

The Science of a Happy Home

A report from **RESI**

About the report

The Science of a Happy Home is a research project commissioned by Resi, the UK's leading architecture practice for everyday homeowners.

The project is an exploratory enquiry into how the design and use of our homes influences our wellbeing. What's presented here is intended to be read by design professionals, policy makers and people with an interest in wellbeing at home.

We synthesise and summarise existing evidence and present the findings of original primary research undertaken especially for this commission. We use this new evidence to bring focus to how we build and improve our homes and in doing so, we invite people to consider what this means for how we live in our homes.

The research took place between July and September 2019. This first phase is a stake in the ground and we expect this body of research and insight to grow over time.

The Science of the Happy Home 2020 Report

Initial Release - 20 January 2020

Resi

Resi are the UK's leading architecture practice for everyday homeowners, supporting with the design, build and finance of projects.

The Underdog Collective

The Underdog Collective are a diverse group of researchers, strategists and designers who bring rich local and international perspectives to their specialist domains of architecture, statistics, wellbeing and geography.

Key Contributors

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Foreword



George Clarke

Architect, TV presenter & Campaigner

@MrGeorgeClarke

The Science of a Happy Home

Today in Britain, we have a deep crisis of housing affordability and chronic shortage of social housing. The housing crisis has implications across nearly every aspect of our lives – from our national wellbeing to education, and community cohesiveness.

Alongside this, the way we live at home is also changing. More people work from home and more people are ageing at home. Adult children are living with their parents for longer and the private rented sector is bigger than any time in recent history.

Our approach to housing must change. I believe that this starts with a simple goal. We all deserve a happy home – a safe, stable, healthy and beautiful place to call home.

A nation of homes that achieves this has the power to shape and transform the lives of Britain's for the better.

By providing us with a way to think and talk differently about our homes, this report outlines

how we can design spaces that give us all the best chance of living well, whatever that means to us.

Building a nation of happy homes will also require commitment and focus from across the design, built environment and wider consumer industries. This will need to be guided in certain key aspects by thoughtful and encouraging policies from different parts of government.

Architecture, design and surrounding built environment industry practices are not typically encouraged or taught to consider optimisation of homes for happiness and wellbeing as a standard part of their process.

This report sheds light on the importance of changing this. A nation of homes that support our happiness and wellbeing should be the foundation of society, and a defining goal of this next decade. The Science of a Happy Home is a welcome step in the right direction.

A note from Resi's CEO



The Science of a Happy Home

We spend more time at home than anywhere else, but when it comes to understanding how to live well in our homes we too often lack confidence or power to change how the home affects us. We barely have the language to articulate ourselves, and so our comfort zone becomes making do, carrying on and enjoying a very British moan about it.

While knowledge has been accumulated on several design factors – the importance of natural light, the impact of colour – a lot of important, well-evidenced stuff is too often missing from practice.

This is particularly important given that the way our homes function is defined to a great extent by social relations. How we live together, share space communally and compromise to accommodate different needs and priorities.

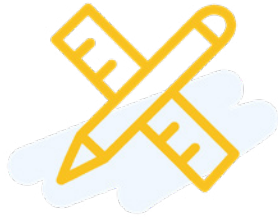
When designers and residents are in conversations to inform their designs, they need to acknowledge, understand and take account of these dynamics. Most worryingly, this conversation sometimes doesn't even take place at all.

Resi want to pay attention to it. That's why we commissioned this research.

Alex Depledge
CEO & Founder

@adepledge

Why are Resi focused on Happy Homes?



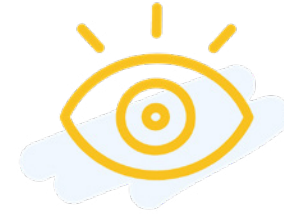
To make architecture and home design accessible

This isn't about aesthetics, it's about the real benefits you can get from applying a different way of thinking to your home. This challenges some of our cultural tendencies to accept things the way they are.




To further our understanding of the changes people can make to create happier homes

Lots of research demonstrates what we should not do to our homes, establishing causality between poor design and ill health, or negative social and environmental outcomes. By contrast, evidence on what we might aspire to is under explored: homes that make us happy.



To look behind the front door, rather than focus beyond the front door

There has been significant research to understand how our neighbourhoods, streets, towns and cities shape our wellbeing. At this scale there is more data available and interactions are easily observable. It is more difficult, but equally important, to look at the private and intimate ways we use our homes.

The background of the slide is a light blue-grey color with a repeating pattern of stylized, line-art faces. These faces have various expressions, some smiling and some with neutral or slightly sad features. The pattern is dense and covers the entire background.

"While an attractive building may on occasion flatter an ascending mood, there will be times when the most congenial of locations will be unable to dislodge our sadness or misanthropy"

Alain de Botton
The Architecture of Happiness, 2006

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Introduction

Introduction



- 1 Whilst we can't be happy all the time, the time we spend at home should contribute to positive wellbeing outcomes.
- 2 Using social science research methods and personality frameworks, we have identified six universal qualities to describe our homes - secure, nourishing, adaptable, relaxed, connected and mirrors.
- 3 These qualities tell us where to focus in order to increase happiness at home.
- 4 Designing with these qualities in mind is key if happiness at home is the goal.
- 5 We need to shift from evaluating our homes as property (by number of rooms and size) to personal environments (how they perform for wellbeing).

The six qualities of a happy home

The time we spend at home ought to be happy.

Whilst we can't be happy all the time, for example we might loathe doing the laundry or renovating a bedroom, overall we think that our homes should contribute to positive wellbeing outcomes. If our homes should help us to be happy, this gives importance to how we choose to live at home, as well as the architectural and design choices reflected in our homes. However, in the UK, the general public tend not to think very hard about that.

Through a national research study, which focused on what it means to be happy at home, we identified six qualities that describe our homes. These six qualities give us a focus around which we can, for the first time, have a national conversation about how our homes perform for our wellbeing. If happiness at home is the end goal, the evidence we have shows that efforts to design, build and create homes should focus on these qualities:

Secure

Provides shelter, safety
& stability



Adaptable

Can meet changing needs



Connected

Provides space to interact



Nourishing

Provides healthy conditions



Relaxed

Makes us feel at home




Mirrors

Reflects who we are



What we learnt while developing these qualities is that too often conversations about home are focused on the bricks and mortar of properties. The way we talk about our homes – how many bedrooms we have, or how many square metres our property is – reflects this.

These qualities focus our attention on how to create happy homes by putting greater emphasis on the residents and the social interactions that take place within the home.



We worked with an independent provider to survey 4000 UK residents to develop a national home happiness database

This study is called the Science of the Happy Home because it is rooted in social science methods.

We worked with an independent provider Populus to survey over 4000 UK residents and used rigorous statistical analysis to produce the findings presented here. You can read more about the research methods [here](#).

We also asked people to describe their homes using the OCEAN framework, a personality framework widely used by psychologists. We presented people with ten home personality traits through which to describe their homes. From this we

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learnt that how we describe our home correlates significantly with how happy we feel at home. These findings underpin our six qualities to define a happy home.

Our survey data was complemented with 16 video interviews with Resi customers, who are considering, are in the process of, or have completed a home project. These interviews, and quotes from them, are referred to in this report.

In this report we present the evidence that we should design, build and use our homes with these qualities in mind, and we look at how these qualities relate to each other. Using this evidence, we can identify the need to shift from evaluating our houses as property, to evaluating our homes as personal environments. As well as measuring energy efficiency, we need to measure how efficient our homes are at performing for our wellbeing.



The Science of a Happy Home makes the case for paying a different kind of attention to your home. We can all ask more of our homes, it's just that until now we haven't had the right questions to do so.

Beyond this, we think that designing and building happy homes is bigger than each individual household. Creating and building happy homes is a national effort, which will require design, built environment and wider consumer industries to work closely together. A focus from these groups will be critical to creating a shift from evaluating our houses as property, to evaluating our homes as personal environments. You can read more of our thinking by following the links below.

Want to know more?



Happy Homes Tool – Find out how your home scores for each quality

Methodology – Find out how we developed these findings

Briefing for Policymakers – Read our recommendations for government

Industry Perspective – Read our point of view on what these findings mean for industry





Headlines



Headlines



- 1 We aren't paying enough attention to how the design and use of space impacts how we feel. Where we are doing so, the scope is too narrow - we are often focused on avoiding negative outcomes rather than pro-actively pursuing positive ones.
- 2 No two homes are the same, which makes identifying happy homes difficult.
- 3 Our experience of the home is hugely influenced by who we live with.
- 4 Wellbeing is about our personal resources and external conditions. It's both individual and collective, meaning that to understand wellbeing we need to talk about households.
- 5 Too often, an understanding of our social interactions are distant or absent from the processes of how homes are designed.

We think of home as a feeling, of coming home or being home, but we don't think very much about how the design of our homes make us feel.

This is surprising given how much time we spend at home, how much pride we place on them and the substantial costs of running, owning or renting a home. Typically in the UK renters spend over a quarter of their salary on rent¹ and the average house price of £235,000² is 7.8 times the average annual earnings³.

As well as talking in terms of the number of bedrooms we have or the style of layout we prefer, we need to start having new types of conversations. These are conversations rooted in how we use the different spaces and rooms within our homes, and how this is shaped by our relationships and the interactions that take place at home. How can our homes make us happier and lead to better wellbeing outcomes?

