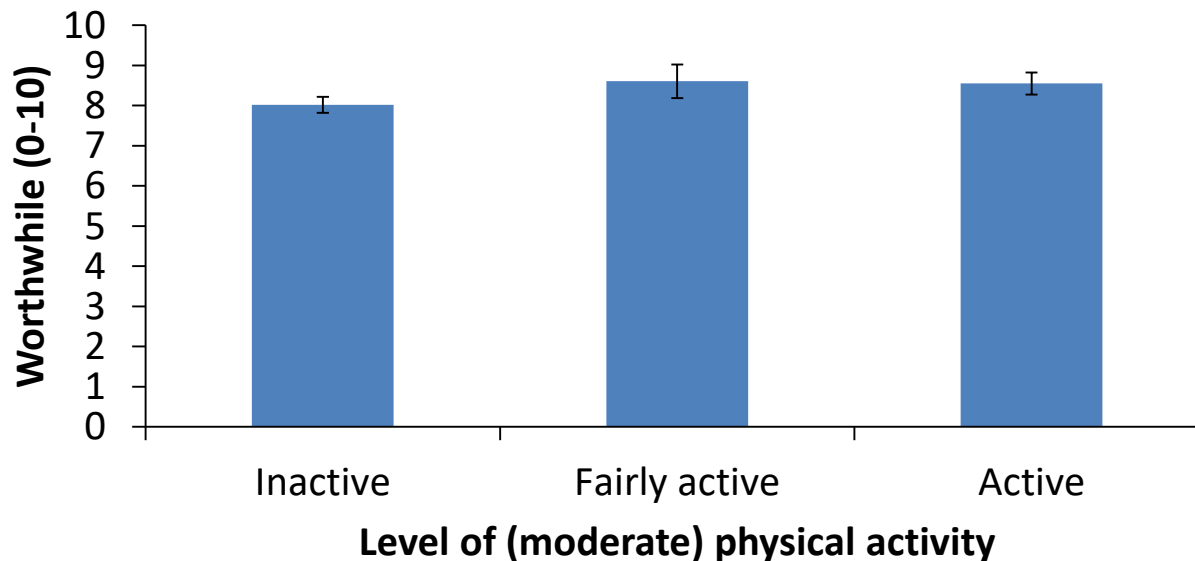
# Volunteering levels are low

- The figure below shows the percentage of individuals (and 95% CI) who had volunteered for any local, national or international organisation or charity in the last 12 months.
- Volunteering is lower than the national estimate (38%) in the 2018-19 Community Life survey.
- Volunteering could be important to support community-based interventions and social movements, and should be further encouraged.



# The relationship between physical activity and personal wellbeing is weak

- Physical activity is often associated with enhanced personal wellbeing, but this did not emerge strongly in the baseline data
- After controlling for demographics and indices of deprivation, levels of moderate physical activity are only associated with small effects on personal wellbeing ( $\eta_p^2 = .001-.020$ ), and this is only statistically significant for things in life being worthwhile



