



Research & Development

White Paper

WHP 371

March 2020

Human values: understanding psychological needs in a digital age

Lianne Kerlin

BRITISH BROADCASTING CORPORATION

Human values: understanding psychological needs in a digital age

Lianne Kerlin

Abstract:

This paper proposes a framework to understand human values in a digital age. Based on 18 months of empirical research and investigation; 14 human values have been established. These are underpinned by psychological needs; supported and validated by existing psychological research and key models of human need.

Human values are inherent to people across gender, ethnicity and culture, where the relative importance (*value priorities*), fluctuates at different stages of life in tandem with a shift in needs, as well as in relation to external factors in response to the wider context of life.

Human values are essential for shaping everyday behaviour, thoughts and attitudes.

Additional key words:

Human values, public purpose, psychological needs, human needs

© BBC 2019. All rights reserved. Except as provided below, no part of this document may be reproduced in any material form (including photocopying or storing it in any medium by electronic means) without the prior written permission of BBC except in accordance with the provisions of the (UK) Copyright, Designs and Patents Act 1988.

The BBC grants permission to individuals and organisations to make copies of the entire document (including this copyright notice) for their own internal use. No copies of this document may be published, distributed or made available to third parties whether by paper, electronic or other means without the BBC's prior written permission. Where necessary, third parties should be directed to the relevant page on BBC's website at <http://www.bbc.co.uk/rd/pubs/whp> for a copy of this document.

Human Values

Lianne Kerlin

Contents

1. Introduction.....	5
1.1. Human values	6
1.2. Value priorities	6
2. Research aims	7
3. Methods.....	7
3.1. Scoping phase.....	7
3.2. Empirical research phase.....	8
3.3. Validation phase	8
3.4. Life stage research	9
4. Findings	9
5. Discussion: Human Values	10
5.1. Achieving goals: the need to set challenges and demonstrate abilities	10
5.2. Being inspired: seeking motivation from other people’s success and failure.....	11
5.3. Being safe and well: looking after physical and mental wellbeing	13
5.4. Belonging to a group: the need to feel included.....	15
5.5. Connecting with others: the need to interact and seek social closeness.....	17
5.6. Exploring the world: curiosity seeks novelty and stimulation.....	18
5.7. Expressing myself: conveying identity through personality, attitudes and behaviour	19
5.8. Feeling impactful: the need to contribute and feel worthwhile	21
5.9. Growing myself: the need to learn new things and develop skills.....	22
5.10. Having autonomy: the need for independence and agency over behaviour.....	23
5.11. Having stability: the need for certainty and security in life	25
5.12. Pursuing pleasure: enhancing positive experiences and reducing pain	26
5.13. Receiving recognition: external validation to boost self-esteem.....	28
5.14. Understanding myself: the need to develop a clear sense of self.....	29
6. References	30

1. Introduction

Human behaviour is the expression of underlying motivations, drivers and needs. It is manifested as explicit and observable actions and forms the very top of the iceberg with regards to how human needs, values and actions are represented. The very tip consists of innate human needs that act as the deepest driving force of behaviour, and the middle resides human values, acting as a gateway to both inform behaviour and understand deeper needs. Values are incredibly important as they are *driven by* underlying needs as well as *drive* explicit behaviour (figure 1).

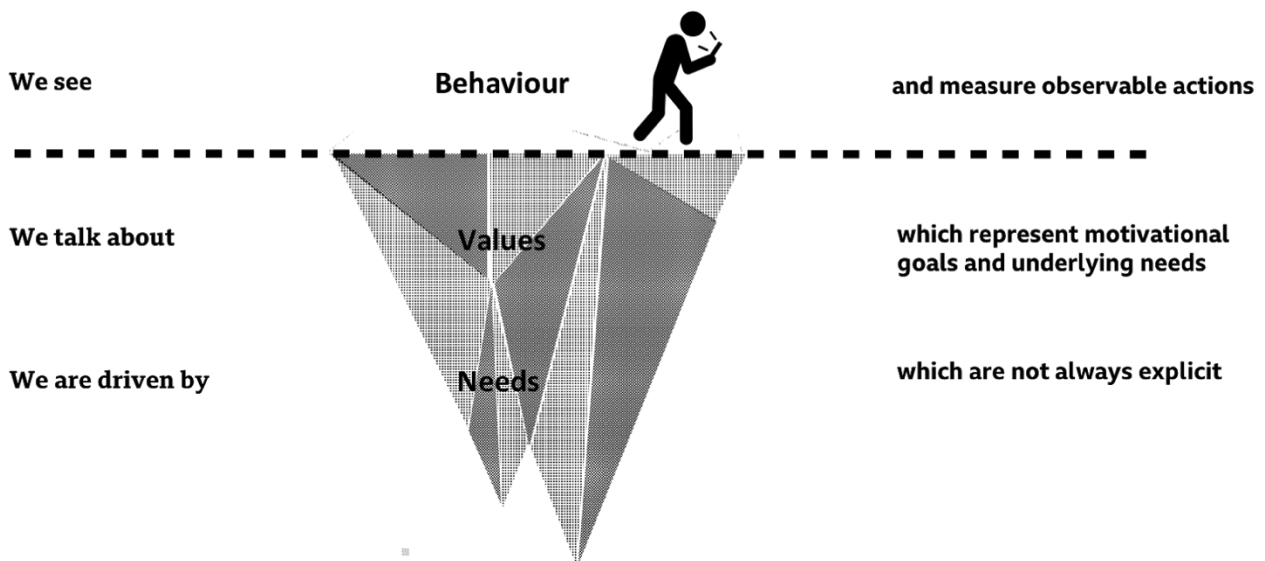


Figure 1: Illustration of the interaction between human needs, values and behaviour

Human needs have thoroughly been demonstrated by psychological models such as Maslow's hierarchy of human needs [1]. Tracing the link between behaviour and needs far enough through history will unearth the most basic motivation to survive, which was manifested by fight or flight responses and hunter gather activities. Society has evolved so that people are not faced by the same threats to their everyday survival, and so people have progressed to developing a range of more sophisticated motivations, with the ultimate goal for self-actualisation [1].

Behaviour occurs within the context of society. Actions are influenced by a range of factors, e.g. social, technological, economic, political. The digital age is a timely example of how society can radically revolutionise behaviour. With the utility of devices and world of infinite choice, information and immediacy of reward; the touch of a button has shaped expectations, interactions and emotions, as well as removed the need to apply overtly conscious thought or effort.

In this age, mapping behaviours to needs becomes more complex than fight or flight (behaviour) to stay alive (need) and requires an understanding of a more intermediary level of being; values. Research shows that people are able to explicitly describe their

personal values [2]. It has widely been demonstrated that values express underlying needs and motivations [3], as well as serve as guiding principles for thoughts, attitudes and judgements [3]. They drive everyday behaviour, having been demonstrated to affect everything from voting behaviour, consumer choices and life decisions [4][5][6]. For example, two people might behave in the same way but be driven by different motivations, and similarly, two people might express the same need in different actions.

1.1. Human values

Herein, human value is defined as a personal judgement of importance, an expression of need [3], and a psychological driver that shapes everyday behaviour [4][5][6]. Researching values acts as a gateway to needs and behaviour – by understanding the intermediary factors that *drive behaviour* and are *driven by* needs.

1.2. Value priorities

In the same way that society shapes behaviour, the wider context of life shapes the relative importance of human values at any given point. Generally speaking, ‘value priorities’[7][8] fluctuate as people transition through different stages of life [9] whether doing so with conscious awareness or not [10]. Sometimes it may require a situation to make value priorities apparent [11]. For example, valuing one’s health might not be at the forefront until one experiences a sickness.

Lifespan research demonstrates that value priorities fluctuate through various stages of development in tandem with the change in psychological needs throughout these times. Children progress through developmental milestones that typically occur in a linear manner, where their needs are dominated by biological and cognitive needs so they can learn about the world. At early adolescence, social needs become heightened as children begin to develop a sense of independence, and so young people are driven by the goals of making friends and fitting in with their peer group. Cultural context is also important, and so the structure of school dictates goals of learning and passing exams. Pre-16, age can be a good indicator of general value priority.

Milestones become less linear after school when there is an increase in freedom. A range of milestones can be seen as traditional markers of adulthood, e.g. moving out of home for the first time or starting a family, whilst others are more nuanced, e.g. travelling, moving to a different country or setting up a business. The increase in choice, opportunity and availability means that individuals have the opportunity to pursue their personal motivations and needs (e.g. career, partners, social circles, passions, making a difference).

The internet has also increased opportunity for making life choices, e.g. for work, travel and meeting new people. Age becomes less meaningful as an indicator of what is

important and valued to people. For example, two 20-year olds, whilst similar in age, could be at different stages of life and their lifestyles could be miles apart.

Value priorities also differ across social groups, cultures and societies [12][13], as well as being subject to societal norms. For example, in a society where personal freedom is prohibited, the value of having autonomy would be expected to be lower in priority compared to a society that has only temporarily had their freedom restricted [14].

2. Research aims

Using key psychological frameworks and models of human needs, this project has investigated human values in the digital age. To understand how values can drive both digital and non-digital behaviour, it was considered important to research values on this core human level. In doing so, it was possible to understand how values play out in people's lives in the digital age as well as recognise the impact of the digital age on behaviour.

It is important to understand the relative importance of values, and one way to demonstrate how value priorities change over time is through stage of life. Since young people transition through a number of milestones, it was decided to research a young adult audience (e.g. under 35 years). A participant base of 16-34 years was used within empirical research to capture a rich set of life stages, and so value priorities were researched in relation to life stages.

The findings of the research will be transformed into a framework for designers, developers and researchers alike. By creating value driven tools, the BBC can ensure that the audience's best interests are at the heart of decisions made, the services created, and new experiences offered. Being value led results in having meaningful impact in people's lives.

The toolkit can be found here: <http://downloads.bbc.co.uk/rd/workstreams/digital-wellbeing/bbc-rd-digital-wellbeing-cards-small-oct19-lk.pdf>

3. Methods

3.1. Scoping phase

The scoping phase consisted of a literature review of research and psychological models, it was decided to use three key models: Schwartz [7], Maslow [1], and Deci and Ryan [8].

Alongside theoretical research, internal BBC audience survey data was collected and reviewed. The data consisted of surveys undertaken on 16-34-year olds over the period of 2016 to 2018, which contained behavioural trends of the audience. The data was used to both identify gaps in the knowledge of the BBC audience as well as a sense check of empirical findings.