We define home happiness through an understanding of wellbeing. Whether individual or collective, wellbeing is created through interactions with external conditions (income/job, neighbourhood/home) and our personal resources (self-esteem, optimism, personality etc). Wellbeing is therefore both personal and about the shape of our wider lives.

For better or worse, our wellbeing is always shifting. This shift happens slowly, wellbeing is distinct from our mood, and the ebb and flow of emotions. There is no silver bullet that can guarantee good wellbeing but a key assumption is that good design choices can lead to positive wellbeing outcomes, and minimise attributes that have been shown to be negative for wellbeing.

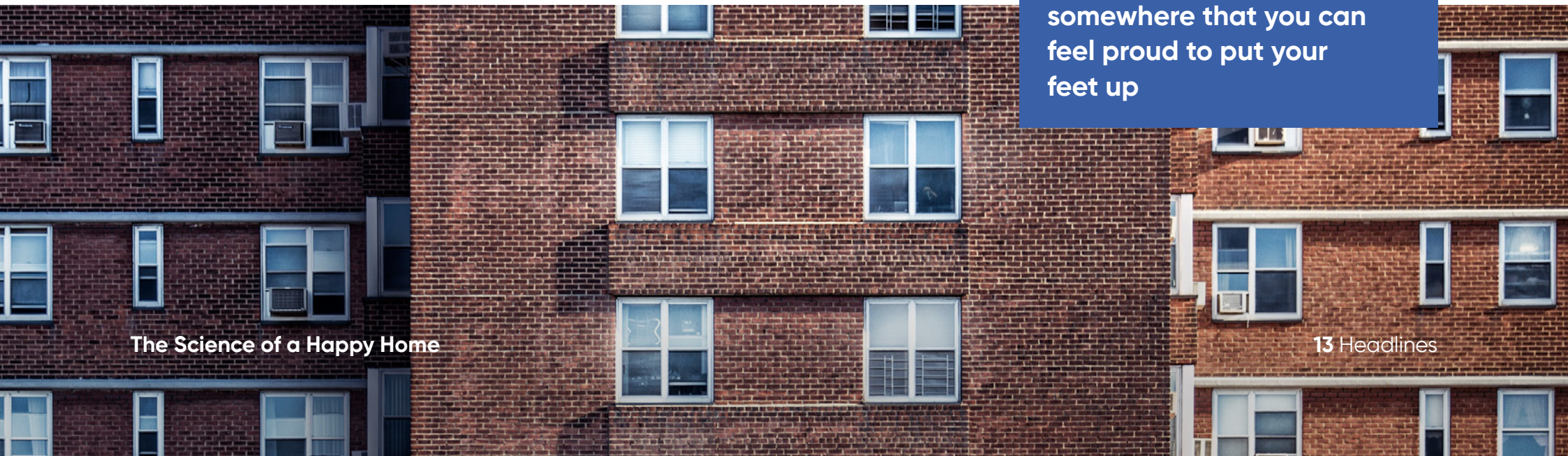
Developing a meaningful understanding of the causal links between our homes and wellbeing is difficult precisely because our homes can be shaped by so many different factors.

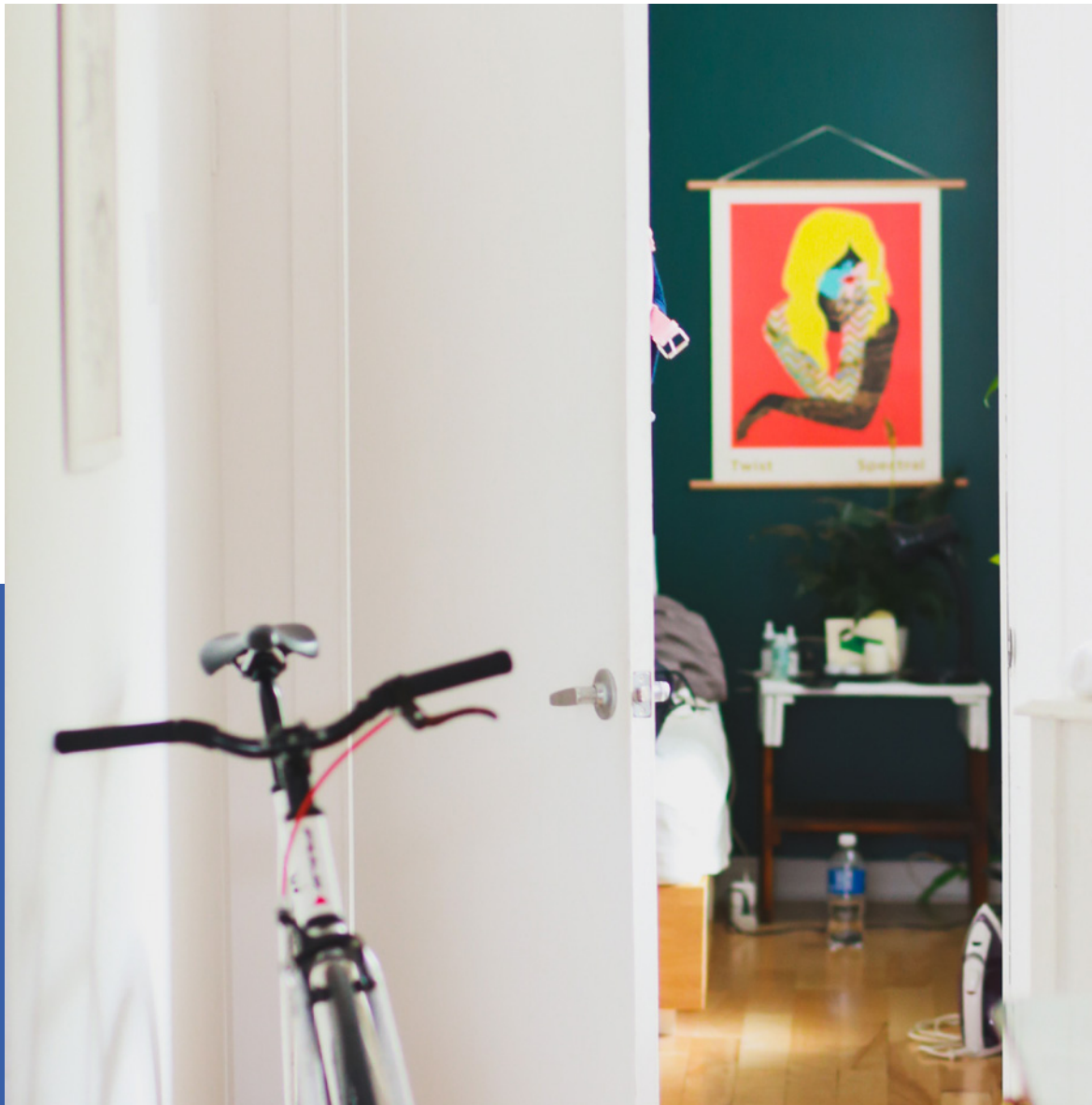
To date, where research has focused on wellbeing at home, the emphasis has been on how distinct aspects of our homes create benefits e.g. windows and natural light, rather than a more holistic view of wellbeing. In understanding what makes a happy home, the physical science has taken priority over the social science. This view considers the fundamental psychological importance of the home, and the relationships and experiences which form uniquely within our homes.

Resi's definition of a Happy Home: A Happy Home is somewhere that you can feel proud to put your feet up

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Homes are filled with emotion and sentimentality.

Understanding what it means to be happy at home is a messy topic to unpick because no two homes are the same. Our homes are not just defined by physical characteristics, they are one of the basic building blocks of how we experience the world. The concept of taking a 'journey' usually is told as a story that begins and ends at home. Furthermore, the people we live with matter because they can enable and constrain how we are able to feel and function at home, they influence our memories and our routines.

**Creating Happy Homes
requires an understanding
where bricks and mortar
meet real life**

If we want to understand the relationship between our homes and our wellbeing outcomes we need to understand not just how we interact with our home spaces, but – for the 20 million UK homes which have multiple members of the household – how our relationships and who we live with also play a role.

We seek to understand how the spatial design of our home affects the relationships, dynamics and interactions within it. Put simply, understanding what makes a happy home is about understanding how bricks and mortar shape everyday life.

Guiding principles for understanding wellbeing at home

Wellbeing is constantly changing

Our wellbeing shifts through interactions with external conditions (e.g. our home and our jobs) and our personal resources (e.g. personality and self-esteem). This shift happens slowly. Wellbeing is distinct from our mood, and the ebb and flow of emotions.

Wellbeing is physical and mental

We need to focus on creating spaces that work for both the body and the mind.



Wellbeing is individual and collective

We need to consider the individual in the context of the household we live in. What one person needs to live well won't be the same as another.

Positive wellbeing can only be attained when both objective and subjective standards are achieved

We need to focus on tangible objective factors (e.g. how much space we have) and subjective feelings (e.g. how comfortable we feel at home).

We cannot solely rely on the design and functions of our homes to ensure our wellbeing

We know that many other aspects of our lives shape our wellbeing beyond the walls of our homes.



Happy Home Qualities

Six qualities of a happy home

Our research identified six qualities of our homes. All homes can be thought of in terms of these qualities. Happy homes score well for each of these qualities.

In this section we introduce each quality, present the evidence that supports why we should focus on designing and building spaces around each quality and explore how these qualities relate to one another.