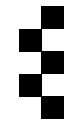
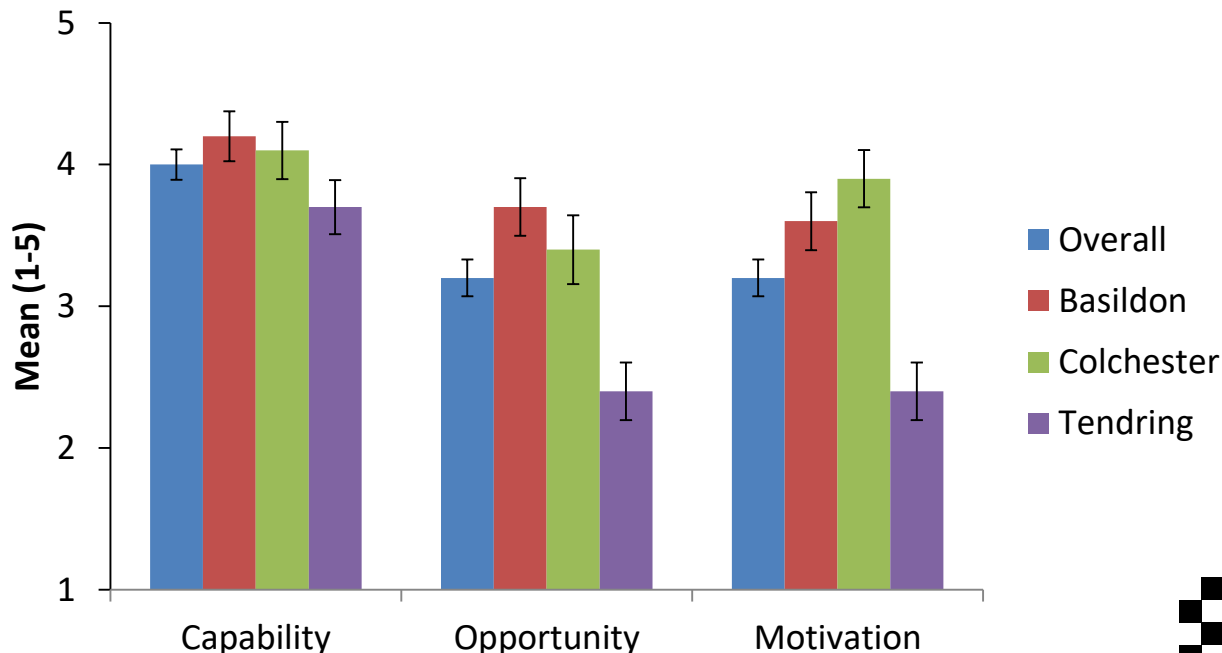


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# **7. The COM-B: Capability, opportunity and motivation**

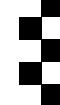
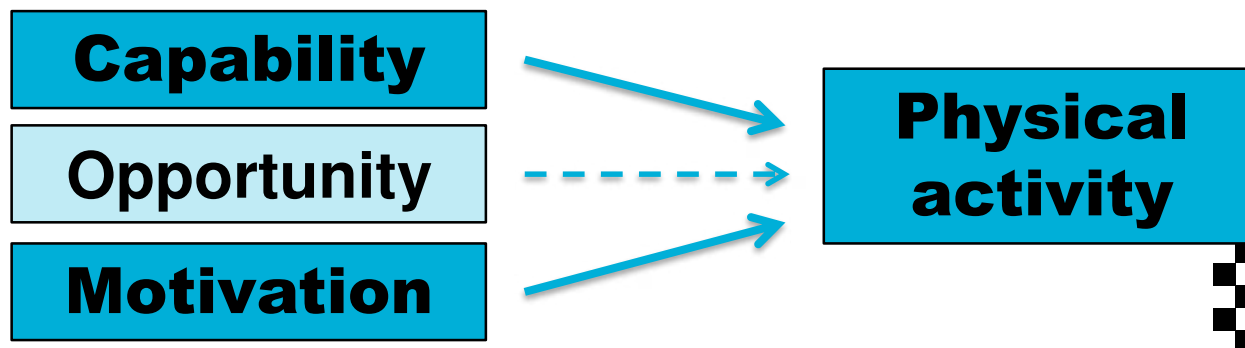
# Capability, opportunity and motivation

- The COM-B model (Michie et al., 2011) suggests Capability, Opportunity and Motivation are important predictors of behaviour
- Tendring residents have significantly lower levels of capability, opportunity and motivation towards physical activity than Basildon and Colchester residents



# Capability and motivation are key for physical activity

- Over and above demographics, health, indices of deprivation, and perceptions of local area (Nagelkerke  $R^2 = .20$ ), capability, opportunity and motivation collectively predict physical activity ( $\Delta$ Nagelkerke  $R^2 = .25$ ). Capability ( $Exp(B) = 1.57$ ,  $p < .01$ ) and motivation ( $Exp(B) = 1.92$ ,  $p < .01$ ) are particularly important predictors of whether individuals perform at least 30 minutes of moderate physical activity
- The Essex LDP and interventions should target individuals' perceived capability and motivation towards physical activity, as 'just' providing opportunities may not be sufficient