3.2. Empirical research phase

Eighteen months of empirical research used a range of mixed methods. This consisted of a series of in-depth interviews, focus groups, workshops and card sorting activities to determine behaviours, lifestyles and values.

A total of 24 interviews were conducted. Initially, 12 interviews were conducted to establish an initial set of value themes. 12 participants (6 male, 6 female, 16-34 years old) were interviewed via a semi-structured interview schedule to discuss lifestyles, behaviours and values. Themes were transformed into 12 cards and used within a second round of interviews.

Round two of interviews with a further 12 participants (6 male, 6 female) were shown the value cards of results from the first interviews. Participants were asked to card sort based on order of importance and relevance, as well as a set of blank cards to include anything that was missed. A semi-structured discussion followed, where participants were asked to elaborate on values, considering the meaning of the value, the behaviours and actions taken as well as the way it played out in their lives. Participants were also asked to define the value in their own words: a validation check of the researcher's language, meaning and intention of the value. These interviews derived 2 further themes.

A focus group with 6 participants was conducted. Participants discussed the behaviours, actions and values that were deemed fundamentally important in their lives. Each participant discussed the reasons *why* and were asked to apply a self-determined value label on the behaviour. As a group, participants mapped out the 20 themes that emerged from their collected values.

At this point, using a grounded theory approach [15], the researcher conducted a thematic analysis across both interviews and focus group findings to derive a list of 16 values: *Wellbeing, connecting, belonging, understanding the self, exploring the world, hedonism, stability, growing, feeling esteem, being recognised, being open and feeling fulfilled, feeling autonomy, expressing the self, developing personal principles, relating to others*

3.3. Validation phase

The validation stage consisted of focus groups, interviews and card sort methods to establish and confirm the language of the human value findings. 5 further workshops

were conducted with 4-6 people in each. In each group, participants were presented with the 16 value cards and asked to sort based on most the least important. At this point, the values were collapsed into 14.

3.4. Life stage research

The range of life stages were discussed organically within interviews and thus recorded by the researcher. Participants discussed stages of life such as being on the career ladder, becoming a parent or beginning university.

To determine a method to understand value priorities, 6 interviews were conducted with participants between 16-34 years old. Participants were asked to card sort most to least important values. A discussion occurred. They were asked to think back to a time when value ordering might have looked different, as well as predict a change for the future. Further discussions continued around past and future selves. Value priorities were discussed differently by people when considering their present, past and future selves. The following important stages resulted: school, college, university, first job/role, being on the career ladder, travelling, becoming a parent, and being in a significant relationship.

In order to understand whether trends existed between value priorities and life stages on a larger scale, a questionnaire was developed to capture the general pattern of value priorities across different life stages. 2559 16-34-year-olds completed the questionnaire, where people were asked to select their top three values for their current stage, previous stage and future stage. The survey requested participants to include qualitative responses about how those values were being fulfilled or not. The qualitative element was of relevance to understanding values per se – by understanding the types of behaviours that people do to fulfil their values.

4. Findings

16 original values (p.9) were modified for clarity, language and legibility. To ensure consistency, all values were written to be first person and an action word. It was intended that this would enable people to understand the value, intention and meaning from a personal perspective.

- *Being inspired* was created, to incorporate aspects of *relating to others* and *role models*
- *Hedonism* changed to *pursuing pleasure*, to capture the subjective nature of enjoyment
- *Wellbeing* changed to *being safe & well* to include the feeling of safe

- *Feeling impactful* was created, to incorporate aspects of *feeling esteem* (confidence, competence and self-value) and *feeling fulfilled* (having meaning and purpose and engaging in impactful activity)
- *Having personal principles* was discarded as a main theme as it emerged as a subtheme of stronger themes, such as *having autonomy* (acting in line with beliefs) and *expressing myself* (expressing thoughts, beliefs or morals)
- *Being open* was collapsed into being a subtheme of *growing myself* (having an open mindset, seeking other perspectives and curiosity).

Fourteen human values were established:

1. Achieving goals
2. Being inspired
3. Being safe and well
4. Belonging to a group
5. Connecting with others
6. Exploring the world
7. Expressing myself
8. Feeling impactful
9. Growing myself
10. Having autonomy
11. Having stability
12. Pursuing pleasure
13. Receiving recognition
14. Understanding myself

5. Discussion: Human Values

The subsequent section provides a discussion of each value. Each value consists of a description about the underlying motivations, psychological needs and consideration in relation to young people, as well as a summary table containing empirical findings.

5.1. Achieving goals: the need to set challenges and demonstrate abilities

Achieving goals fulfils a need to learn, develop and demonstrate competency in life [16]. Applying knowledge enables a demonstration of abilities, skills and competencies, which implicitly and explicitly drives efforts to reach further goals [17]. Striving for competency [18] is beneficial for sustaining interest, motivation and seeking higher levels of personal satisfaction [18]. Table 1 below demonstrates the links between needs, values and behaviour.

Achieving goals boosts self-esteem which enables confidence for taking on challenges [19]. When skills are applied to challenges, people experience focus, control and able to

achieve a state of flow [20]. Developing mastery of skills contributes to psychological growth and is connected with the value of *growing myself* [17].

Cognitive abilities are generally developed through a series of defined milestones that peak around early adulthood [21]. After the structure of school, the need for learning and developing transforms into personal goals, which vary from person to person (e.g. saving money, winning a gold medal, mastery in education), or societal goals, which may be based on a number of socially defined milestones or achievements (e.g. passing exams, getting a job, buying a house).

Priorities for young people

Young people have demonstrated aspirations for learning general life skills. Research found that the most frequently reported desires for skills being in relation to cooking, languages, and money management, as well as improving social and communication skills [22][23][24]. This was supported in the empirical qualitative findings, where interviewees considered it to be important “*to have lots of skills at your disposal*’ with one interviewee suggested that university was invaluable to her as ‘*you are constantly learning new things*’.

Young people are ambitious about their careers and want to explore opportunities and new environments. This links in with ambition to try new things, have new experiences and explore (see value: *exploring the world*). For example, in a recent survey conducted by Deloitte, almost half (43%) of millennials reported that they felt motivated to seek a change in job environment and as such were planning to leave their current job within two years [25].

Need	Having	Doing	Being
To learn To develop To demonstrate competency	Knowledge Education Motivation Access to information Opportunity to apply knowledge Tools to track progress	Learning Setting goals Practicing skills Tracking progress Self-reflecting Developing skills	Competent Confident Accomplished Feeling a sense of achievement

Table 1: Human value, needs and behaviour: achieving goals

5.2. Being inspired: seeking motivation from other people’s success and failure

Behaviour is learned by observing, imitating and comparing to others [26]. From birth, babies are positively reinforced to copy the behaviour of others that is rewarded in order to achieve the same outcomes [26]. People become role models for children, providing an important behavioural template through observing other people’s successes, mistakes and failures [27]. Role models become more considered as social awareness

increases and children gain and a better understanding about who they are (see value: *understanding myself*) [27].

Inspiration is likely taken from people in aspirational positions in society [27]. Similarity also plays a role, where people who are perceived to be similar are considered relatable and therefore their achievements are seen as achievable [28]. In times of uncertainty, others are sought for guidance, inspiration or motivation [27], to seek ideas, goals or possibilities [29], which can influence ambitions, choices, and achievements [26].

Feeling inspired is beneficial on a number of levels. It provides motivation to tact on ideas [26] and has been linked to increased creativity [30], a boost in performance [31][32], and greater life satisfaction [30]. Being open and inspired tend to go hand in hand; where an openness to new experiences boosts the feeling of inspiration and being inspired can increase the feeling of openness [33].

Priorities for young people

With a natural instinct to seek similarity, the peer group inspires and influences young people [28]. Social media platforms are significant sources of inspiration, with a vast amount of relatable content and potential role models. Similarity and relatability are seen as important attributes as it makes achieving the same goals more possible [28].

Celebrities or social media ‘influencers’ are also prominent sources of inspiration for young people, seen in the rise of young people becoming professional “influencers”. The rise in fame of reality TV stars, such as Love Island contestants, demonstrates the growth in popularity and fame of contestants representing ‘everyday people’. The reality TV show Love Island became the most popular program of 2018 because the contestants were ‘real everyday’ people developing ‘real’ love lives [34].

A perception of authenticity is a key driver. interviewees reported feeling especially inspired by the “*everyday authentic person*”. One interviewee admired “*other people’s lifestyles on social media*” and followed accounts “*that promote feeling good about yourself and being authentically yourself.*” This has also been demonstrated in campaigns where real people have been used. The YouTube channel, Whistle Sports, launched a campaign for people to upload their own basketball videos and saw a huge engagement of more than 94 million views of 2,500 videos [35].

Consumer decisions can be easily influenced. For instance, 51% of young people said they rely solely on social media when choosing a holiday [36]. Brands are well aware of the power of influence, where well liked celebrities become the face of their brand [37]. Influence can become problematic in instances when there is a lack of authenticity. For example, the use of filters puts unnecessary pressure to “*look a certain way*”, described by one interviewee. Advertising can also put unrealistic expectations on life, with what interviewees spoke about being “*a warped view of reality*”.

Need	Having	Doing	Being
To... learn observe others imitate others seek role models seek inspiration seek guidance	Access to people/groups Sources of inspiration (offline, online) Accredited sources of information	Following others social media Being interested in people (e.g. on social media, offline, friendship groups) Consuming user generated content Joining groups or clubs Watching sports Going to galleries	Inspired to act Guided on how Feeling self- esteem

Table 2: Human value, needs and behaviour: being inspired

5.3. Being safe and well: looking after physical and mental wellbeing

Once essential needs for food, water and shelter are met, the need for physical safety and mental wellbeing takes priority [38]. Whilst effort to maintain physical and mental health may not always be conscious, an imbalance will always be noticed. For instance, when health or safety feels compromised, the adrenal glands release cortisol, evoking stress, i.e. fight or flight response, as well as the motivation to reduce it [39].

The effective coping mechanism has been passed down generations from our ancestors who learned this behaviour as a way to deal with serious threats from dangerous animals, starvation and death. This evolved behaviour is used today much more widely. On an everyday basis, perceived threats come in a multitude of forms and experienced on a prolonged basis, resulting in the persistent feeling of stress. This has been associated with anxiety, depression, and post-traumatic stress [39]. *Being healthy and safe* is crucial to core human functioning; it underpins the ability to fulfil other important needs [38].