Secure

Provides shelter, safety & stability



Adaptable

Can meet changing needs



Connected

Provides space to interact



Nourishing

Provides healthy conditions



Relaxed

Makes us feel at home



Mirrors

Reflects who we are





Home Happiness Measurement

In our national survey we measured wellbeing in two key ways. These are referred to throughout this report.



Evaluation Measures

We asked questions to understand how satisfied people were with their homes (**home satisfaction**) and their lives overall (**life satisfaction**). The results from these questions are referred to as influencing home satisfaction and life satisfaction respectively in this report.



Emotive Measures

We asked questions about how often homes made people feel a series of **emotions: happy, sad, proud, embarrassed, relaxed and stressed**. This gave us a rich set of subjective user feedback.

Secure

Provides shelter, safety
and stability



- 1 Secure homes ensure our basic need for a safe shelter. This security is still not guaranteed for everyone today.
- 2 We think of security as physical and emotional stability.
- 3 Renting is shown to be, on average, detrimental to our home happiness. The majority of us support two year rental tenancies as standard.
- 4 Emotional stability is about having peace of mind at home - 48% of us say there is always something to worry about in terms of our home.
- 5 Emotional stability also links to security of tenure. In our data, 52% of those privately renting expected to move within three years as opposed to 19% of those who rent from the council or housing associations.

Meeting our basic needs

Security at home starts with our basic needs; a safe place to stay is a necessary condition to happiness at home. However, we know that for many people in the UK these basic needs are not being met. Today 126,000 children live in temporary accommodation⁵ and 2.5 million are in 'hidden households' which they can't afford to move out of (including house shares, people living with an ex-partner and adults living with their parents)⁶. Efforts to address these headline symptoms of the UK's housing crises must continue; as things stand, millions of people are fundamentally constrained in being able to find happiness at home.

Where our basic housing needs are met, being secure is about physical and emotional stability in relation to our homes.

The dynamics of home ownership

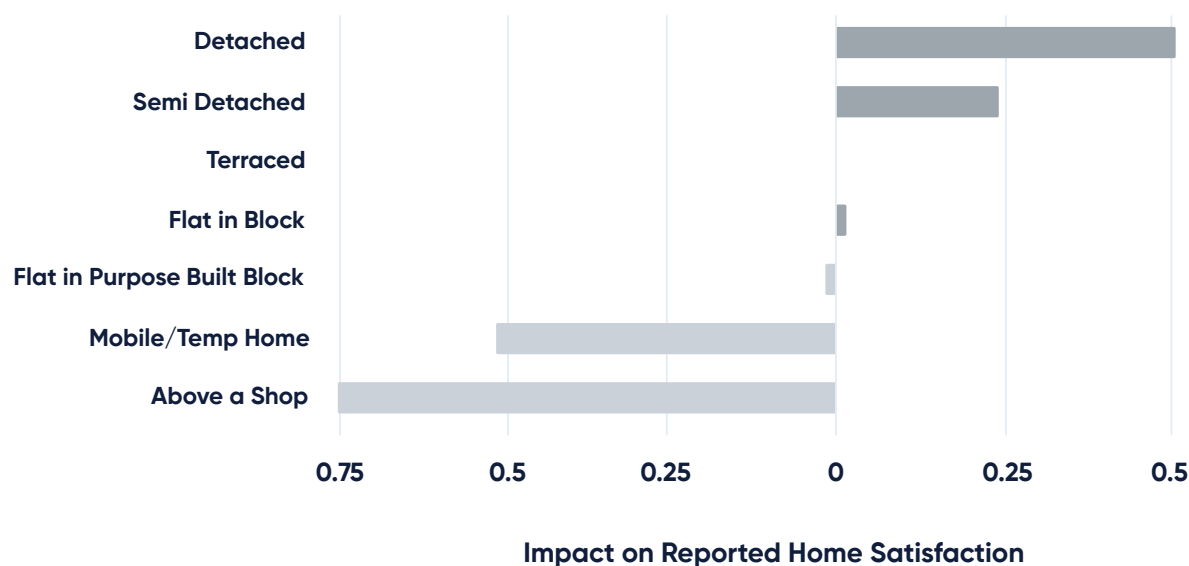
Owning your home carries a relatively high level of social status – a trend we've observed since the turn of the mid century and particularly from the 1980s onwards. We found this 'status' that comes with home ownership was reflected in home satisfaction levels in our data. Of all the demographic variables we considered (including age, income and relationship status) home ownership was the most significant predictor of home satisfaction.

Interrogating our survey data, interesting patterns emerge. For example, people who live in flats appear less happy than others. However, the reason they are less happy is not because they live in flats but because they're more likely to be renting (and renters are less happy with their homes). Those who own their flat report the same home satisfaction levels to those who live in terraced houses – this is important to remember when thinking about the type of home you want to live in. This finding is consistent with the government's own survey data for England⁷.

Insecurity of renting holds us back

However, the data reveals that it is inaccurate to assume the security offered by home ownership can guarantee our happiness. Rather, it is the insecurity of renting that can hold us back. Those who rent privately or live rent-free report the lowest levels of home satisfaction. Notably, those who rent from council or housing associations (HAs), usually benefiting from secure lifetime tenancies, have higher life satisfaction than those who own without a mortgage.

Effect of Home Type on Home Satisfaction





55%

of the public believe the government should require landlords to offer rental contracts which cover two years of tenancy as standard

This shows that renting need not be detrimental for life satisfaction or home satisfaction. The evidence suggests it is the stability of tenure that's most important. Private renters move eight times as often as homeowners and five times as often as social renters⁸. In our data, 52% of those privately renting expected to move within three years as opposed to 19% of those who rent from the council or housing associations. This is supported by other research, such as Shelter's Living Home Standard, which outlines that it is the control over your tenure status that's important⁹.

Security of tenure has broad appeal. Our data shows that 55% of the public believe the government should require landlords to offer rental contracts which cover two years of tenancy as standard. This links to the importance of designing **ADAPTABLE** spaces that can be flexible to the needs of renters over time.

Emotional stability at home

Security of tenure is important but ownership doesn't have to be the only way to achieve it. If happiness is the end goal we also need to pay greater attention to our emotional security too.

Our time at home ought to contribute towards positive wellbeing outcomes, yet 48% of us say there is always something to worry about in terms of looking after our homes. For those reporting the lowest levels of home satisfaction, this figure is 75%.

NEXT: If **SECURE** homes afford us the basics, **NOURISHING** homes afford us the conditions to help us thrive.

Read more on secure homes



Shelter's Living Home Standards

George Clarke on the housing crisis

Resi - 'I'll design your social housing for free'



Nourishing

Provides healthy conditions



- 1 Nourishing homes control physical elements by optimising light, sound and ventilation.
- 2 It is important that residents have the control to provide optimal comfort levels for their personal preference.
- 3 Our satisfaction levels with the views outside are a more significant predictor of our happiness than our satisfaction with sunlight levels.
- 4 91% of the public support government action to make it illegal for landlords to rent a home that is unfit for human habitation.
- 5 Indoor air quality should be of increasing concern as we seek to make existing and new homes more sustainable.

Nourishing homes have conditions that allow us to be healthy and thrive

Nourishing homes are well ventilated, optimise light and noise levels and are made with or contain healthy materials. Nourishing homes control natural and physical elements to allow us to feel comfortable at home.

However, nourishing homes aren't just a checklist. For example, in terms of lighting we know that individuals who live in dark homes are 150% more likely to report ill health compared to those don't,¹⁰ but too much sunlight can cause overheating or sleep disturbance if not regulated by shade¹¹. There are also some interactions between natural light, room orientation, and colour. South-facing rooms receive the brightest and whitest natural light, making darker or more muted colours more suitable as a design choice¹².

Ensuring comfort requires government to regulate and provide thoughtful policy towards housing standards. In the UK, we began regulating homes in 1875 with the Bylaw Terraced House Act, which said new homes had to include a toilet or outdoor 'privvy'. Subsequent Housing Acts are also protected by law. It is important to distinguish between regulation, which is protected by law, and standards, which are non-mandatory guidelines. Since 1935, 'Space Standards' have suggested minimum levels of spaces but are not mandatory by law. Recently, we have seen progress through greater emphasis on quality, first through the

Decent Homes Standard (2004) and the recent National Design Guide (2019).

Our data shows that 91% of the public support government action to make it illegal for landlords to rent a home that is unfit for human habitation. However, despite this, a recent study by charity Citizens Advice found 50% of landlords don't know or understand their legal obligations¹³, leaving many renters living in homes with mould and inoperative smoke alarms.