# Factors that predict perceived capability to be active

**Age**

**Employment**

**Mental/physical condition**

**Health**

**Area**

- Collectively demographics, health and social factors predict whether individuals agree that they have the ability to perform exercise ( $\Delta$ Nagelkerke  $R^2 = .63$ ). Age, area, mental/physical condition, employment, and health are key predictors: Individuals who are younger, employed, have no mental/physical conditions, in good health, and live in Basildon (vs. Tendring) feel more capable of performing exercise.
  - The Essex LDP and interventions should target perceptions of capability in individuals

# Factors that predict motivation to be active

<b>Age</b>	<b>Area</b>
<b>Sense of community</b>	<b>Mental/physical condition</b>

- Collectively demographics, health and social factors predict whether individuals agree that they had the motivation to perform exercise ( $\Delta$  Nagelkerke  $R^2 = .32$ ). Age, area, mental/physical condition, and a sense of community are key predictors: Individuals who are younger, have no mental/physical conditions, a strong sense of community, and live in Basildon or Colchester (vs. Tendring) feel more motivated to perform exercise.
  - The Essex LDP and interventions should target motivation in individuals



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# **8. Comparison of data collection methods: findings, costings and learning**

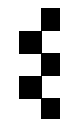


# Respondents by method, area and IMD

Method	Area and IMD								Total
	Basildon		Colchester		Tendring		Wider Essex		
	1-4	5-10	1-4	5-10	1-4	5-10	1-4	5-10	
Door knocking	209	0	211	0	237	0	0	0	657
Targeted locations	70	20	45	45	80	16	7	23	306
Social media	21	61	39	94	50	34	20	67	386
Total	300	81	295	139	367	50	27	90	1349

# Demographics of respondents

Variable	Category	Method		
		Door knocking	Targeted locations	Social media
Sex	Male	46.4%	28.6%	20.5%
	Female	53.5%	71.4%	79.0%
Age	<45	37.7%	36.2%	43.8%
	45+	62.3%	63.8%	56.2%
Live with family	Yes	82.8%	77.6%	84.8%
Ethnicity	White	90.5%	94.1%	98.4%
	Other	9.5%	5.9%	1.6%
Long-term physical/mental health condition	Yes	38.5%	56.3%	42.2%
Employment	Working	43.1%	38.9%	75.0%
	Not working	50.5%	59.1%	22.8%
	Student	6.5%	2.0%	2.2%

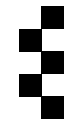


# Physical activity levels in different collection methods

- Convenience sampling methods provided lower estimates of inactivity compared to random stratified sampling
- Active people may have been more likely to participate in those other methods: e.g.,
  - At targeted locations, people had to get to those places
  - On social media, recruitment materials mentioned the survey focused on area, health and *activity*

Method	Inactive	Fairly Active	Active
Door knocking	57.3%	12.6%	30.1%
Targeted locations	37.9% *	21.5%	40.5%
Social media	32.1% *	24.3% *	43.6% *

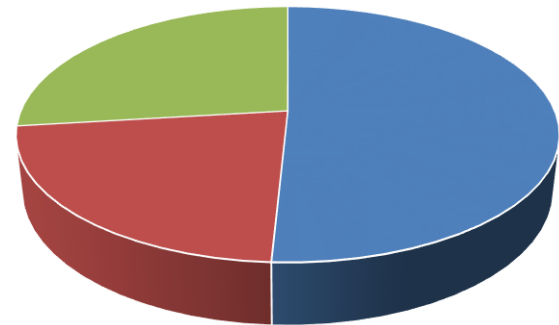
**Note.** \* indicates estimate was significantly different to door knocking



# Walking: Participation and intensity by method

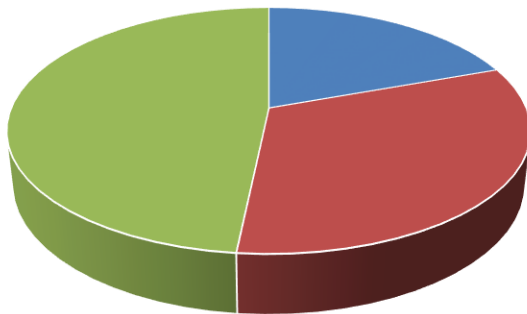
- The figures show the percentage of individuals who engage in walking and at what intensity across the three data collection methods.