How does society impact health and safety?

Emerging research highlights negative effects of excessive technology use on health and mental wellbeing [40]. Excessive use is defined by being compulsive and interfering with normal day-to-day activities. The overload of information has been shown to have negative repercussions on mental health, wellbeing and sleep [41]. For example, late night technology use has been linked to reduced sleep quality [41] partly due to the effects of light exposure on circadian rhythms and nocturnal secretion of melatonin [42]. There has also been links between increased time spent on social media platforms, such as Facebook, and higher self-reported depression, body dissatisfaction, stress, and lower self-esteem [43][44][45].

Priorities for young people

Young people have grown into a world of endless digital options. Spending a large amount of time online, companies compete to win their attention. With a range of evidence demonstrating harmful effects of excessive screen time on sleep, health and mental wellbeing, research on young people is demonstrating early warning signs. For example, a recent report highlighted that over 40% of the most digitally prolific group, Gen Z (16-24-year olds), reported feeling ‘always anxious’ and 50% feeling ‘quite worried about themselves’ [46]. This group has also collectively self-reported the highest level of loneliness [47].

There has been attempts to combat negative effects of excessive technology use. For example, research shows that there has been an increase in the number of people taking a ‘digital detox’ or permanently deactivating a social media account [48]. The latter of which 51% of 16-24-year olds reported doing so in 2018 [48]. Qualitative findings support this as interviewees highlighted the importance of taking *“self-care”* and maintaining a *“balance between tech and non-tech activities”*.

On the flip side, technology has been used as a tool to generate mental health awareness, with the availability of information and surge of social media movements. Interviewees discussed using apps as a utility for maintaining their health and wellbeing. Apps enabled personal insight into the connection between physical and mental health through tracking diet, weight and exercise, which was considered helpful to *“remain conscious about how I’m treating my body”* to *“monitor progress”* or ensure *“I am staying as healthy as possible.”*

Similar to the physical world, safety is also important in the digital world, evermore with the rise of services harvesting and using personal data. In light of recent privacy breaches (e.g. the Facebook-Cambridge Analytica scandal), digital rights have been at the forefront of public concern. The protection of personal information online is paramount given the wealth of data that is being collected and used.

Need	Having	Doing	Being
To be physically healthy To be mentally healthy Safe from harm	Methods to achieve balance Low stress Access to trusted information Education about digital wellbeing Information about personal data Ethically designed services Methods to stop mindless consumption	Restful activities Technology free time Physical activity Exercise or movement Relaxing activities Reducing stress Having protection over personal data Making informed decisions Activities for self-care Keeping out of harm's way	Safe Balanced Active Nourished Stress free Relaxed

Table 3: Human value, needs and behaviour: being safe and well

5.4. Belonging to a group: the need to feel included

As social animals there exists an innate need to belong, which drives an essential part of human behaviour and a motivation to build meaningful relationships [49]. Whilst the concept of a groups might look or act differently across cultures, the concept of members sharing mutual concern and/or love for one another is universally applied principle [49]. Evolutionarily, being part of a group increased survival chances [49] and the same applies today, with strong social bonds boosting survival odds by up to 50% [50].

Groups enable understanding of oneself in relation to the wider world (see *understanding myself*). By identifying with a group, individuals take on the group norms and shared identity [51]. On a societal level groups provide important social norms and acceptable standards of behaviour. Group labels and attributes simplify the process of learning about others, serving a function to categorise people to help with understanding and adapting behaviour accordingly. Generally speaking, one's own group (in-group) is perceived positively against others (out-group) as it boosts self-esteem and increases the confidence of the group identity. Sometimes negative judgements are cast to ensure in-group superiority [52][49].

Groups provide essential support to individuals. Absence of belonging or lack of group affiliation results in the inability to relate to the social environment. Isolated or lonely individuals experience poor mental and physical health as well as higher rates of early death [53]. Being excluded have also been shown to drive socially deviant behaviour [54] or engagement with corrupt groups. Both serving the purpose to fulfil the need to feel accepted [55].

Belonging is especially prioritised during challenging life events where others provide support [56]. Support from others helps emotional health during transitional periods [57] and provides a sense of purpose by being able to contribute towards the welfare of others (see *feeling impactful*).

Priorities for young people

Young people experience a number of transitions during life. Ten stages of life were identified in the empirical findings (page 9), such as a starting university, beginning a new job and becoming a parent. At these points people prioritise finding new groups, friends, or support systems to feel they belong to the new peer group stage. One interviewee pointed out that *“your interests change over time so it’s important to make new connections overtime”*.

Social media and the affordance of digital technologies enable people to maintain relationships and group membership. Strong and long-lasting friendship groups were seen as especially important but increasingly difficult to maintain whilst progressing through life. Interviewees discussed feeling comfort and support by having long-lasting relationships. Post-university groups were digitally maintained as people moved around, started new jobs and families, e.g. *‘I’m part of a Whatsapp group with my old uni friends. I can stay included and just dip in and dip out’*.

Some groups were considered as extensions of offline ones, where individuals actively participate, have clear goals, or based around passions. In reference to the latter, there has been a number of young people participating in movements such as environmental groups, climate change groups or mental health advocacy. Interest based content consumption has also grown, enabling people to keep up to date with hobbies, passions or interests, e.g. sports channels are popular amongst young males (32% of 16-24 males are subscribed to a sports channel in 2018) [58].

In some instances, the time spent online can result in a large amount of passive consumption. When this passive nature becomes excessive it can have repercussions on mental health. For example, passively following the lives of reality TV contestants has grown, with Love Island becoming a hugely successful brand in 2018 when viewers followed the lives of contestants after the show [59]. Interviewees discussed that being exposed to the lives of celebrities gave viewers a *“warped sense of reality”*, when *‘TV stars end up with so many clothing deals and free stuff that makes it hard to keep up with’*. Recent research found that *‘seeing the picture-perfect lives of others’* can make people *‘feel depressed’* [60]. Active engagement with others encourages cooperation, contribution, and the feeling of belonging.

Need	Having	Doing	Being
To belong Feel appreciated Feel supported	Group affiliations Social identities Informal codes of conduct for the group Social norms	Searching for people or groups Participating Attending events Maintaining communication Offline groups and communities Online groups and communities Sharing Supporting with others Networking	Part of a group or community Supported Appreciated Accepted Empowered

Table 4: Human value, needs and behaviour: belonging to a group

5.5. Connecting with others: the need to interact and seek social closeness

Individuals are driven to interact and seek social closeness [61]. Attachments are first formed to primary caregivers that satisfy basic needs for hunger, warmth, and protection; and then additional relationships are formed with family, friends and partners [62]. Socialising evokes emotional rewards in the brain which feel good and support emotional bonds. The closeness between individuals is important. Research showed that a hug releases serotonin, dopamine and oxytocin, which support bonds and feeling good [63].

The benefits of social connections are far-reaching. Not only are they important for social learning, as individuals seek reference points for actions and behaviour [64], they are essential for physical and mental wellbeing. Research has demonstrated that healthy social connections can reduce blood pressure, lower stress and boost the immune system [65]. Loneliness can be the result of an inability to fulfil social needs [66], where isolation can result in isolation and feelings of depression [66]. Loneliness is noticeable in older people when their social networks have narrowed and therefore meeting new people is difficult [67].

In a digital age a lot of time is spent connecting with others online. Over three quarters of adults use online platforms to help maintain relationships [68]. Active social media users represent 31% of the global population [69]. Whilst there is a lack of physical intimacy online, some emotional benefits can be experienced. For example, similar hormones to those experienced face-to-face can be triggered whilst interacting on social networking sites [70].

Priorities for young people

Interviewees highlighted the importance of maintaining contact with friends and family. It was considered to be more difficult as lives change. One interviewee said, “*it becomes so easy to let connections fall away after uni*” and required much more effort to “*stay in contact with those people who were once such a substantial part of your life.*”

Gen Z have been referred to as ‘the most digitally connected generation ever’, sending an average of more than 128 texts per day [71] and spending a large amount of time using social media. Despite being digitally connected they are regarded as the loneliest generation [47]. With social media playing a pivotal part of everyday life, it is not clear how much of this online behaviour is passive or replacing physical connection. As discussed, social closeness is an important factor for developing bonds and feeling good [63], and so it is essential for on and offline connections.

Need	Having	Doing	Being
To... Interact Feel social closeness	Meaningful relationships Ways to communicate Healthy attachments	Communicating with people Emotionally connecting Sharing experiences Making friends Maintaining bonds Supporting others	Interested in others Together Secure Supported

Table 5: Human value, needs and behaviour: connecting with others

5.6. Exploring the world: curiosity seeks novelty and stimulation

Curiosity drives individuals to seek stimulation, information or new experiences [72], serving a purpose to increase knowledge and build skills. It evolved as a learned behaviour from hunter gathers; where those who were curious and explored their surroundings gathered important about how to survive, and consequently the “seeking” behaviour became reinforced in the brain [73]. The exposure to new stimuli not only creates new neural connections in the hippocampus, which is important for learning and memory [74], it releases dopamine, making people feel good. Therefore, the connection between exploring and learning is both reinforced and rewarded [74].

Curiosity helps individuals to discover and learn, which in turn, motivates exploration and travel, as well the desire to try new activities, have new experiences or meet new people [75]. In addition to providing variety in life [76], seeking novelty contributes to well-being. It has been linked to personal growth, increased life satisfaction and innovation and in the workplace [77][78].

Discovery behaviour can motivate individuals to embark on new challenges. Taking on new challenges empowers the use of skills, which can help individuals to understand personal strengths [79] and contribute to growth and self-development [80].

Priorities for young people

Generally, young people prioritise exploration and stimulation (e.g. see *pursuing pleasure*) more than older people [81].

In a digital age, there is an increase in access to information and opportunities. Young people demonstrate huge interest for seeking novelty, sharing experiences and making memories. Travel is regarded as being a high priority [82] and was summarised by one interviewee who liked to *‘jump on a train with no destination in mind’* to *‘discover new things and see new places’*. Recent statistics showed that a huge proportion of 16-24 year olds are say they are always looking for new experiences, and/or would happily choose an experience over a physical present [83].