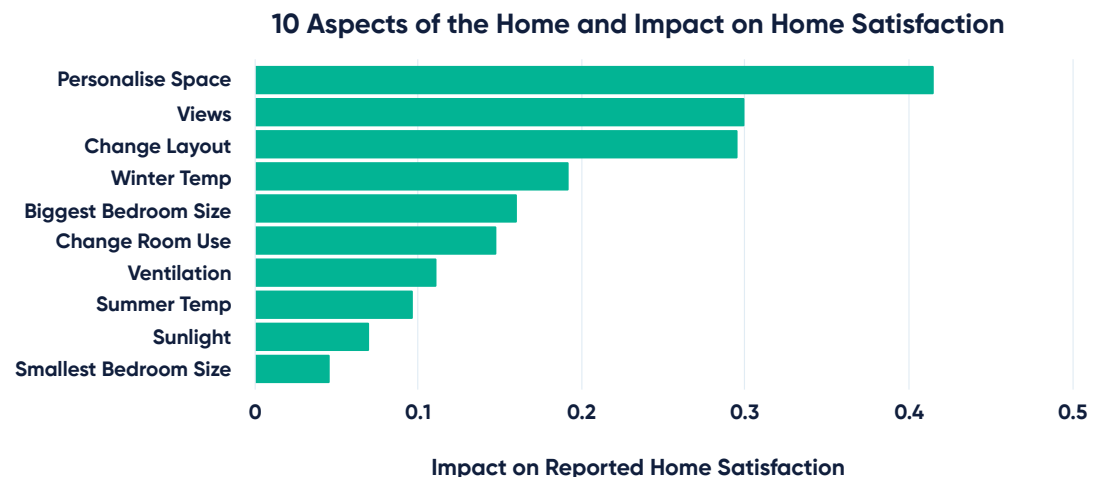
The importance of residential control

Nourishing homes allow for control by the residents to make the home comfortable for different people and different functions over time. In terms of heating, feeling too cold in the winter at home is a strong predictor of poor home satisfaction. In the UK, being able to maintain a comfortable temperature in the winter is a greater concern than

temperature control during the summer. Given that the survey data was collected in the summer, when theoretically people are more likely to be thinking about the summer temperature, this is a strong finding*.

4.9 million homes across the UK are in a non-decent condition due to inadequate heating facilities, bringing cold, damp and poor air quality into the home¹⁴. Control over spaces helps us to feel **RELAXED** and links strongly to being **ADAPTABLE**. Homes that score well for nourishing will benefit anyone who lives in them but we all have individual preferences about changing the uses of a space or calibrating the temperature to our preferences. In the future, climate change may require our homes to become more adaptable and sustainable to continue to nourish us.

*In this survey we were unable to capture the effect that the age of property had on this finding.



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Portals to the outside

Exposure to and interactions with nature have positive effects on wellbeing. These include psychological benefits like improved mood, physiological benefits like reduced blood pressure and cognitive benefits like concentration. A recent systematic review of evidence found links between exposure to or interaction with the natural environment and mental health outcomes¹⁵. There's also increasing evidence to suggest having indoor plants and paintings of nature are beneficial to increasing productivity and comfort¹⁶.

In our survey results, we found that how satisfied we are with views from our windows is a more significant predictor of how happy we are than our satisfaction with sunlight levels in our homes. Whilst it's difficult for us to know if those satisfied with their views had views of nature, the importance of views over sunlight* is notable in that significant attention has previously been paid to the importance of sunlight to our physical and mental health.

We also found that gardens and balconies were two of the most important spaces in terms of our home happiness. Outdoor spaces can help us feel **CONNECTED** to nature and to the wider world.

*We asked respondents specifically about sunlight levels (direct sunshine) and chose not to distinguish between sunlight and daylight levels (volume of natural light) to ensure understandability.

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Indoor air quality

There is increasing attention among policy makers to outdoor air pollution. However, toxic substances in the home can also impact our indoor air quality (IAQ). Ventilation in our homes improves the circulation of air to remove pollutants, moisture and heat and to improve IAQ. As homes become more airtight, IAQ can decrease as pollution is trapped. Being able to control this ourselves through natural ventilation provides the greatest benefit to wellbeing¹⁷.

NEXT: If **NOURISHING** homes support us to live well at home, **ADAPTABLE** homes are responsible for what living well looks like for you and for those you might live with.

Read more on nourishing homes



Velux Bring the outside in campaign

UK Governments national design guide
Homes and buildings section

Ben Channon's Happy by Design
A guide to architecture & wellbeing



Adaptable

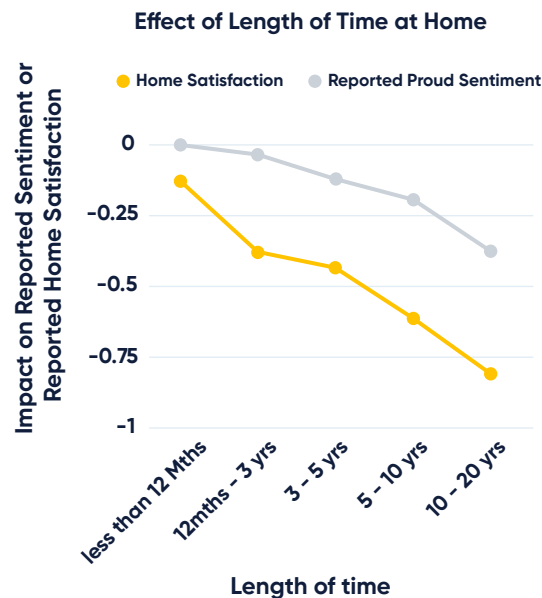
Can flex to meet
changing needs



- 1 We don't use the rooms and spaces in our homes equally.
- 2 Adaptability requires us to think of our homes less in terms of size and dimensions, and more in terms of the multiple uses and functions that each space can host.
- 3 Our homes must be designed so they can adapt to meet our needs now and in the future. 92% of those most happy at home agree that their house met their needs, while only 20% of those most unhappy at home feel this.'
- 4 In terms of our home satisfaction, the ability to change layouts is more important than the size of our bedrooms.
- 5 When looking at moving into a home, consider how your needs will change - we find the 'honeymoon' of moving into a new home fades quickly, especially for those with children.

Time at home isn't divided equally

Whether you enjoy sharing food as a household or hosting bigger celebrations, adaptable homes can serve different functions both day to day and over many years. This is important because time spent in the home is not divided equally; some spaces are utilised a great deal more than others. A one bedroom flat may be carefully calibrated to proportion kitchen, sleeping and bathroom spaces, whilst a large home may have rooms reserved for guests or a dining room for special occasions. Regardless of the size of your home, most of us can make our homes work harder to support our wellbeing and happiness by focusing on creating adaptable spaces.



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92%

of the most happy at home agree that their house met their needs, while only 20% of those most unhappy at home feel this

Adaptability requires us to think of our homes less in terms of size and dimensions, rooms and storage (although these things are important) and more in terms of the multiple uses and functions that each space can host. In fact, when we look at the aspects of our homes that matter most to us, our data shows that the ability to change the layouts of our spaces as our needs change is more important than the size of our biggest or smallest bedrooms*.

*We did not ask about the size of living spaces in our survey but we did ask for a room inventory to understand how many of each room people had.

Adaptable homes meet our changing needs

We age, inevitably. Our needs change but our homes don't - unless we change them or move home. 92% of those most happy at home agree that their house met their needs, while only 20% of those most unhappy at home feel this. This gives even more

importance to the adaptability of our homes to work both in response to the rhythm of the day and over the longer-term.

When we look at life satisfaction, we can identify a honeymoon period which fades away after moving into a new home. In the first 12 months, we tend to be happier (in honeymoon mode) but then there is a sharp decline over the following 5 years. The graph also shows that we tend to report feeling less proud of our homes as time passes**.

This suggests that moving to a new house isn't the same as upgrading. We may think that a new home will make us feel happier, but our needs can change quickly, and our homes must be able to accommodate this. It is not surprising therefore that the decline is sharpest for those with children living at home.

We found that for those with children aged 5 years and older living at home having an open plan layout is three times as important to our home satisfaction. This links to the need for **CONNECTED** spaces that allow for different kinds of interactions, such as children playing together or adults hosting friends.

**We asked respondents how often their homes made them feel both proud and embarrassed. With this data we created a new variable to look at the reported difference between the two emotions.

Homes that are made to last

Many houses are built to outlive us, but homes that are made to last will shift with us as we age. As more of us use our homes to work, have children stay at home for longer, or rent our homes through online platforms to others, what we ask of our homes is changing.

Sometimes this requires new layouts, extensions, subdivisions or merging of spaces, but often it can be as simple as changing what a room is used for. People who report high home satisfaction are three times as likely to be satisfied with their ability to

change room use in their home (e.g. create a work area or temporary bedroom) than those with low home satisfaction.

Whilst open plan spaces have been shown to be important to home satisfaction, it is important to consider how your open plan spaces can be adaptable in the long term. Particularly in new builds, some open plan spaces are smaller than the sum of the same spaces when provided separately. Ensuring adequate space and light levels to enable the change of open plan use over time is important so as not to sacrifice other happy home qualities of **RELAXED** or **SECURE**.



What we use our homes for

16%

of us now work from home

ONS data shows that 16% of people's work is now carried out at or from home, a figure that has been rising since 2008. In our survey, we found that 23% of people work from home at least some of the time.¹⁸



We're ageing at home

In the years between 2001 and 2011 the number of people aged over 65 grew by 11% but the number of people in care homes only 0.3%¹⁹. This suggests we are living at home for longer.

10%

of owner occupiers home sharre

In the last 12 months, about one in ten owner occupiers report renting part or all their home out using home sharing organisations.²⁰

It is not just what we do at home that's changing, who we live with is also changing. Children are staying at home for longer, requiring our homes to **MIRROR** the changing identities of different family members. More homes have two generations of adults (parents and grandparents) meaning we look for the **SECURITY** and peace of mind that we can grow at home.