Door knocking



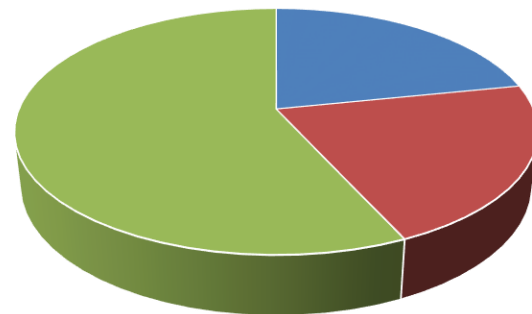
■ No walking ■ Light walking ■ Moderate walking

Targeted locations



■ No walking ■ Light walking ■ Moderate walking

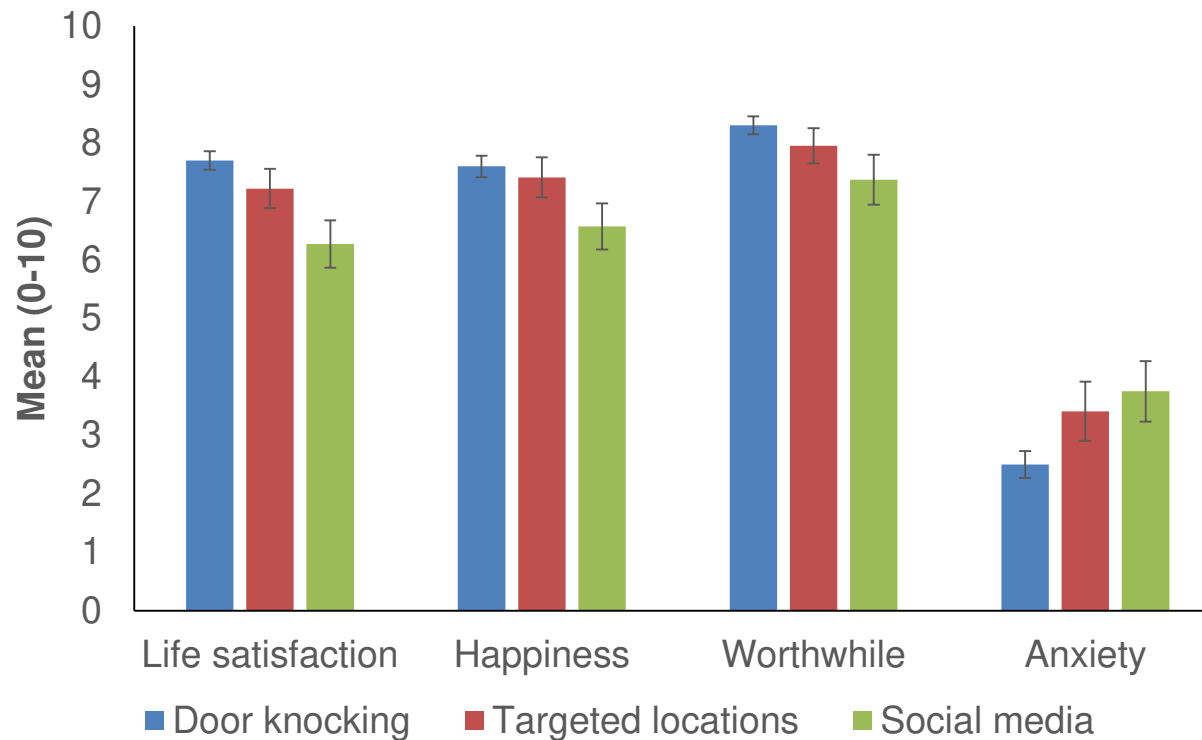
Social media