On an everyday level, young people enjoy discovering new media and activities, such as films, TV shows and social media accounts [84]. Interviewees highlighted the importance of continuously exploring *“every single day I want to explore... it’s important to keep trying things you haven’t tried before”*.

Need	Having	Doing	Being
To... Discover Seek novelty Explore Learn	Curiosity Interests Hobbies Access to media Experiences Opportunities	Research Discovering new things Having new experiences Travelling Learning Meeting new people	Interested Curious Immersed Challenged

Table 6: Human value, needs and behaviour: exploring the world

5.7. Expressing myself: conveying identity through personality, attitudes and behaviour

Individuals are driven to express their identity (see value: *understanding myself*) [85]. Self-expression is the explicit representation of thoughts, attitudes and feelings about oneself, which can be expressed through words, actions or decisions, or more subtly through clothing, possessions and body language [85]. Self-expression helps with the process of self-categorisation, where individuals validate their identity and understand how they fit in with the context of the wider world. There is a motivation to express authentically, because psychological dissonance and distress occurs when individuals act inconsistently to their beliefs about who they are (see *having autonomy*).

Self-expression is beneficial for mental health because it facilitates social connections. Sharing personal stories and beliefs with others enables bonding [86], and sharing thoughts and feelings encourages social acceptance and validation [87]. Having the freedom to express oneself is generally important to individualistic societies, where there is an emphasis on individual goals, but less so in cultures where the emphasis is on community goals [88].

Social media platforms become a key outlet for self-expression. Individuals express their personality, opinions and post content about themselves. Individuals enjoy talking about themselves. It has been estimated that talking about oneself rises from about 60% in offline interactions [89] to approx. 80% on social media platforms [90]. Online platforms afford the time for thinking, adapting and reflecting content. In an age where filters, captions and photo editing are commonplace, it becomes easy to portray a highly idealised or sometimes altered version of reality [91] despite the human need to be authentic. Excessive editing is problematic, where highly edited or fake is hard to ascertain, which can breed a level of insecurity in individuals who compare to others (see *understanding myself*). The latter existed before in highly edited magazines; but the frequency of consumption increasing significantly, where a never-ending stream of images are consumed across a range of platforms daily. On just one platform alone, 1 in 5 British people described themselves as feeling 'depressed' looking at their friends 'perfect lives' on Instagram [92].

Priorities for young people

Self-expression typically occurs for the first time in adolescence. At this point, social factors become prioritised and social pressure is heightened, as young people report feeling self-conscious and concerned about how they look [93]. This time of life is marked by self-exploratory behaviour, for e.g. one interviewee *'dyed my hair pink at one point!'* in the pursuit of exploration and expression.

This time of life is also marked by increased freedom to self-express because *"being courageous and putting yourself out there a bit comes from your brain and it's what you're putting out there"*. Research found that young people want to be listened to, have the opportunity to express their views and are willing to speak up when they disagree with something in society [94].

Young people invest time self-expressing through social media accounts. The idea of content being 'instagrammable' has emerged, referencing an overly idealistic picture. As such, filters are popular for constructing the *"perfect backdrop for an image"*. Some individuals have taken to having multiple accounts, where their second contains only polished, perfected and idealistic images. There has also been a rise of fake accounts.

There have been concerns in relation to the quantified nature of popularity on social media (e.g. the likes, comments, views). If individuals make negative comparisons of themselves to inauthentic or highly edited content (e.g. photos) it can affect self-

esteem. When the sole motivation to post content is to seek validation from others (e.g. a number of likes, comments, views), it can result in self-worth being based purely on popularity metrics [95][96]. Authenticity is vital for psychological needs, especially in line with the number of physical and emotional changes that young people experience.

Need	Having	Doing	Being
To portray identity To be positively perceived by others	Self-understanding Self-confidence The freedom to express Opportunities Ways to express Support to express	Speaking out Expressing thoughts and beliefs Expressing through self-image	Authentic Confident Self-aware Secure

Table 7: Human value, needs and behaviour: expressing myself

5.8. Feeling impactful: the need to contribute and feel worthwhile

The desire to make an impact is universal. It serves important social needs, tied closely to the primitive motivation to be part of a group (see value: *belonging to a group*). Fulfilling the need of positively contributing to the welfare of the group supports individuals in the feeling of being secure, accepted and competent, as well as boosting confidence for future interactions [97].

The instinctual concern for the wellbeing of others can motivate altruistic behaviour, i.e. actions that benefit others without personal gain [98]. Helping others is deeply satisfying and rewarding. Research shows that the dopamine producing centres of the brain are activated when individuals act altruistically. The results being an increased sense of self-esteem, perceptions of oneself being ‘moral’ and ‘good’ as well as contributing to self-actualisation [99].

A number of factors affect an individual’s motivation to be impactful. Self-efficacy increases the likelihood for acting altruistically [100] as well as feeling empathetic, i.e. able to understand and share other people’s emotions [101]. Attitudes also play an important role, as individuals are unlikely to help when their beliefs do not align to the cause [102]. Over time attitudes can change, as do moral values and responsibilities further develop [103].

Priorities for young people

Young people demonstrate a passion to have a positive impact in the world. In relation to the environment, people express attitudes to live ethically and environmentally friendly. Research found that over 50% of 16-24-year olds said they would pay more for ethical produce, and 20% had boycotted a brand in the past due to unethical practices

[104]. Veganism is also on the rise in the UK, with 15-34-year olds constituting almost half of all vegans [105].

A key theme from the interviews was the desire to have impact through meaningful careers. One participant discussed changing careers from a corporate to non-profit environment in order to strive for purpose and meaning, where she felt “*able to contribute to something that I believe in*”. Interviewees also discussed having impact by volunteering for a charity, campaigning or helping and supporting those less fortunate.

Need	Having	Doing	Being
To maintain group welfare To be accepted by others	Self-belief Self-efficacy Motivation Empathy Personal moral principles Personal beliefs Meaning and purpose	Contributing Participating Helping others Donating Volunteering Supporting Helping Living by a set of principles	Accepted by the group Motivated Empowered Able

Table 8: Human value, needs and behaviour: feeling impactful

5.9. Growing myself: the need to learn new things and develop skills

Individuals are driven to self-actualise, which is to reach full potential. Personal growth is a continuous improvement in life in order to find purpose and meaning [106]. A strong sense of identity is required to reach fulfilment, as well as developing inner validation and self-esteem (see value *understanding myself*) [106]. The acknowledgment of one’s strengths, the acceptance of limitations and feeling of competence can empower individuals to accomplish goals [107] and improve overall self-worth. Self-validation is derived from personal growth (see *understanding myself*), and ultimately, enables individuals to flourish and reach their potential [106].

Life transitions present an opportunity for self-development. Change can result in individuals stepping outside of their comfort zone, re-evaluating personal beliefs and challenging assumptions held about the world [108]. Equally, periods of boredom or stagnation can motivate a desire to seek change [109]. Enacting one’s intention to change yields feelings of being in control and perceiving it in a positive manner [110].

The personality characteristic of openness to change is associated with being open to new ideas [111]. Despite the need for growth being part of the human psyche, some people explicitly value and actively seek personal growth, and as such will direct efforts to seek alternative perspectives, challenges, or diverse opinions in the pursuit of growing as a person [112].

Priorities for young people

Young people transition through a number of life stages where they are most likely to look to others for support and guidance. During these periods, growth is possible, where it is important to develop skills, competencies and confidence in order to develop a self-esteem, confidence and inner validation.

Opportunities are essential for young people to develop competencies and skills in order to achieve their potential. Research shows that they are committed to working hard to achieve success, with more than half of Gen Z being prepared to work very long hours in order to progress their careers [113] One interviewee discussed striving towards *“a sense of mastery and understanding”* about his work. Another participant expressed that *“If you go through life not really knowing what you’re doing, you’ll quickly become frustrated, so I like to take the correct steps and make sure I’m putting in effort and dedication to make sure I feel increasingly confident and capable in what I’m doing.”*

Need	Having	Doing	Being
To achieve full potential	Opportunities Support Self-reflective tools Constructive feedback Healthy challenges	Honing skills Developing expertise Experimenting Taking on challenges Seeking alternative perspectives Actively seeking conflicting or diverse opinions	Competent Capable Accomplished Reaching potential Considered an expert Fulfilled

Table 9: Human value, needs and behaviour: growing myself

5.10. Having autonomy: the need for independence and agency over behaviour

The underlying need for self-determination drives the value of having autonomy. Independence and agency over actions is important [114], as well as the ability to act with willingness and purpose [115]. When intentions and behaviour are aligned individuals experience harmony, which is essential for psychological well-being and overall life satisfaction [114].

Freedom is an essential pre-requisite for autonomy and is especially important within individualist culture where independence is highly regarded. When autonomy is compromised, and individuals are unable to behave in line with their intentions, psychological distress can result; where individuals become unmotivated and dissatisfied with life [116].

How has the digital age affected autonomy?

In the digital world, autonomy can be compromised when the design of a service has not aligned to the *individual's intention* but rather to the ultimate goal of the business. As a result of the competition for user's attention and time, some design practices used by digital companies are becoming unethical. Such techniques are becoming increasingly subtle, sophisticated and concealed, incorporating aspects of persuasion, habit forming or nudging behaviour in ways to serve the business. This 'dark user experience' results in users being *very likely to act* through implementing sophisticated behavioural science practices that ultimately trigger, reward and reinforce behaviour. For example, through evoking anxiety to act, nudging behaviour, removing stopping cues or giving the perception of infinite content to increase time, creating friction or increasing the steps to exit, as well as eliminating the need to apply conscious thinking, decision making or critical thinking skills.

On psychological level, people are more likely to act in a way to fulfil an immediate gratification over a longer-term goal, and neurologically are being rewarded and reinforced. This results in habit, where the of cue (trigger), action (prompt), and reward (emotional reinforcement) perpetuates the cycle of subconscious, compulsive and regularly repeated action [117]. Demonstrating that a single episode can turn into 'binge watching' several, as it easier to continue than consciously make the effort to stop and seek alternative activities [118]. This mismatch between initial intention and behaviour can result in negative feelings [119].

Habits free up cognitive effort, which is beneficial for focusing on higher thinking, such as solving problems or making decisions [120]. However, unintended habits can be harder to break as negative emotions become associated. The habit of constantly "*checking*" the phone is a timely example [121]. Where push notifications *trigger urgent action* in order to *alleviate anxiety* and ultimately *reinforce the behaviour*, a well-established technique in the gambling industry to increase engagement [122][123][124].