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Who we live with is changing

1 in 4

20-34 year old still live at home

This figure rose between 1996 and 2013, but has remained stable since then. ²¹

Three generations at home

The nuclear family setup is less the norm nowadays. Intergenerational households, which have two generations of adults, are back at 1950's levels and now make up 21% of the total. ²²

More of us live alone

8 million of us live alone today ²³, this number is predicted to rise to 11 million by 2039 ²⁴. Today that represents 12% of the population and by 2039 it'll be closer to 15%.

If happiness is the end goal, we need to pay greater attention to the adaptability of our spaces to change with us. Consider the patterns of daily life, the level of privacy that you and your household enjoy and how spaces can be personalised temporarily. Given that the median square metre price of a house in England and Wales is now over £2000²⁵, we need to redress the balance to make the best use of our spaces, especially if space is at a premium.

NEXT: If **ADAPTABLE** homes move with the passage of time, **RELAXED** homes are spaces where we can continually feel at ease.

Read more on adaptable spaces



Levitt Bernstein's The Housing
Design Handbook


Dwell's Designing With Downsizers

Read about **Lifetime Homes**



The Science of a Happy Home



The background of the entire image is a repeating pattern of stylized, minimalist faces. These faces are drawn with simple lines for outlines, eyes, and mouths, some with additional features like hair or accessories. They are scattered across the light blue background. A white rectangular box is centered in the image, containing the main text.

**If happiness is the end goal, we need
to place greater emphasis on the
residents and social interactions that
take place at home, when thinking
about the design and use of our homes.**

Relaxed

Spaces to make us
feel at home



- 1 Relaxed homes are spaces that make us feel calm, comfortable and at ease.
- 2 90% of those most satisfied with their home say their home always or often makes them feel relaxed.
- 3 When we asked people to describe their homes in relation to our home personality traits, those who describe their home as relaxed were more likely to report higher home satisfaction than any other home personality trait.
- 4 If our focus is on creating happy homes, we must create spaces where we can relax as this is very strongly correlated with home happiness.
- 5 In terms of where we can switch off and relax, our data identifies living spaces and bedrooms as the spaces to focus on.

Feeling at ease at home

Relaxed spaces work to make us feel calm and at ease, they are spaces where we can switch off and put our feet up. 90% of those most satisfied with their home say their home often or always makes them feel relaxed whereas only half of those most dissatisfied with their home say this. Feeling at ease is closely linked to the ways in which our homes must be **ADAPTABLE** in meeting our day to day needs. Feeling relaxed on the other hand is more likely to be linked to design choices and **NOURISHING**. Proper insulation that is fit for modern living is key to ensuring comfort. The use of colour, greenery and acoustics in design choices have also been shown to help us relax and reduce stress.²⁶

Feeling relaxed at home

When we asked people to describe their homes in relation to our home personality traits, those who describe their home as relaxed were more likely to report higher home satisfaction than any other home personality trait (including private, sociable, organised and balanced). This was such a strong effect in that on a home satisfaction scale of 1-10, someone who strongly agrees their home is relaxed can be expected to score 2.9 points higher than someone who strongly disagrees.

The importance of a relaxed home is demonstrated in our data on how often people report that their home makes them feel happy. In addition to its effect on home satisfaction, people with relaxed homes are more likely to say they are often happy at home, underlining its importance to our wellbeing outcomes.

The effect is so strong that the ability to feel relaxed at home becomes a proxy for home happiness. As well as looking at building performance (e.g. energy efficiency to measure how we physically feel at home) we need to measure how our homes help us to mentally feel calm and how it facilitates our time to relax – as measures for wellbeing.

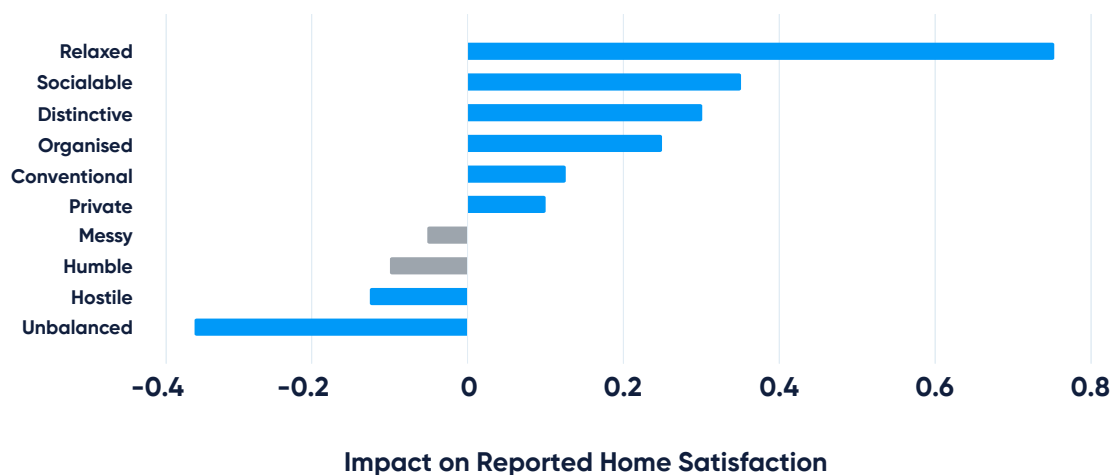
RELAXED was the home personality trait most associated with home satisfaction. After relaxed,

90%

Of those most satisfied with their home say their home often or always makes them feel relaxed

sociable and distinctive had significant positive impacts on how we feel about our homes. We will discuss these traits in the subsequent **CONNECTED** and **MIRRORS** sections.

Effect of the 'Traits' we use to describe our homes on Home Satisfaction



Read more on relaxed homes



The School of Life on Why We Need to Create a Home

Ikea's Life at Home Report

The World Green Building Council on Healthy Homes

Where we can switch off: bedrooms and living spaces

If the focus is on creating happy homes, we must create spaces where we can relax. Our data shows that living spaces and bedrooms are the most important spaces for us when it comes to switching off. 46% of us say that we relax best in our living spaces and 36% in our bedrooms. This finding requires focus on designing both living spaces and bedrooms that have this calming quality. In order to do so, ensuring thermal air comfort, optimum daylight, sunlight and levels is key in these spaces is key. We often have control over lighting, decoration and furniture choices in these spaces, but we think of them – first and foremost – aesthetically rather than relating to influencing our wellbeing.

We need to think of lighting, decoration and furniture in relation to functions (what we use them for), as well as expression. To do this we need a greater understanding of how we relax. Typically we think of bedrooms as places for sleeping, however this research suggests we need a greater understanding of how bedrooms can promote relaxation while we're awake too.

NEXT: Whilst we need **RELAXED** spaces to put our feet up, we equally need **CONNECTED** homes to socialise and interact.



69%

of those most happy at home have somewhere that is just their space



21%

of those most unhappy at home have somewhere that is just their space

The Science of a Happy Home

33 Happy Home Qualities

Connected

Spaces to interact



- 1 We need places to switch on and be sociable and spaces that connect us to the outside world.
- 2 Sociable is a home personality trait which is strongly associated with home happiness. This means that people who describe their homes as sociable are more likely to be happy at home.
- 3 The spaces that matter most, on average, to our home happiness are private gardens, balconies and open plan spaces. All these spaces can enhance our feelings of connectedness.
- 4 Our data suggests that a quarter of homes have an open plan layout. If our data is representative, this means that close to 6.25 million households now have open plan living.
- 5 Connection to nature and the wider outside world are also important. After five years in a home, the decline in satisfaction plateaus and then reverses slightly. This trend likely reflects the increased community links and bonds which we typically accumulate locally over time.

Switching on and switching off

Our social needs are complex and whilst we need to switch off, we also need space to switch on and interact. Connected homes facilitate interactions, the sharing of space with friends or those we live with, as well as connections to the outside world.

In fact, when we asked people to describe their homes, we found sociable to be the second most desirable home personality trait, after relaxed. This reinforces the complex nature of our social needs

which should be addressed if we are to truly live well at home. We need a careful balance between shared spaces which accommodate communal activity and encourage a sociable atmosphere, as well as spaces for privacy and intimacy.

To achieve this, we need to place greater emphasis on residents when thinking about the design and use of our homes. If happiness is the end goal, this requires us to view design as an active process, that helps us better understand how the spaces around us shape us.

Introducing Design as a Process

If happiness is the end goal, designing for happy traits is something we should aspire to. This requires us to view design as an active process.

Design as a verb, not a noun

Design shouldn't just be about aesthetics, or look and feel of the space, but an ongoing conversation about personality and needs. To think of design as a process is to consider it a verb as opposed to a noun. Design as a process should start with the individual or household carefully considering their needs; how they like to switch on and switch off.

For designers, this requires them to be research led and to stay conscious of their own assumptions about what is right for their clients. Designers should proactively work to understand households. Ideally this happens through conversation, but on a larger scale alternative methods may be needed. This does not mean that professionals cannot apply their deep industry expertise and knowledge, they just do this in a more informed way.

Even where professionals are already engaging with their clients' needs as part of the design process, this research points to the need for greater measurement of clients' wellbeing as part of this journey.

The Science of a Happy Home





6.25 million

households now have open plan living. If this is the case, then this is a significant shift in the way we live.

The importance of connected homes is also reflected in the spaces which are important to us. When we look at the spaces of the home – once income and other demographic factors are considered – private gardens, balconies and open plan spaces are the three most desirable spaces. Not everyone has these features but where they do we see a strong correlation with higher home satisfaction.