■ No walking ■ Light walking ■ Moderate walking

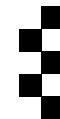
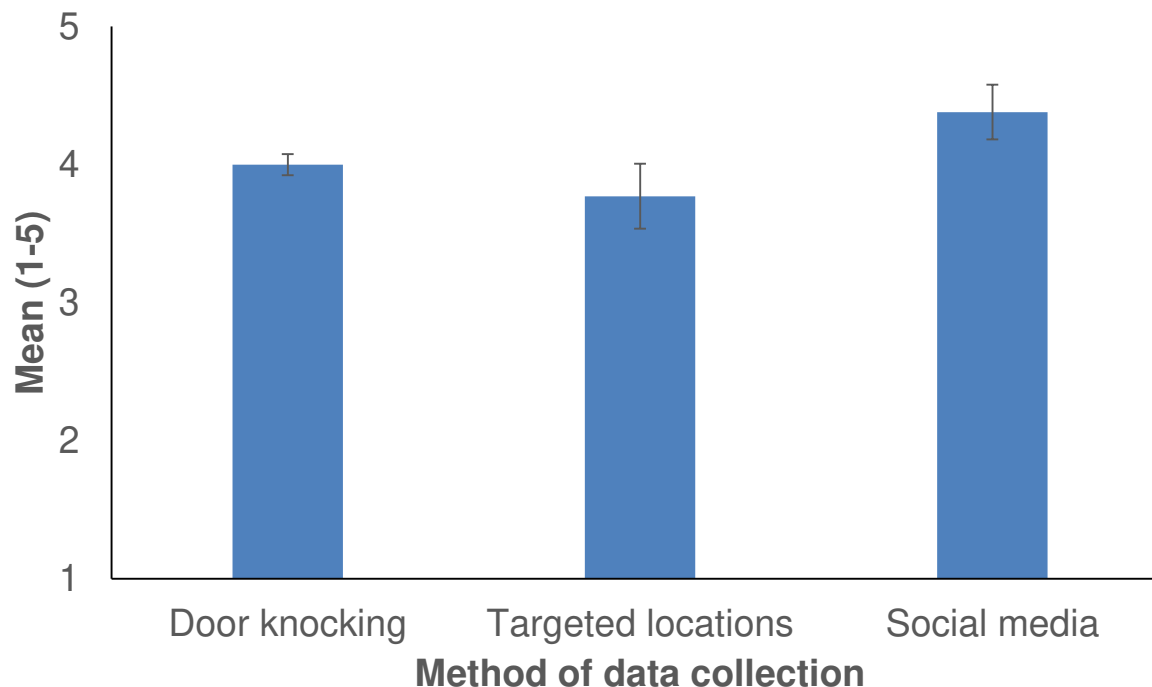
# Personal wellbeing

- Individuals responding via social media generally had less favourable personal wellbeing than other methods.