Priorities for young people

Approximately 8 in 10 British adults indulge in binge-watching habits, with 35% doing so on a weekly basis [125]. When consumption is excessive, important tasks become postponed in favour of fulfilling short-term gratification [126]. When autonomy is compromised, individual's experience a loss of control over behaviour [126].

Excessive and unintended screen time is experienced by many and has been linked to a range of damaging psychological effects [127], such as poor quality of sleep [128], feelings of guilt [129], loneliness and anxiety [130]. Gen Z have been regarded as the loneliest generation, feeling both distracted and overwhelmed. Recent research has demonstrated that the number of young people in the UK who reported feeling as though they have no control of their lives rose from 28% in 2017 to 39% in 2018 [131].

However, some efforts are being taken to take control over digital behaviour by switching off, taking a digital detox [59] or using services to understand where time is being spent, e.g. apps such as Moment, Forest or the iPhone screen time.

Need	Having	Doing	Being
Acting with intention Psychological harmony	Control over actions Informed choices Independence Freedom Transparency Verified information Verified sources	Making decisions Acting with intent Acting intentionally	In line with intentions Empowered In control

Table 10: Human value, needs and behaviour: having autonomy

5.11. Having stability: the need for certainty and security in life

Individuals are motivated to feel certainty, security and predictability in life [132], which may mean living in a stable society, being financially secure or having dependable relationships. Key to survival are the stable attachments formed with primary caregivers that enable a secure base. A number of further attachments are created with friends, partners and peers that provide additional bases of stable reassurance and comfort [133]. Relationships are fundamental. Continuous disruptions in relationships result in cognitive, social and emotional difficulties [134].

Generally speaking, older adults value stability more than younger individuals which may be linked to the physical decline in strength, memory and cognitive speed [132]; whereas younger people prioritise hedonism, exploration and stimulation [135]. However, stability is often highly prioritised during times of uncertainty and change, such as at transitional points in life, when work responsibilities increase [136], or in times of job insecurity [137]. The latter has been linked to increased anxiety and depression [137], where periods of instability are generally associated with declined psychological well-being. Valuing stability becomes more important during these challenging periods of transition [135].

Uncertainty about the future triggers stress and anxiety in the same way that the brain reacts to an immediate threat [138]. This hyper vigilant state, better known as *the fight*

or *flight response*, evolved as an adaptive behaviour because it prepares people to take action in an ambiguous situation [139]. Having a secure and predictable environment is valued when it gets difficult to adapt to changes in life [132].

Priorities for young people

In spite of busy lifestyles and a general attitude for living in the moment (see value: *pursuing pleasure*) young people demonstrate a number of motivational goals for seeking stability. Self-report research in 2018 found that 77% of 16-24-year olds hoped to own their own home by 30; two-thirds wished to have had their first child by 30 [140] and 48% spent a lot of time thinking about their finances [141]. However, there exists uncertainty in light of current economic and political environments, with 56% of Gen Z and 48% of Millennials self-reported being anxious about their future [140].

Table 11: Human value, needs and behaviour: having stability

Need	Having	Doing	Being
To be able to predict outcomes Certainty Security	Trusted information Organisational skills Decision making skills Planning tools Guidance Support	Researching information Planning for the future e.g. finances, health	Secure Certain Stable Able Empowered Proactive over the future

Interviewees expressed a desire for seeking a level of certainty in life but thought that having solid stability was going to be prioritised more in the future. For example, one interviewee suggested she liked having *“the reassurance that things are going to continue to be fine, rather than trying to sort things out last minute, right now I value that I have a stable job, a nice apartment, a good group of friends, and I’m in decent health.”*

With regards to planning finances, the advice of others was considered invaluable. Interviewees discussed seeking advice from *trusted friends and family*, and research found that approximately one third said they need help when planning their finances [141]. Digital tools and apps have been used to support planning and saving. For example, the Barclays Bank Robin Hood app, which provides skills for saving and investing, has a predominate user base of under 35 [142].

5.12. Pursuing pleasure: enhancing positive experiences and reducing pain

Individuals are psychologically motivated towards seeking pleasure and avoiding pain in life [143]. Pleasure refers to hedonic feelings of enjoyment, satisfaction, relaxation,

comfort and excitement. Hedonism has a neurobiological basis, as surge of dopamine is released upon anticipating a reward [144]. A number of hedonic hotspots exist in the brain that enhance enjoyment for sensory rewards [145], which are crucial for motivating behaviour. Individuals have learned to repeat rewarded behaviours and reduce punished ones [146][147], and as such, pleasure seeking has evolved as a learned behaviour.

Individuals engaged in hedonistic pursuits report feeling carefree, living in the moment and disengaging from ongoing worries [148][149][150]. Those whose lives are high in these pursuits tend to feel greater levels of life satisfaction [151]. Ultimately, individuals are driven to strive and experience pleasure, whilst the specific activities themselves are personal and subjective. Pursuing pleasure enhances positive emotions and physical experience, which increase well-being, maximise pleasure and overall happiness in life [152][153].

Priorities for young people

Research continuously demonstrates that young people generally prioritise values of hedonism, exploration, and stimulation [154][155], compared to that of older adults who generally value a stable environment due to declines in strength, cognitive speed and memory [156]. Interviewees demonstrated a desire to *'live in the here and now'*. Pursuing pleasure experienced through having (new) experiences, enjoying the moment and disconnecting from daily life.

A state of flow was described by interviewees, as interviewees discussed the feeling of deep enjoyment that came with time passing by, feeling completely absorbed and focused. Flow was discussed in relation to engaging in immersive experiences, exploring passions and having fun. For example, *'Sometimes I'm so engrossed and absorbed in my work I forgot to have a break'*.

A desire to pursue creative pursuits is emerging in young people. There has been a rise in the number of people creating their own digital content. More than one quarter of Gen Z considered themselves to digital content creators [157], as well as being heavy users of such platforms, such as YouTube, Snapchat, Instagram, Musical.ly. Young people like to experiment and take opportunities to put content out to the world [157].

Another emerging behaviour of young people is the overindulgence of media content. As discussed in *Having Autonomy*, a number of people engage in weekly "binge watching" [130]. Streaming services have revolutionised viewing habits, but in doing so have made over consumption easy. Enjoying content should be part of a healthy balance.

Table 12: Human value, needs and behaviour: pursuing pleasure

Need	Having	Doing	Being
To maximize pleasure To avoid pain	Opportunities Fun Media Non-technology activities Tools Methods	Playing Enjoying Relaxing Consuming Creating	Pain free Immersed Creative In a state of flow Happy

5.13. Receiving recognition: external validation to boost self-esteem

Receiving recognition boosts self-esteem [158]. Whilst some esteem needs can be met by having self-acceptance, self-worth and self-value, validation from others is also important [158]. These needs can be met through admiration from others [159], such as through receiving recognition, e.g. attention, validation, status, prestige, fame. Gaining the respect and appreciation from others helps with feeling included [158].

When efforts go unnoticed, individuals are at risk of developing feelings of inferiority and can consequently become less productive or motivated [158]. For example, a lack of acknowledgement and approval in the workplace is associated with stress and lower confidence in job performance [160].

Priorities for young people

Being recognised is important and other people can boost self-esteem. Authenticity of recognition is important. One interviewee highlighted an example of having her accomplishments celebrated in her community group *'the community makes a lot of effort to show off each other's achievements and that's really important'*.

Social media forms a key part of young people's lives. However, when validation from others becomes the sole focus, people may miss out on fulfilling other self-esteem needs such as developing inner validation [161]. For example, popularity metrics amplify the need for attention and approval, exaggerating the very human need to be liked by others. The platforms heighten social comparisons, make it easy for attention seeking behaviour and can drive people to act primarily to receive approval from others. In doing so people are at risk of compromising self-worth [162] by associating their value solely on the judgements of other people [162].

Being recognised is important, but an over-reliance can result in vulnerability of negative emotions when there is a lack of validation [161]. It is not surprising that high levels of social media use have been linked to lower levels of self-esteem [162]. To experience confidence and self-acceptance a balance between internal and external validation is essential [158].

Need	Having	Doing	Being
To have self-esteem To feel accepted by others	Feedback Validation Self-esteem Self-validation Self-worth	Representing a team or club Giving information Giving advice Providing expertise	Acknowledged Appreciated Recognised Validated Praised

Table 13: Human value, needs and behaviour: receiving recognition

5.14. Understanding myself: the need to develop a clear sense of self

Individuals are driven to form an identity. A pre-requisite to establishing a personal identity is to understand one's collection of personal beliefs [163]. The process of self-awareness and self-reflection enables increased awareness of thoughts, attitudes and behaviour [164]. Developing self-acceptance is important as it enables one to feel secure in their identity and is associated with psychological well-being [165].

Individuals are also driven to understand who they are in relation to others and the wider world. In addition to personal identity, group identities are adopted. Being part of a group can be across a range of levels from being a member of a local football club to a citizen of a country [166]. The group's beliefs, characteristics and attitudes filter into one's personal understanding of who they are [167].

A number of identity crises can occur during life. Crises are categorised by periods of internal conflict and high confusion and occur most prominently around key stages of life development, transitional periods, or in response to a change [168]. They can additionally occur when people feel discomfort in the way they are perceived by others [169]. These times are resolved by either affirming existing beliefs or adopting alternative ones [170]. Successfully navigating an identity crisis is a positive experience, as it enables a clearer understanding of the self [168]. A clear identity is associated with being secure, emotionally mature and self-confident, all of which are important aspects in the pursuit of self-actualising [169][171].

How does digital society affect identity?

The digital world has increased the opportunities for people to form, express and reflect their identity, as well as learn more about who they are in relation to others. Curiosity drives individuals to seek information about how they compare to others or fit in with the wider context of the world. Online quizzes that reflect personal information or show where people fit in with others are popular as people learn more about themselves. Apps and games enable participation and engagement with groups, affording people the ability to form personal and group-based identities.