A way of life: Open plan living

Open plan living was linked to home happiness but also to the frequency with which people said their home made them feel proud.

Our data suggests that a quarter of homes have an open plan layout which combines living room spaces, kitchen facilities and, in some cases, a dining area ('LDK'). We have not found another study that has been able to reliably confirm or contradict this but if our data is representative, this means that close to 6.25 million households²⁷ now have open plan living. If this is the case, then this is a significant shift in the way we live.*

*It is important to note that we only surveyed one household representative. An understanding of relations between household members are crucial to understanding wellbeing, but in this first phase we were not able to probe this issue further.

Open plan spaces are multi-functional, which can often allow for greater interaction. A typical 'LDK' cannot be compared to a space that has been designed to be truly family or intergenerational orientated. A well designed open plan area should provide temporary private spaces, which could, for example, be used by parents working from home or even children doing their homework. Alongside this, provisions, such as multiple windows, should be made for the layout to change over time. As has been discussed, we need to ensure open plan spaces are **ADAPTABLE** and able to change with our social needs.

"It's important when you cook, to interact. So the dining room & kitchen have to be open and even when kids do their homework and I am in the kitchen cooking I can see them, I can talk to them, they can ask me questions so it doesn't stop me doing what I have to do & I'm still"

Interview Participant

Connection outside

Interaction beyond our front door is also important as it offers a sense of connection to the wider world.

The importance of **NOURISHING** windows with views outside and balconies is linked to the importance of connection to the outside world, to nature and to others. These outdoor rooms are just as important as our indoor spaces. Our data finds that balconies were particularly important to our home satisfaction, especially amongst those who typically work at home throughout the day.

Connection may also come with the **SECURITY** of living in a home for some time. The decline in satisfaction that follows the honeymoon period of moving into a new home plateaus after five years and then reverses slightly. This trend likely reflects the increased community links and bonds (or social capital) which we typically accumulate locally over time.

Creating homes where we can interact and be sociable is a key part of how we make memories in our homes, develop attachments, build up sentimental value and develop routines with those we live with.

NEXT: If **CONNECTED** spaces help us have interactions, when our homes act as **MIRRORS** they provide a setting that supports our wellbeing.

The Science of a Happy Home

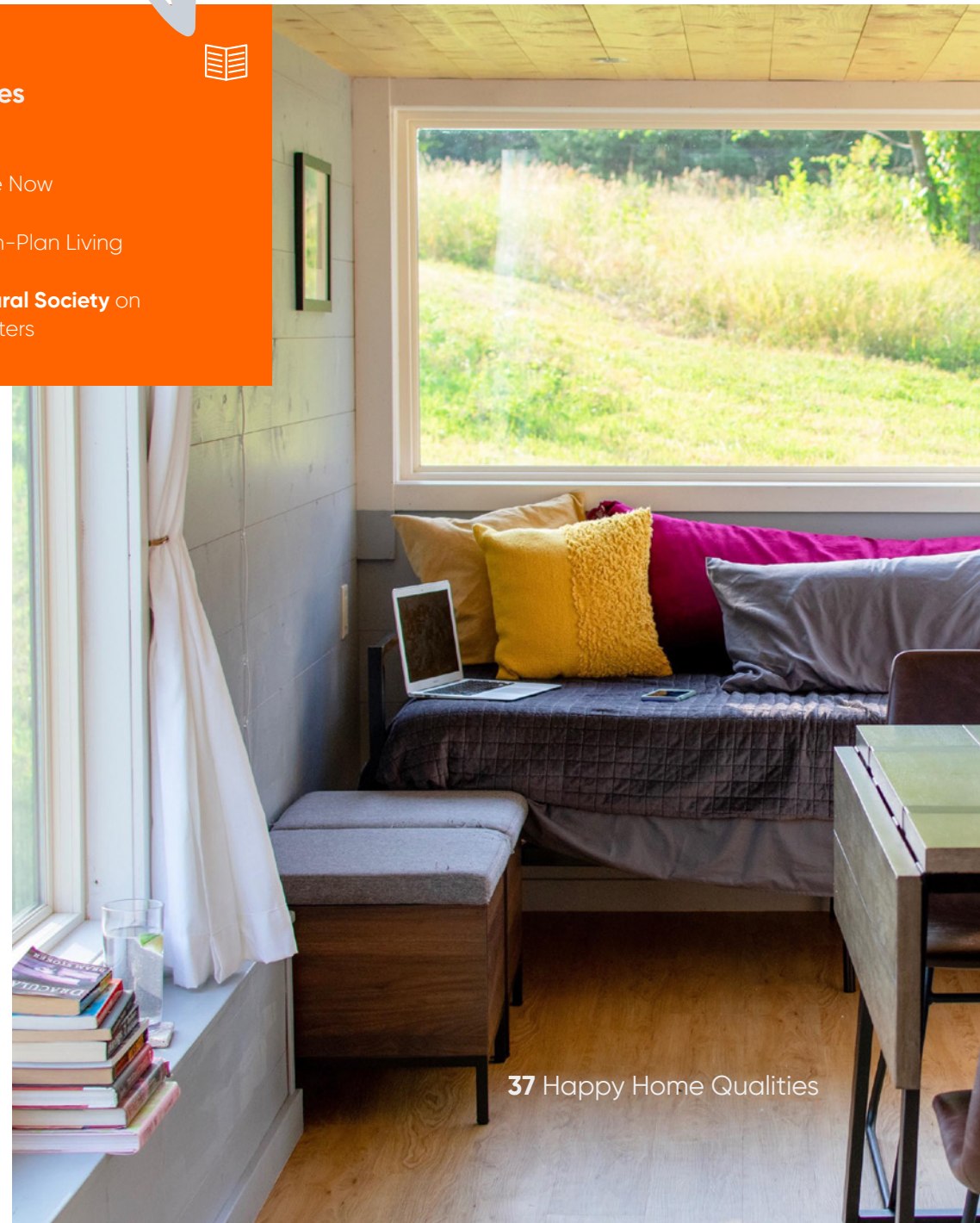
Read more on connected homes



Iposos Mori for RIBA
on *The Way We Live Now*

The Times on Broken-Plan Living

The Royal Horticultural Society on
why Gardening Matters



Mirrors

Reflects who we are



- 1 Homes that mirror us are reflections of our values and personalities; our intrinsic selves.
- 2 81% of those most happy at home say their homes reflect who they are, while just 7% of those most unhappy agree.
- 3 A focus on our intrinsic selves is important if we are to avoid conspicuous consumption by investing in short-term trends, as opposed to our own long-term needs.
- 4 In terms of how people describe their home personality traits, our data found people who said their homes were distinctive tended to have a higher home satisfaction, on average, than those who said their homes were conventional.
- 5 To design a home that reflects who you are, start by asking simple questions such as 'what about your home feels most special?' or 'what do you like to do to relax?' or 'how do you host?'.



81%

of those most happy at home say
their home reflects who they are



Personality in the home

The choices we make about our homes, however small, say a lot about who we are and who we want to be. Given the amount of time we spend at home, this is not surprising. We have also found that expressing your identity at home is vital to wellbeing.

81% of those most happy at home say their homes reflect who they are, compared to 7% of most unhappy.

Sometimes our homes reflect our selves through sentimental items or distinctive design choices that are deeply personal, mirroring our values and our personalities – our intrinsic selves. This results in the physical nature of our homes being expressed through its own set of personality traits (e.g. playful, outdoorsy, creative, foodie) that mirror our own. Borrowing from the Environmental Psychology discipline, we use the term mirrors to describe this²⁸. Our intrinsic selves are contrasted with our extrinsic selves. Extrinsic choices are those which we might make to present an image of what we would like others to notice or see as important.

Making a house a home


Of those who are very satisfied with their homes, 90% were satisfied with their ability to personalise their space with objects and possessions, versus 32% who were not able to personalise their space. Our homes should reflect our identity through styles and tastes. Our ability to use them as a mirror is key to wellbeing and this factor was a more significant predictor of home satisfaction than having somewhere that is 'just your space'. Whilst having adequate space to live is critical, where we have spatial constraints we should focus on personalising them.

Personalising spaces so they feel like your own helps us to feel more comfortable and **RELAXED**. Most people agree that you shouldn't have to own your own home to personalise your space. 67% of the public agree that renters should have greater rights when it comes to personalising their space e.g. hanging pictures on walls.



7%

of those most unhappy at home
say their home reflects who
they are



"I think sometimes people try and create something that looks like the same thing in a magazine, it's not giving the people their identity, you know, they get a bit saddened. We're really lucky to create our space the way we want it, you know. It doesn't look like something out of an Ikea catalogue"

Interview Participant

Read more on
homes as mirrors



Sam Gosling's Snoop

Elina Grigoriou's Wellbeing in Interiors

Lily Bernheimer's How Everyday
Spaces Structure Our Lives



Avoiding Conspicuous Consumption

We do not want to fall into the trap of conspicuous consumption, whereby we buy things because of what they might say about us rather than because they really represent our intrinsic selves. When we do this we invest in short term trends, as opposed to our own long term needs.

We know this is important because when we asked people about their homes, we also found a preference for distinctive homes, as opposed to conventional. This suggests that following trends may be overrated.

67%

of the public agree that renters
should have greater rights to
personalise their space

Combined with creating **ADAPTABLE** spaces that can change to meet our needs, our approach to space should focus on creating spaces that mirrors our personalities and values.