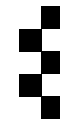
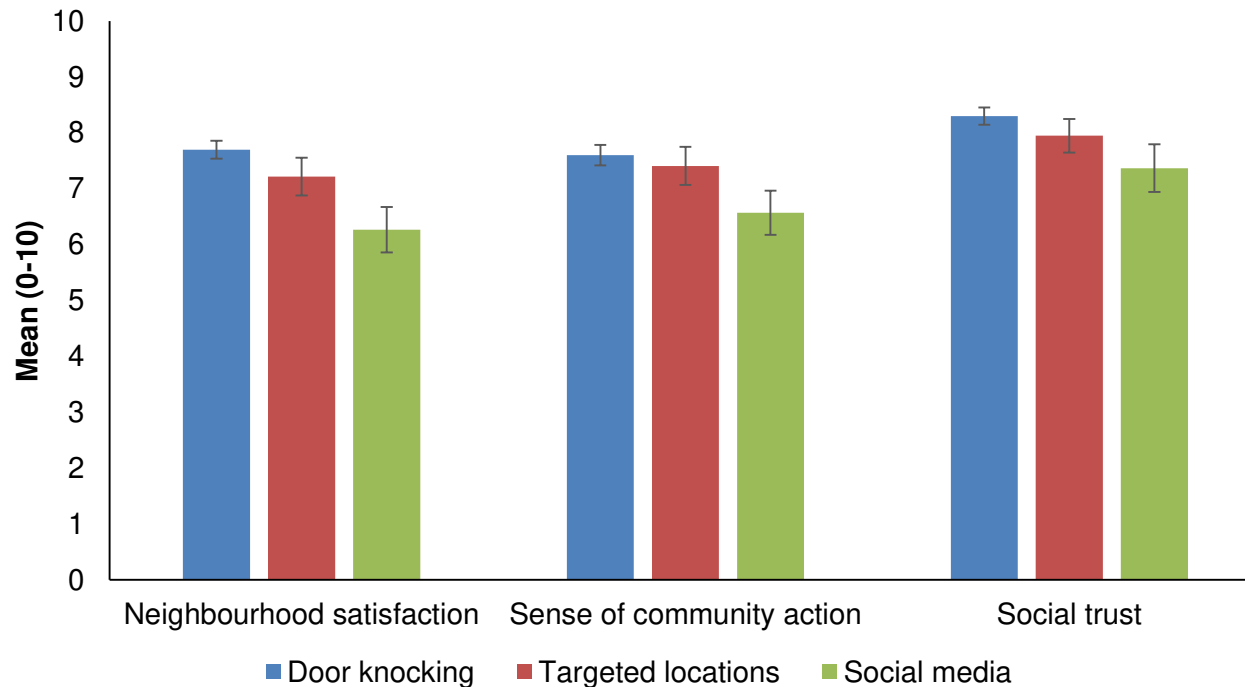
# Individual development

- Individuals responding via social media had higher self-efficacy than other methods.



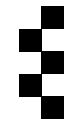
# Social development

- Individuals responding via social media generally had less favourable social perceptions than other methods.



# The relationship between physical activity and personal wellbeing is weak

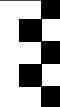
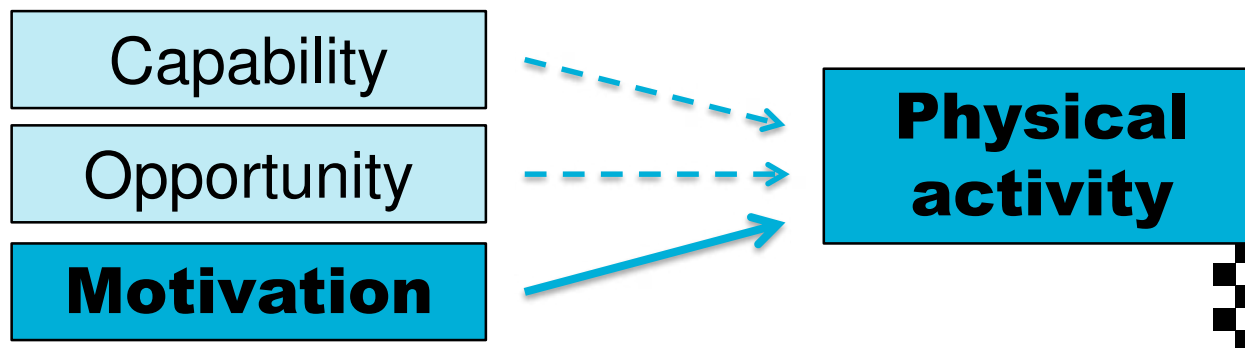
- Similar to the door knocking sample, the effect of physical activity levels on personal wellbeing was weak.
- After controlling for demographics and IMD, levels of moderate physical activity did not effect personal wellbeing in either the social media (Wilks  $\lambda = 0.95$ ,  $p = .06$ ,  $\eta_p^2 = .074$ ) or targeted locations (Wilks  $\lambda = 0.97$ ,  $p = .72$ ,  $\eta_p^2 = .016$ ) sample.