Priorities for young people

A key marker of young people is the transition from adolescence to adulthood. During this stage young people go through a number of internal conflicts in the pursuit of establishing who they are and how they want to be perceived by others. Identity exploration is a key aspect of adolescence [170] and the transition to adulthood is marked by increased maturity and development of key physical, cognitive and social skills. The crisis represents a struggle between developing a personal identity whilst being accepted and fitting in with others. It is important for young people to take the time to self-reflect and become self-aware, because a failure to adequately work through this stage can result in being socially disconnected, lonely or lacking emotional maturity [168].

Young people have reported a desire to understand how to progress in life but feel highly distracted. As the most digitally connected generation, Gen Z lead busy lifestyles rarely away from their devices. A behaviour of time killing has emerged, where interviewees reported *'killing time with my phone'*, *'filling time'* and *'feel distracted by everyone'* a result of the content rich and notification led world. The constant need to be digitally connected may result in being distracting.

Digital tools can help people to understand who they are. For example, aiding self-reflection. One interviewee talked about using a blog to *'get things out of [her] head'* as a form of therapeutic understanding, whilst another spoke about *'using health tracking data to understand her eating habits'*.

In addition to self-reflection, the skills of deep and critical thinking are important for people to understand both themselves and the world better. A constant stream of information, notifications and killing time may risk hindering this development, especially in line with young people feeling distracted.

Need	Having	Doing	Being
To have an identity/s To have personal beliefs To feel good about oneself	Self-awareness Self-perception Interests Hobbies Passions Beliefs Attitudes	Self-reflection Trying new things Meeting new people Spending time with others Being part of groups	Self-reflective Self-aware Self-appraising Self-accepting

Table 14: Human value, needs and behaviour: understanding myself

6. References

[1] Maslow, A. H. (1954b). *Motivation and personality*. New York: Harper & Row

- [2] Schwartz, S. H. (2011). Values: Individual and cultural. In F. J. R. van de Vijver (Eds.), A. Chasiotis, & S. M. Breugelmans, *Fundamental questions in cross-cultural psychology* (pp. 463-493). Cambridge: Cambridge University Press.
- [3] Rockeach, M. (1973). *The Nature of Human Values* (1st ed.). New York: The Free Press.
- [4] Rohan, M. (2000). A Rose by Any Name? The Values Construct. *Personality and Social Psychology Review*, 4(3), 255-277. doi: 10.1207/s15327957pspr0403_4
- [5] Maio, G. R., & Olson, J. M. (1998). Attitude dissimulation and persuasion. *Journal of Experimental Social Psychology*, 34(2), 182-201
- [6]Puohhiniemi, M. (1995). *Values, Consumer Attitudes and Behaviour*. University of Helsinki
- [7] Schwartz, S. H. (1994). Are There Universal Aspects in the Structure and Contents of Human Values?. *Journal of Social Issues*, 50(4), 19-45. doi: 10.1111/j.1540-4560.1994.tb01196.x
- [8] Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum.
- [9] Smith, P. B., & Schwartz, S. H. (1997). Values. In J. W. Berry, M. H. Segall & C. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology*, (2nd ed., Vol. 3, pp. 77- 118). Boston, MA: Allyn & Bacon.
- [10] Bardi, A., & Schwartz, S. (2003). Values and Behavior: Strength and Structure of Relations. *Personality and Social Psychology Bulletin*, 29(10), 1207-1220. doi: 10.1177/0146167203254602
- [11] Roccas, S., Sagiv, L., Schwartz, S., & Knafo, A. (2002). The Big Five Personality Factors and Personal Values. *Personality and Social Psychology Bulletin*, 28(6), 789-801. doi: 10.1177/0146167202289008
- [12] Schwartz, S. H., & Sagiv, L. (1995). Identifying culture-specifics in the content and structure of values. *Journal of Cross-Cultural Psychology*, 26, 92-116.
- [13] Schwartz, S. H. (2017). The refined theory of basic values. In S. Roccas & L. Sagiv (Eds.), *Values and behavior: Taking a cross-cultural perspective* (pp. 51-72). Cham:Springer
- [14] Bardi, A., & Schwartz, S. H. (2003). Values and behavior: Strength and structure of relations. *Personality and Social Psychology Bulletin*, 29, 1207-1220. <https://doi.org/10.1177/0146167203254602>
- [15] Strauss, A., & Corbin, J. (1990). *Basics of Qualitative Research Techniques and Procedures for Developing Grounded Theory* (2nd Edition). Sage Publications: London

Further reading:

- Devos, T., Spini, D., & Schwartz, S. (2002). Conflicts among human values and trust in institutions. *British Journal of Social Psychology*, 41(4), 481-494. doi: 10.1348/014466602321149849

Achieving my goals references:

- [16] Janacsek K., Fiser J., Nemeth D. (2012). The best time to acquire new skills: age-related differences in implicit sequence learning across the human lifespan. *Developmental Science*. 15, 496–505 <http://dx.doi.10.1111/j.1467-7687.2012.01150>
- [17] Deci, E. L., & Ryan, R. M. (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.
- [18] Legault, L. (2017). Self-Determination Theory. In book: *Encyclopaedia of Personality and Individual Differences*, Editors: V. Zeigler-Hill and T. Shackelford 10.1007/978-3-319-28099-8_1162-1.
- [19] Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. <http://dx.doi:10.1037/h0054346>
- [20] Csikszentmihalyi, M. (2000). Happiness, flow, and economic equality. *American Psychologist*, 55(10), 1163-1164. <http://dx.doi.org/10.1037/0003-066X.55.10>
- [21] Piaget, J. (1936). *Origins of intelligence in the child*. London: Routledge & Kegan Paul.
- [22] State of the Youth Nation Report, August 2017, BBC
- [23] State of the Youth Nation Report, June 2018, BBC
- [24] State of the Youth Nation Report, February 2018, BBC
- [25] Deloitte. (2018). 2018 Deloitte Millennial Survey. Deloitte Touche Tohmatsu Limited. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-2018-millennial-survey-report.pdf>

Further reading:

Schwartz, S. (1994). Are There Universal Aspects in the Structure and Contents of Human Values?. *Journal Of Social Issues*, 50(4), 19-45. doi: 10.1111/j.1540-4560.1994.tb01196.x

Being inspired references:

- [26] Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <http://dx.doi.org/10.1037/0033-295X.84.2.191>
- [27] Morgenroth, T., Ryan, M. K., & Peters, K. (2015). The motivational theory of role modeling: how role models influence role aspirants' goals. *Rev. Gen. Psychol.* 19, 1–19. doi: 10.1037/gpr0000059
- [28] Manke, K. J., & Cohen, G. L. (2011). More than inspiration: Role models convey multiple and multifaceted messages. *Psychological Inquiry*, 22(4), 275-279.
- [29] Thrash, T. M., & Elliot, A. J. (2003). Inspiration as a psychological construct. *Journal of Personality and Social Psychology*, 84(4), 871-889. <http://dx.doi.org/10.1037/0022-3514.84.4.871>

- [30] Thrash, T. M., Elliot, A. J., Maruskin, L. A., & Cassidy, S. E. (2010a). Inspiration and the promotion of well-being: tests of causality and mediation. *J. Pers. Soc. Psychol.* 98, 488–506. doi: 10.1037/a0017906
- [31] Buunk, A. P., Groot Hof, H. A., & Siero, F. W. (2007). Social comparison and satisfaction with one's social life *Journal of Social and Personal Relationships*, 24(2), 197-205.
- [32] Campbell, D. E. & Wolbrecht, C. (2006), See Jane Run: Women Politicians as Role Models for Adolescents. *Journal of Politics*, 68: 233-247. <http://doi:10.1111/j.1468-2508.2006.00402>
- [33] Thrash, T. M., & Elliot, A. J. (2004). Inspiration: core characteristics, component processes, antecedents and function. *J. Pers. Soc. Psychol.* 87, 957–973. doi: 10.1037/0022-3514.87.6.957
- [34] State of the Youth Nation Report, December 2017, BBC.
- [35] State of the Youth Nation Report, January 2018, BBC.
- [36] State of the Youth Nation Report, September 2017, BBC.
- [37] State of the Youth Nation Report, April 2018, BBC.

Further reading

Goldstein, K. (1934). *The Organism: A Holistic Approach to Biology Derived from Pathological Data in Man*. New York, USA: Zone Books

Being Safe and Well references:

- [38] Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. doi: 10.1037/h0054346
- [39] Zheng, Z., Gu, S., Lei, Y., Lu, S., Wang, W., Li, Y., & Wang, F. (2016). Safety Needs Mediate Stressful Events Induced Mental Disorders. *Neural Plasticity*, 2016, 1-6. doi: 10.1155/2016/8058093
- [40] George, M., Russell, M., Piontak, J., & Odgers, C. (2017). Concurrent and Subsequent Associations Between Daily Digital Technology Use and High-Risk Adolescents' Mental Health Symptoms. *Child Development*, 89(1), 78-88. doi: 10.1111/cdev.12819
- [41] Van den Bulck, J. (2004). Television Viewing, Computer Game Playing, and Internet Use and Self-Reported Time to Bed and Time out of Bed in Secondary-School Children. *Sleep*, 27(1), 101-104. doi: 10.1093/sleep/27.1.101
- [42] Higuchi, S., Motohashi, Y., Liu, Y., & Maeda, A. (2005). Effects of playing a computer game using a bright display on presleep physiological variables, sleep latency, slow wave sleep and REM sleep. *Journal of Sleep Research*, 14(3), 267-273. doi: 10.1111/j.1365-2869.2005.00463.x
- [43] Chen, W., & Lee, K. (2013). Sharing, Liking, Commenting, and Distressed? The Pathway Between Facebook Interaction and Psychological Distress. *Cyberpsychology, Behavior, And Social Networking*, 16(10), 728-734. doi: 10.1089/cyber.2012.0272