In our qualitative research we identified a pattern of thought whereby interview participants were imagining a future buyer's needs to help shape their home transformation plans. In some cases, participants were prioritising a future owner of their house even when they had no intention of selling.

By focusing on residents and social interaction instead, the design process has the potential to create spaces that mirror our identities. Given the importance of distinctiveness in terms of home happiness, thinking of design as a process helps us to move away from being led by trends to being led by needs. A home that mirrors your personality and values is somewhere you can cherish and feel proud of.

Design as a process continued

By thinking of design as a process, we increase our chances of designing for wellbeing as we stay focused on resident needs. Resident needs are understood through greater resident interaction about the use of space and social interactions at home.

Designing for home personality traits

We want to design for happy traits; specifically Relaxed, Sociable, Distinctive. Here are a few questions you might want to ask yourself to start thinking of design as a process. These should be relevant whether you're a professional or just someone interested in design and wellbeing.



How do you and other household members best relax? What do you like to do alone?

What hobbies do you have? Do you Garden, Cook, Host?

How often do you host people at home?

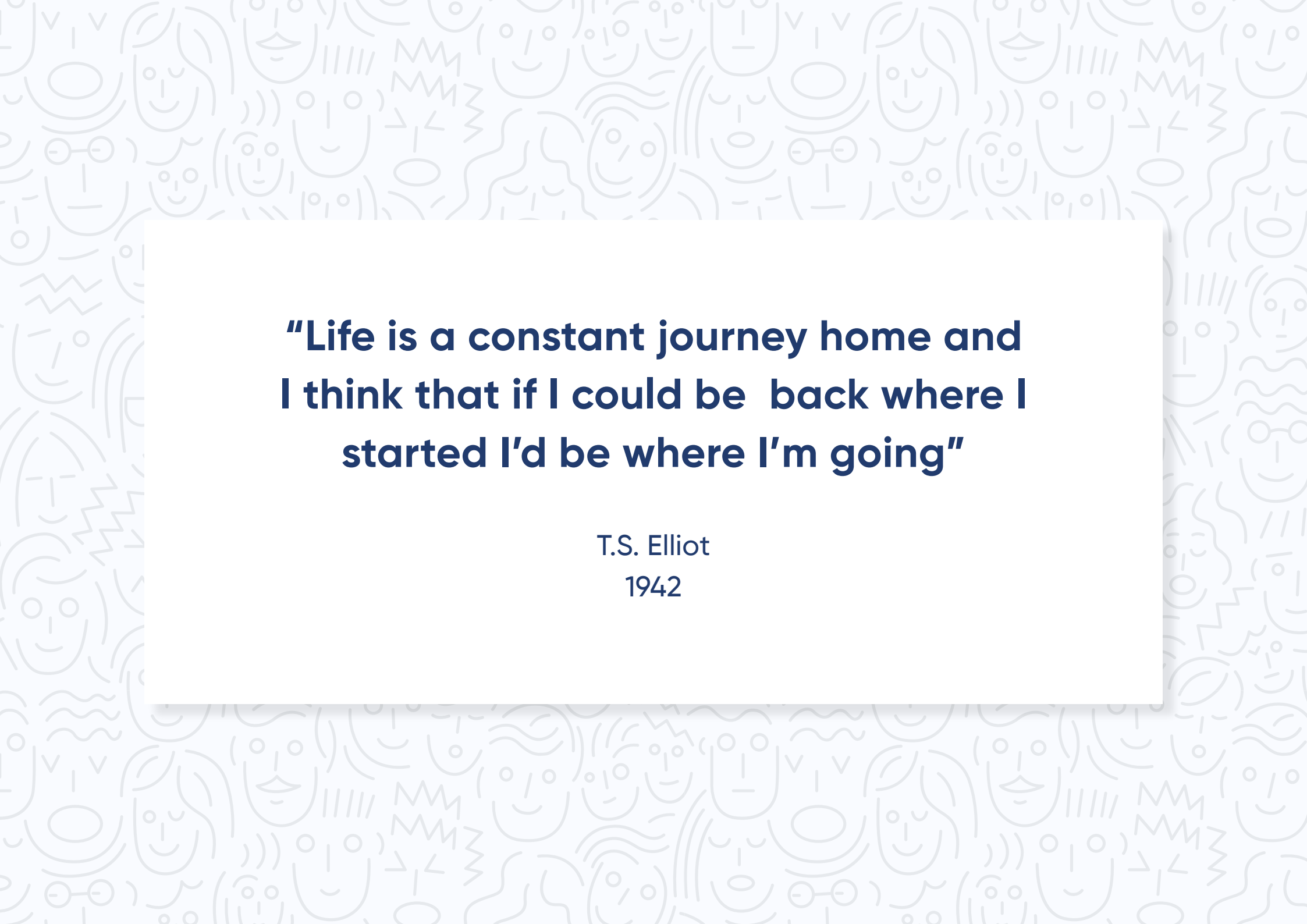
What do you like to do when you host people?

What about your home feels most special to you? How often are you reminded of that?

Have you ever been to someone's home and felt it was 'just like them'? What about their home made you think that?



Take it Home

The background of the image is a light blue-grey color, covered with a repeating pattern of stylized, line-art faces. These faces are drawn with simple outlines and various expressions, some with wavy lines for hair or zig-zag lines for features. They are scattered across the entire background, creating a textured, patterned effect.

**"Life is a constant journey home and
I think that if I could be back where I
started I'd be where I'm going"**

T.S. Elliot
1942

Summary

The Science of a Happy Home can help us all to learn a thing or two about how we can live better in our homes.

Future proof your home

ADAPTABLE MIRRORS RELAXED

Whether you are buying, renting, building or renovating, consider your needs now - and into the future - when thinking about how to maximise space and or value. Time spent in the home is not divided equally. Some spaces are utilised a great deal more than others. Spend a bit of time thinking about the rhythm of your day and, if relevant, of those you share your home with. Where space is at a premium, think about how you can personalise spaces so they suit your tastes and needs.

Make design choices with me in mind

MIRRORS CONNECTED RELAXED

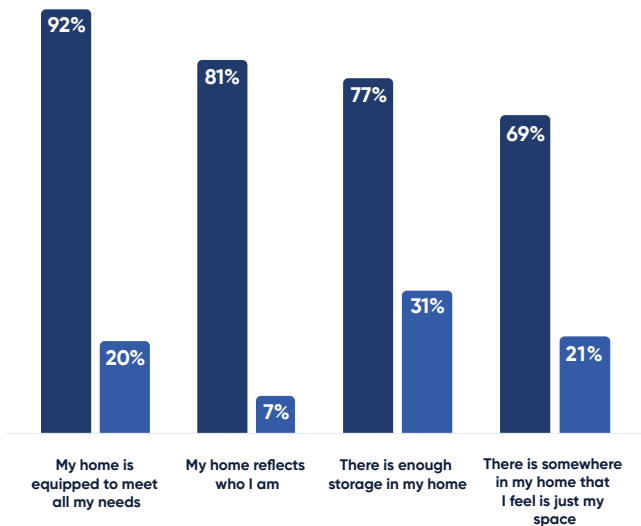
When we focus on our needs and expression we focus on our wellbeing. When making choices about your home, whether it's a new lamp or an extension, question how it meets your needs or helps you express yourself. This is important if wellbeing outcomes are the goal. Sometimes we find our choices reflect what we think we should do, not what is best for us.

Design as a process

SECURE NOURISHING ADAPTABLE RELAXED CONNECTED MIRRORS

For the general public, the Science of a Happy Home offers a way to think and talk differently about our homes. Consider design as a process that starts with questions about what each of the traits mean to you and those you might live with. Simply by paying a different kind of attention we can make changes that will improve our wellbeing and make us happier at home.