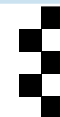
# Motivation is key for physical activity

- Over and above demographics, health, IMD, and perceptions of local area (Nagelkerke  $R^2 = .14$ ), capability, opportunity and motivation collectively predicted physical activity ( $\Delta$ Nagelkerke  $R^2 = .28$ ) in the social media sample. Motivation ( $Exp(B) = 2.91$ ,  $p < .01$ ) was a particularly important predictor of whether individuals perform at least 30 minutes of moderate physical activity
- Over and above demographics, health, IMD, and perceptions of local area (Nagelkerke  $R^2 = .23$ ), capability, opportunity and motivation collectively predict physical activity ( $\Delta$ Nagelkerke  $R^2 = .22$ ). Motivation ( $Exp(B) = 4.06$ ,  $p < .01$ ) was a particularly important predictor of whether individuals perform at least 30 minutes of moderate physical activity



# Cost of different methods of data collection

Method	Cost
<b>Door knocking</b> (657 collected responses, all in target IMD)	One day sampling strategy planning by consortium member (TAB) = £284.00 + Use of Fieldwork Company to data collect = £25,000.00 = <b>Total = £25,284.00 (£38.48 per response from target IMB)</b>
<b>Targeted locations</b> (306 collected responses, 195 in target IMD)	Four days planning, interviewing and training for data collection by consortium member (AP) = £1976.00 + Data collection, involving some consortium members, trained student data collection assistants, and including travel and parking costs = £5683.34 = <b>Total = £7659.34 (£39.28 per response from target IMD)</b>
<b>Social media</b> (386 collected responses, 110 in target IMD)	Two hours planning by consortium members (VG and WL) = £166.57 One day networking and promotion via social media platforms (WL) = £489.00 = <b>Total = £655.57 (£5.96 per response from target IMD)</b>



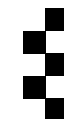
# Reflections on methods of data collection

Method	Advantages	Disadvantages
Door knocking	<ul style="list-style-type: none"> <li>• Probability sample</li> <li>• 100% of respondents fit target area and SES</li> </ul>	<ul style="list-style-type: none"> <li>• Cost</li> <li>• Field work agents are uncomfortable working in some areas and not necessarily skilled in collecting data from hard to reach groups</li> <li>• Respondents often reluctant to answer door (due to fear of authorities, debt collection and/or timing with election campaign)</li> </ul>
Targeted locations	<ul style="list-style-type: none"> <li>• Majority of respondents fit target area and SES</li> <li>• Builds on existing relationships within communities</li> <li>• Ability to collect qualitative data</li> </ul>	<ul style="list-style-type: none"> <li>• Non-probability sample</li> <li>• Potential confidentiality issues when collecting data in busy locations (e.g. a café in a community centre)</li> <li>• Respondents already 'active' to a degree, as recruited via group or organisation</li> </ul>
Social media	<ul style="list-style-type: none"> <li>• (Low) Cost</li> <li>• Reaches beyond target areas</li> </ul>	<ul style="list-style-type: none"> <li>• Non-probability sample</li> <li>• Majority of respondents do not fit target area and SES</li> <li>• Requires support from individuals organisations to publicise survey</li> </ul>

# Different measures of physical activity

- The table below reports the percentage of individuals classified as active vs. inactive using the SALS data crossed with the number of active days in the Milton data.
- Some individuals classified as inactive using the SALS (<30 minutes of moderate physical activity) actually report 1 or more days of 30+ minutes of physical activity that raises their breathing on the Milton et al single-item.
- Only 44.5% of individuals report less than 30 minutes of moderate physical activity on both measures.
- The measurement of physical activity at population level should be further investigated

<b>SALS</b>	<b>Milton et al</b>	
	<b>0 days</b>	<b>1+ day</b>
<b>Inactive (&lt;30 mins)</b>	<b>44.5%</b>	<b>12.7%</b>
<b>Active (30+ mins)</b>	<b>3.4%</b>	<b>39.5%</b>



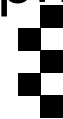


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# **9. Conclusions, recommendations and future directions**

# Conclusions

1. Physical inactivity is high (57.3%) in the Essex LDP priority areas.
2. There is variation in (in)activity levels across areas and populations.
3. Physical activity does not have a strong relationship with perceived personal wellbeing in the Essex LDP priority areas.
4. The Essex LDP priority areas, and in particular Tendring, generally have high satisfaction with local areas, strong sense of community, and social trust.
5. Capability and motivation are strong predictors of performing at least 30 minutes of moderate physical activity.