- [44] Chou, H., & Edge, N. (2012). "They Are Happier and Having Better Lives than I Am": The Impact of Using Facebook on Perceptions of Others' Lives. *Cyberpsychology, Behavior, And Social Networking*, 15(2), 117-121. doi: 10.1089/cyber.2011.0324
- [45] Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D., & Lin, N. et al. (2013). Facebook Use Predicts Declines in Subjective Well-Being in Young Adults. *Plos ONE*, 8(8), e69841. doi: 10.1371/journal.pone.0069841
- [46] State of the Youth Nation. (2018). UK Youth. YouthSight. Retrieved from <https://www.ukyouth.org/wp-content/uploads/2018/02/UK-Youth-State-of-the-Membership-2018-2.pdf>
- [47] BBC Radio 4. (2018). 16-24-year olds are the loneliest age group according to new BBC Radio 4 survey - Media Centre. Retrieved from <https://www.bbc.co.uk/mediacentre/latestnews/2018/loneliest-age-group-radio-4>
- [48] State of the Youth Nation report, 2015, BBC.
- [49] Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. doi: 10.1037/h0054346
- [50] Holt-Lunstad, J., Smith, T., & Layton, J. (2010). Social Relationships and Mortality Risk: A Meta-analytic Review. *Plos Medicine*, 7(7), e1000316. doi: 10.1371/journal.pmed.1000316
- [51] Turner, J. C. (1991). Social influence. Buckingham, UK: Open University Press.
- [52] Tajfel, H. & Turner, J. C. (1986). "The Social Identity Theory of Intergroup Behavior". In S. Worchel & L. W. Austin (Eds.), *Psychology of Intergroup Relations*. Chicago: Nelson-Hall
- [53] Berkman, L., & Syme, S. (1979). Social networks, host resistance, and mortality: A nine year follow up study of Alameda county residents. *American Journal of Epidemiology*, 109(2), 186-204. doi: 10.1093/oxfordjournals.aje.a112674

Further reading:

Netflix. (2017, 17 April). "Sleep is my greatest enemy" [Twitter Post] Retrieved from <https://twitter.com/netflix/status/854100194098520064?lang=en>

[54] Purdie, V., & Downey, G. (2000). Rejection Sensitivity and Adolescent Girls' Vulnerability to Relationship-Centered Difficulties. *Child Maltreatment*, 5(4), 338-349. doi: 10.1177/1077559500005004005

[55] Sageman, M. (2011). *Understanding Terror Networks*. Philadelphia: University of Pennsylvania Press, Inc.

Belonging to a group references:

[56] Cohen, S. (2004). *Social Relationships and Health*. *American Psychologist*, 59(8), 676-684. <http://dx.doi.org/10.1037/0003-066X.59.8.676>

[57] Haslam, C., Holme, A., Haslam, S., Iyer, A., Jetten, J., & Williams, W. (2008). Maintaining group memberships: Social identity continuity predicts well-being after

stroke. *Neuropsychological Rehabilitation*, 18(5-6), 671-691. doi: 10.1080/09602010701643449

[58] State of the Youth Nation report, October 2017, BBC.

[59] State of the Youth Nation report, December 2018, BBC.

[60] Office for National Statistics, (2016). Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuringnationalwellbeing/2016>

Connecting with others references:

[61] Lieberman, M. (2013). *Social - why our brains are wired to connect*. New York: Crown Publishers.

[62] Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psychoanalysis*, 39, 350-371.

[63] Kuchinskas, S. (2009). *The Chemistry of Connection*. Oakland, CA: New Harbinger Publications.

[64] Bandura, A. (1968). Imitation. In D. L. Sills (Ed.), *International encyclopedia of the social sciences* (Vol. 7). New York: Macmillan.

[65] Cohen, S. (2004). *Social Relationships and Health*. *American Psychologist*, 59(8), 676-684. <http://dx.doi.org/10.1037/0003-066X.59.8.676>

[66] Cacioppo, J., Hughes, M., Waite, L., Hawkley, L., & Thisted, R. (2006). Loneliness as a specific risk factor for depressive symptoms: *Cross-sectional and longitudinal analyses*. *Psychology And Aging*, 21(1), 140-151. doi: 10.1037/0882-7974.21.1.140

[67] Burholt, V., & Scharf, T. (2013). Poor Health and Loneliness in Later Life: The Role of Depressive Symptoms, Social Resources, and Rural Environments. *The Journals of Gerontology Series B: Psychological Sciences And Social Sciences*, 69(2), 311-324. doi: 10.1093/geronb/gbt121

[68] Ofcom. (2018). *Children and parents: media use and attitudes*. Ofcom. Retrieved from https://www.ofcom.org.uk/__data/assets/pdf_file/0024/134907/Children-and-Parents-Media-Use-and-Attitudes-2018.pdf

[69] Kemp, S. (2016). Three Billion People Now Use Social Media - We Are Social UK - Global Socially-Led Creative Agency. Retrieved from <https://wearesocial.com/uk/blog/2017/08/three-billion-people-now-use-social-media>

[70] Zak, P. J. (2012). *The Moral Molecule: The Source of Love and Prosperity*. London: Penguin Books Ltd.

[71] State of the Youth Nation report, February 2018, BBC.

Exploring the World references:

[72] Hull, C. (1943). *Principles of Behavior*. New York: Appleton-Century-Crofts.

[73] Panskepp, J. (2004). *Textbook of Biological Psychiatry* (1st ed.). Hoboken: Wiley-Liss.

[74] Berlyne, D. E. (1971). *Aesthetics and psychobiology*. East Norwalk, CT, US: Appleton-Century-Crofts.

[75] Silvia, P.J., & Kashdan, T.B. (2009). Interesting things and curious people: Exploration and engagement as transient states and enduring strengths. *Social Psychology and Personality Compass*, 3, 785-797.

[76] Maddi, S. R., & Berne, N. (1964). Novelty of productions and desire for novelty as active and passive forms of the need for variety. *Journal of Personality*, 32(2), 270-277.

<http://dx.doi.org/10.1111/j.1467-6494.1964.tb01340.x>

[77] Kashdan, T. B., & Steger, M. F. (2007). Curiosity and stable and dynamic pathways to wellness: Traits, states, and everyday behaviors. *Motivation and Emotion*, 31, 159-173

[78] Mussel, P. (2012). Introducing the construct curiosity for predicting job performance. *Journal of Organizational Behavior*, 34(4), 453-472. doi: 10.1002/job.1809

[79] Baumeister, R. (1991). *Meanings of life*. New York: Guilford Press.

[80] Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. doi: 10.1037//0003-066x.55.1.68

[81] Arnett, J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. doi: 10.1037/0003-066x.55.5.469

[82] State of the Youth Nation. September 2017, BBC.

[83] State of the Youth Nation Report. August 2018, BBC.

[84] State of the Youth Nation Report. Wave Z25, BBC.

Expressing myself references:

[85] Kim, H. S., & Ko, D. (2007). Culture and self-expression. In C. Sedikides & S. J. Spencer (Eds.), *Frontiers of social psychology*. The self (pp. 325-342). New York, NY, US: Psychology Press.

[86] Lieberman, M. D. (2013). *Social: Why our brains are wired to connect*. New York, NY, US: Crown Publishers/Random House.

[87] *Hanns and Weisman, (2016)*.

[88] Inglehart, R. (2008). "Changing Values among Western Publics, 1970-2006: Postmaterialist Values and the Shift from Survival Values to Self-Expression Values," *West European Politics*, 31(1-2),130-46.

[89] Dunbar, R. I. M., Marriott, A., & Duncan, N. D. C. (1997). *Human conversational behaviour*. *Human Nature*, 8(3), 231-246.

[90] Naaman, M., Boase, J., & Lai, C.-H. (2010). Is it really about me?: message content in social awareness streams. *Paper presented at the Proceedings of the 2010 ACM conference on Computer supported cooperative work*, Savannah, Georgia, USA.

[91] Orehek, E., & Human, L.J. (2017). Self-expression on social media: Do tweets present accurate and positive portraits of impulsivity, self-esteem, and attachment style? *Personality and Social Psychology Bulletin*, 43, 60-7.

[92] Office for National Statistics, (2016). Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuringnationalwellbeing/2016>

[93] State of the Youth Nation Report, Dec 2017, BBC.

[94] Spotlight Report, September 2018, BBC.

[95] Office for National Statistics, (2016). Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuringnationalwellbeing/2016>

[96] Wood, A. M., Linley, P. A., Maltby, J., Baliousis, M., & Joseph, S. (2008). The authentic personality: a theoretical and empirical conceptualization and the development of the authenticity scale. *Journal of Counselling, Psychology*, 55, 385-399.

Further reading:

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319-340 <http://dx.doi.org/10.1037/0033-295X.94.3.319>

Katz, J. & Crocker, E. (2015). "Selfies and photo messaging as visual conversation: Reports from the United States, United Kingdom and China," *International Journal of Communication*, 9, 1861-1872.

Feeling impactful references:

[97] Leary, M. R. (2010). Affiliation, Acceptance, and Belonging: The Pursuit of Interpersonal Connection. In S.T. Fiske, D. T. Gilbert & G. Lindzey (Eds.), *Handbook of Social Psychology* (pp. 864-897). Hoboken, NJ: John Wiley & Sons

[98] Nagel, T. (1970). *The Possibility of Altruism*. Princeton, N.J: Oxford University Press. ISBN 9780691020020.

[99] Maslow, A. H. (1954). *Motivation and personality*. Oxford, England: Harpers.

[100] Zamanian, Z., Oladian, M., & Safari, M. (2015). The Relationship between Self-Efficacy and Altruism among students of faculty of theology, Islamic Azad University, Tehran Branch. *Journal of Humanities and Cultural Studies*, 2(3), 928-42.

[101] Eisenberg, N., & Miller, P. A. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin*, 101(1), 91-119. <http://dx.doi.org/10.1037/0033-2909.101.1.91>

[102] Kahana, E., Bhatta, T., Lovegreen, L. D., Kahana, B., & Midlarsky, E. (2013). Altruism, helping, and volunteering: pathways to well-being in late life. *Journal of aging and health*, 25(1), 159-187. doi:10.1177/0898264312469665

[103] Brady, N., & Hart, D. (2007). An exploration into the developmental psychology of ethical theory with implications for practice and pedagogy. *Journal of Business Ethics*, 76, 397-412.

[104] State of the Youth Nation Report. Young People Demand Higher Ethical Standards from Brands. How Do You Measure Up? May 2018, BBC.

[105] Marsh, Sarah. (2016, May 27). The rise of vegan teenagers: 'More people are into it because of Instagram'. The Guardian, Retrieved from: <https://www.theguardian.com/lifeandstyle/2016/may/27/the-rise-of-vegan-teenagers-more-people-are-into-it-because-of-instagram>

Further reading:

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [http://dx.doi.org/10.1016/0749-5978\(91\)90020-T](http://dx.doi.org/10.1016/0749-5978(91)90020-T)

Growing myself references

[106] Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. doi: 10.1037/h0054346

[107] Legault, L. (2017). Self-Determination Theory. In book: *Encyclopedia of Personality and Individual Differences*, Editors: V. Zeigler-Hill and T. Shackelford 10.1007/978-3-319-28099-8_1162-1.