My Home is... Statements - % of respondents who agree with Statements



Most Happy at Home and Most Unhappy at Home

Happy at home 😊 Not happy at home ☹️

20

steps to a Happy Home

Simple steps to make your home happier



1. Asking for building control certificates to ensure your house is safe before renting, buying or moving in

SECURE NOURISHING

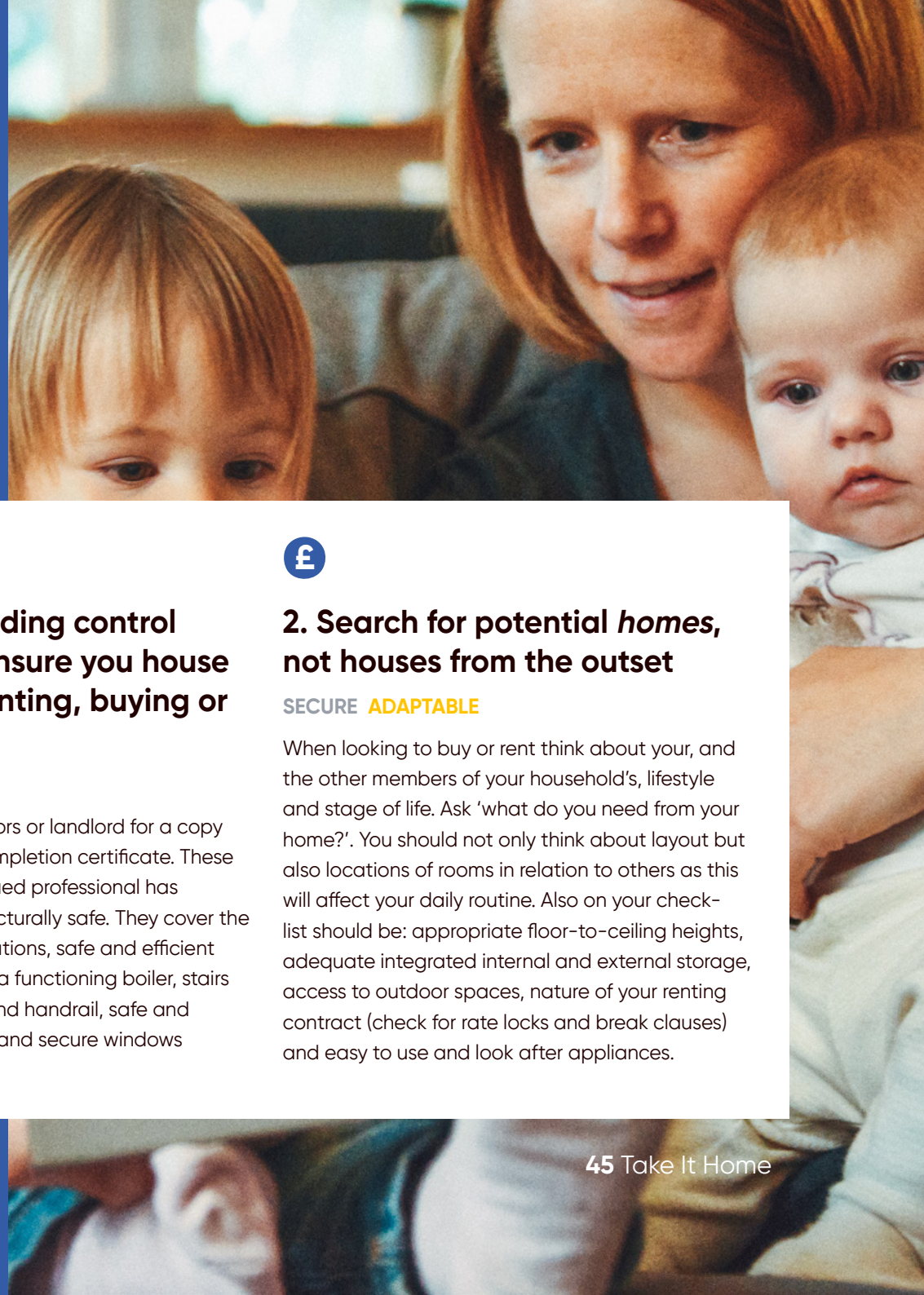
Ask your sellers/ contractors or landlord for a copy of the building control completion certificate. These certificates mean a qualified professional has ensured your home is structurally safe. They cover the basics - fire safety precautions, safe and efficient cold/ hot water supplies, a functioning boiler, stairs with enough headroom and handrail, safe and working electrical fittings and secure windows and doors.



2. Search for potential *homes*, not houses from the outset

SECURE ADAPTABLE

When looking to buy or rent think about your, and the other members of your household's, lifestyle and stage of life. Ask 'what do you need from your home?'. You should not only think about layout but also locations of rooms in relation to others as this will affect your daily routine. Also on your check-list should be: appropriate floor-to-ceiling heights, adequate integrated internal and external storage, access to outdoor spaces, nature of your renting contract (check for rate locks and break clauses) and easy to use and look after appliances.





3. Hide entrances to 'back of house' spaces with furniture

RELAXED ADAPTABLE

Sometimes we don't like our social spaces, such as living rooms or kitchens, to be directly connected to bathrooms or utility spaces. Camouflage the doors to these private areas, for example, by running shelving across and around doors. This adds creativity and playfulness to your space too.



5. Use mirrors and personalised design in tight spaces

MIRRORS RELAXED

Where you're short on space, for example in tight hallways or box rooms, these features provide a sense of a larger and more habitable space to help make you feel more comfortable.



4. Maximise and mimic natural light

NOURISHING

Start by hanging a mirror adjacent to a window to allow light to bounce around the room as this optimises natural light. Where rooms don't have daylight, purchase 'biodynamic' lights that mimic our body clocks. Alternatively, glare free bulbs for dimmable lights give more control over brightness levels and are a good high street price option.



6. Break up spaces with 'broken plan'

ADAPTABLE CONNECTED

A broken-plan layout helps to break up big spaces and can be accomplished easily with a DIY approach. Use new shelving or panels to mark out zones, rugs to encourage spaces for interaction, and screens to create temporary, quieter spaces.





7. Make space for sentimental items

MIRRORS CONNECTED

Decorating 'on trend' is over rated so focus on items that have meaning to you. This could be as simple as having a corkboard with photos and cards, hanging up a souvenir from a special holiday or framing a special sports shirt. Doing things like this help to make a space feel like your own thereby increasing attachment and comfort. It's important to let all residents share in this behaviour.



9. Create wall nooks for work, reading and quiet moments

ADAPTABLE RELAXED

Making use of unused wall or corner spaces removes the need to design specific rooms to accommodate these functions. This gives you a pocket space to work or study from home, which also has the flexibility to be personalised for different uses in the future. A window seat built into a window can have a similar effect.



8. Enhance your green spaces, maximising even small areas

NOURISHING CONNECTED

For those with a garden, make the space your own sanctuary by adding seating and growing your own vegetables and flower beds. Even artificial plants have similar benefits. If urban living makes this impossible, consider the benefits of a local allotment plot.



10. Find what is unique about your home and make it your own

MIRRORS CONNECTED

Whether you're an owner or a renter, get creative with features at home. For example, a mantelpiece can be personally customised, providing space for objects, as well as giving symmetry to a space. Where you don't have any distinctive features, consider installing something new that encourages interaction, like an expandable table that can accommodate smaller or larger groups.

Longer term and more expensive steps you can take to make your home happier



11. Design a 'broken plan' layout

ADAPTABLE CONNECTED

If you've tried some of the simple broken plan steps, you can take the layout to the next level with easy to install half-walls or internal windows (which don't require permission for owners). These can facilitate more time to interact or time for quiet moments, as you prefer. When designing from scratch, make sure open plan spaces have more than one window so you can be truly flexible.



12. Create malleability with modular furniture

ADAPTABLE CONNECTED

If you're expecting your household to grow or you are soon to be an empty nester, modular furniture that can scale up and down gives you more flexibility. Storage solutions with tiered shelves may allow you to create new zones within larger spaces, making your home more malleable. However, make sure you consider storage depth so you've got enough space.

The Science of a Happy Home





13. Install sun tunnels to dark corners of the house

RELAXED NOURISHING

These tunnels, which can be installed on any roof, bring in external natural light, are easy to install, are much cheaper than roof lights which mean they minimise heat gain in summer and heat loss in winter as well as producing less heat and saving more than electric lighting does.



15. Play with multi-storey floor to ceiling heights and different space volumes

ADAPTABLE RELAXED

Floor level changes can act as a separation between specific areas and can add dimension to an open plan layout while maintaining the open plan configuration. By resisting the urge to be 'boxed in', rooms that stack and seam into each other establish a greater sense of coherence and connectivity within the home. This can help you maximise light across all levels of the home.



14. Make structural and drainage works a feature of your home

MIRRORS NOURISHING

There may be occasions where boxing the pipework and columns can create awkward spaces or where hiding the beams in the ceiling does not give you enough floor-to-ceiling height. Exposing them, through vaulted ceilings or exposed pipes, can create a sense of a larger, more fun space and also gives the clients an idea of how their homes work behind-the-scenes.



16. Allow for internal voids like light wells or mini courtyards in circulation spaces

CONNECTED RELAXED NOURISHING

Bringing the outside in, this not only allows more daylight and natural ventilation into the house but also breaks the internal circulation and diverts you to the outside in a private setting. Adding trees or plants can create a temporary space for quiet moments. Ask your designer if this is something you could incorporate into your home.



17. Bring personality with statement windows

RELAXED MIRRORS

Window choices and placement can maximise light exposure and create connections to the outside. Extend windows on the ground floor for a greater view outside. Alternatively, skylights can bring in almost double the level of daylight as vertical windows, filling spaces with light which may not ordinarily fit normal windows. They can be used stylistically to light up key spaces. Unusual shapes, grid patterns and colour panels can also give a space personality and distinctiveness.



19. Ensure you have a connection outside with a balcony or garden

NOURISHING SECURE CONNECTED

The benefits of such spaces are often underestimated but we should think of them as external rooms. Balconies have been shown to be particularly important to home workers. These spaces also act as a safe buffer between the public and the home. Where possible a balcony that also extends back into the home offers additional shelter, privacy and function adaptability.

The Science of a Happy Home



18. Invest in innovative and sustainable materials

NOURISHING

When building or renovating, consider what innovative materials you could use. For example, there are a growing number of natural concrete options, including mycelium made from mushroom fungi. Bio-concretes are non toxic, meaning they absorb pollution and have the ability to trap more heat than traditional insulation. Ask your designer about sustainable drainage systems like green roofs and installing photovoltaic arrays and smart climate control systems.



20. Invest in malleable living spaces.

ADAPTABLE MIRRORS

When designing or buying a home consider the malleability of a space. Our research highlights that living spaces are particularly important. How possible will it be to change layouts of your living spaces over time, through merging or subdivision? Living spaces that incorporate distinct features are likely to grow with you.



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Our Literature Scan Summary can be found [here](#).