# Recommendations

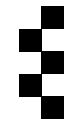
The Essex LDP and linked interventions should:

- Continue to focus on improving the physical activity levels in the priority areas and populations
- Encourage and enable individuals undertaking light activity to increase their intensity
- Target individuals' perceived capability and motivation towards physical activity, as 'just' providing opportunities may not be sufficient
- Embrace the strong community spirit to foster community engagement in interventions and support the creation of social movements to promote physical activity
- Further explore the barriers and enablers to physical activity in the different areas



# Future directions

- Obtain a better understanding of barriers and enablers of physical activity in priority areas and populations, particularly in those not performing any activity.
- Explore the capability, opportunity, and motivation to be active in more depth.
  - e.g., more nuanced conceptualisation of capability, opportunity, and motivation (e.g., Howlett et al, 2019)
  - explore how capability, (opportunity), and motivation can be enhanced in different areas and populations (Ziebart et al, 2018)
- Explore how the Essex LDP can best harness the strengths of local areas and strong sense of community to support the development of interventions and social movements to promote physical activity
- Explore the use of social media to bring about behavioural change in specific geographical locations







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# 10. Further information

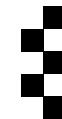
If you require any further information relating to the content of this report, or have any particular questions, please contact us using the details below:

Email: [essexldpevaluation@essex.ac.uk](mailto:essexldpevaluation@essex.ac.uk)

# Weighting information for door knocking sample

IMD\*Area\*Sex Crosstabs show weighting weighted % Males and Females by IMD and Area (bold)

Sex			Basildon	Colchester	Tendring	
Male	IMD1	Area	70.7%	1.2%	28.0%	
			29.9%	0.9%	14.2%	<b>17.6%</b>
	IMD2	Area	34.4%	43.4%	22.1%	
			21.6%	48.2%	16.7%	<b>26.2%</b>
	IMD3	Area	50.5%	13.8%	35.8%	
			28.4%	13.6%	24.1%	<b>23.4%</b>
	IMD4	Area	25.5%	26.8%	47.7%	
			20.1%	37.3%	45.1%	<b>32.8%</b>
			<b>41.6%</b>	<b>23.6%</b>	<b>34.8%</b>	
Female	IMD	Area	62.2%	1.7%	36.1%	
			36.8%	1.9%	24.2%	<b>24.6%</b>
	IMD	Area	32.7%	38.3%	29.0%	
			17.4%	39.0%	17.4%	<b>22.1%</b>
	IMD	Area	49.2%	16.4%	34.4%	
			29.9%	19.0%	23.6%	<b>25.2%</b>
	IMD	Area	23.5%	30.9%	45.6%	
			15.9%	40.0%	34.8%	<b>28.1%</b>
			<b>41.5%</b>	<b>21.7%</b>	<b>36.8%</b>	



# Unweighted levels of inactivity by area and IMD

Method	Area and IMD								Total		Grand Total
	Basildon		Colchester		Tendring		Wider Essex				
	1-4	5-10	1-4	5-10	1-4	5-10	1-4	5-10	1-4	5-10	
Door knocking	50.7	-	55.0	-	68.8	-	-	-	58.6	-	58.6
Targeted locations	40.0	15.0	28.9	22.2	46.3	43.8	0.0	39.1	38.6	27.9	35.0
Social media	38.1	37.7	17.9	17.0	36.0	38.2	40.0	29.9	31.5	28.1	29.3
Total	47.3	32.1	46.1	18.7	59.4	40.0	29.6	32.2	51.0	28.1	
Grand Total	44.1		37.3		57.1		31.6				44.8