[108] Jain, C., & Apple, D. (2015). What is self-growth? *International Journal of Process Education*, 7(1), 41-52.

[109] Bauer, J., & McAdams, D. (2004). Personal Growth in Adults' Stories of Life Transitions. *Journal of Personality*, 72(3), 573-602. doi: 10.1111/j.0022-3506.2004.00273.x

[110] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [http://dx.doi.org/10.1016/0749-5978\(91\)90020-T](http://dx.doi.org/10.1016/0749-5978(91)90020-T)

[111] Miller, V., Johnson, J., & Grau, J. (1994). Antecedents to willingness to participate in a planned organizational change. *Journal of Applied Communication Research*, 22(1), 59-80. doi: 10.1080/00909889409365387

[112] Di Fabio, A., & Gori, A. (2015). Measuring Adolescent Life Satisfaction. *Journal of Psychoeducational Assessment*, 34(5), 501-506. doi: 10.1177/0734282915621223

[113] State of the Youth Nation report, February 2018, BBC.

Further reading:

Arnett, J. J. (2000). Emerging Adulthood: A Theory of Development from the Late Teens Through the Twenties. *American Psychologist* 55(5), 469-80.

Having autonomy references:

[114] Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum.

[115] Peters, D., and Calvo, R. (2014). Compassion vs. empathy: designing for resilience. *Interactions* 21, 48-53. doi:10.1145/2647087

- [116] Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 9(1), 13-39.
- [117] Dickinson A. 1985. *Actions and habits: the development of behavioural autonomy*. *Philos. Trans. R. Soc.* B308:67–78
- [118] Wagner, Charles N., ""Glued to the Sofa": Exploring Guilt and Television Binge-Watching Behaviors" (2016). *Communication Honors Theses*. 11. http://digitalcommons.trinity.edu/comm_honors/11
- [119] Flayelle, M., Maurage, P., & Billieux, J. (2017). Toward a qualitative understanding of binge-watching behaviors: A focus group approach. *Journal of behavioral addictions*, 6(4), 457–471. doi:10.1556/2006.6.2017.060
- [120] Wilmer, H. H., Sherman, L. E., & Chein, J. M. (2017). Smartphones and Cognition: A Review of Research Exploring the Links between Mobile Technology Habits and Cognitive Functioning. *Frontiers in psychology*, 8, 605. doi:10.3389/fpsyg.2017.00605
- [121] Kim, M. (2015). "The effect of push notification alerts on mobile application usage habit." *Society for Journalism and Communication Studies*, 358-387.
- [122] Gray, M. C., Kou, Y., Battles, B., Hoggatt, J., & Toombs, L. A. (2018). The Dark (Patterns) Side of UX Design. In Proceedings of the 2018 *CHI Conference on Human Factors in Computing Systems* (CHI '18). ACM, New York, NY, USA, 534:1--534:14. <https://doi.org/10.1145/3173574.3174108>
- [123] Brownlee, J. (August 2016). *Why dark patterns won't go away*. Fast Company. Retrieved from: <https://www.fastcompany.com/3060553/why-dark-patterns-wont-go-away>
- [124] Rodde, T. (2018). The State of Push Notifications in 2018: Broadcasting No More. Localytics. Retrieved from: <http://info.localytics.com/blog/the-state-of-push-notifications-in-2018-broadcasting-no-more>
- [125] Ofcom. (August 2017). Box Set Britain: UK's TV and online habits revealed. Retrieved from: <https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2017/box-set-britain-tv-online-habits>
- [126] Flayelle, M., Maurage, P., & Billieux, J. (2017). Toward a qualitative understanding of binge-watching behaviors: A focus group approach. *Journal of behavioral addictions*, 6(4), 457–471. doi:10.1556/2006.6.2017.060
- [127] Exelmans L, Van den Bulck J. (2017). Binge viewing, sleep, and the role of pre-sleep arousal. *Journal of Clinical Sleep Medicine*, 13(8), 1001–1008.
- [128] Duke, É., & Montag, C. (2017). Smartphone addiction and beyond: Initial insights on an emerging research topic and its relationship to internet addiction. In C. Montag & M. Reuter (Ed.), *Internet Addiction* (pp. 359-372). New York, USA: Springer international publishing.

[129] Granow, C. V. Reinecke, L. & Ziegele, M. (2018). Binge-Watching and Psychological Well-Being: Media Use Between Lack of Control and Perceived Autonomy. *Communication Research Reports*, 35(5), 392-401.

[130] Kuss, D.J. & Griffiths, M.D. (2011). Excessive online social networking: Can adolescents become addicted to Facebook? *Education and Health*, 29, 63-66.

[131] The Prince's Trust Macquarie. (2018). *Youth Index 2018*. Retrieved from: <https://www.princes-trust.org.uk/about-the-trust/research-policies-reports/youth-index-2018>

Further reading:

Eyal, N. (2014). *Hooked: A Guide to Building Habit-Forming Products*. Scotts Valley, CA: CreateSpace Independent Publishing Platform.

S. Matrix, 2014. "The Netflix effect: Teens, binge watching, and on-demand digital media trends," *Jeunesse: Young People, Texts, Cultures*, 6(1), 119–138. <https://doi.org/10.1353/jeu.2014.0002>

Wang, J., Liu, R. D., Ding, Y., Xu, L., Liu, Y., & Zhen, R. (2017). Teacher's Autonomy Support and Engagement in Math: Multiple Mediating Roles of Self-efficacy, Intrinsic Value, and Boredom. *Frontiers in psychology*, 8, 1006. doi:10.3389/fpsyg.2017.01006

Having stability references:

[132] Schwartz, S. H. (2012). An Overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture*, 2(1). <https://doi.org/10.9707/2307-0919.1116>

[133] Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York, NY, US: Basic Books.

[134] Sortheix, F., & Schwartz, S. (2017). Values that Underlie and Undermine Well-Being: Variability Across Countries. *European Journal of Personality*, 31(2), 187-201. doi: 10.1002/per.2096

[135] Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55 (5), 469-480.

[136] Heckhausen, J., Wrosch, C., & Schulz, R. (2010). A motivational theory of life-span development. *Psychological Review*, 117(1),32-60. <http://dx.doi.org/10.1037/a0017668>

[137] Orpen, C. (1993). Correlations between Job Insecurity and Psychological Well-Being among White and Black Employees in *South Africa. Perceptual and Motor Skills*, 76(3), 885-886. doi: 10.2466/pms.1993.76.3.885

[138] Lipton, B. (2005). *The Biology of Belief: Unleashing the Power of Consciousness, Matter & Miracles*. Santa Rosa, CA: Elite Books

[139] Cannon, W. (1932). *Wisdom of the Body*. United States: W.W. Norton & Company.

[140] State of the Youth Nation Report, August 2017, BBC.

[141] State of the Youth Nation Report, January 2018, BBC.

[142] Spotlight Report, July 2018, BBC.

Further reading:

Sagone, E., & Caroli, M. (2014). Relationships between Psychological Well-being and Resilience in Middle and Late Adolescents. *Procedia -Social and Behavioral Sciences*, 141, 881-887. doi:10.1016/j.sbspro.2014.05.154

Pursuing Pleasure references

[143] Higgins, T. (1997). Beyond pleasure and pain. *American Psychologist*, 52(12), 1280-300.

[144] Schultz, W., Romo, R., Ljungberg, T., Mirenowicz, J., Hollerman, J. R., & Dickinson, A. (1995). Reward-related signals carried by dopamine neurons. In J. C. Houk, J. L. Davis & D. G. Beiser (eds), *Models of Information Processing in the Basal Ganglia*. Cambridge, MA: MIT Press.

[145] Berridge, K. C., & Robinson, T. E. (1998). What is the role of dopamine in reward: Hedonic impact, reward learning, or incentive salience? *Brain Research Reviews*, 28(3), 309-369. [http://dx.doi.org.10.1016/S0165-0173\(98\)00019-8](http://dx.doi.org.10.1016/S0165-0173(98)00019-8)

[146] Gray, J. A. (1981). A critique of Eysenck's theory of personality. In H. J. Eysenck (Ed.), *A model for personality* (pp. 246-276). Berlin: Springer-Verlag.

[147] Skinner, B. F. (1938). *The behavior of organisms: an experimental analysis*. Oxford, England: Appleton-Century.

[148] Zimbardo, P. G., & Boyd, J. N. (1999). Putting time in perspective: A valid, reliable individual-differences metric. *Journal of Personality and Social Psychology*, 77, 1271-1288.

[149] Fordyce, M. W. (1983). A program to increase happiness: Further studies. *Journal of Counselling Psychology*, 30(4), 483-498. <http://dx.doi.org/10.1037/0022-0167.30.4.483>

[150] Huta, V. & Ryan, R. (2010). Pursuing pleasure or virtue: The differential and overlapping well-being benefits of hedonic and eudemonic motives. *Journal of Happiness Studies*, 11, 735-762.

[151] Henderson, L. W., Knight, T., & Richardson, B. (2013). An exploration of the well-being benefits of hedonic and eudemonic behaviour. *Journal Positive Psychology* 8, 322-336. doi: 10.1080/17439760.2013.803596

[152] Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: The foundations of hedonic psychology*. New York, NY, US: Russell Sage Foundation.

[153] Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum.

[154] Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55 (5), 469-480.

[155] Milfont, T. L., Duckitt, J., & Wagner, C. (2010). A cross-cultural test of the value-attitude-behaviour hierarchy. *Journal of Applied Social Psychology*, 40, 2791-2813.

[156] Schwartz, S. H. (2011). Values: Individual and cultural. In F. J. R. van de Vijver (Eds.), A. Chasiotis, & S. M. Breugelmans, *Fundamental questions in cross-cultural psychology* (pp. 463-493). Cambridge: Cambridge University Press.

[157] State of the Youth Nation report, August 2017, BBC.

Receiving recognition references

[158] Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. doi: 10.1037/h0054346

[159] Kasser, T., & Ryan, R. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality And Social Psychology*, 65(2), 410-422. doi: 10.1037//0022-3514.65.2.410

[160] Albertsen, K., Rugulies, R., Garde, A., & Burr, H. (2009). The effect of the work environment and performance-based self-esteem on cognitive stress symptoms among Danish knowledge workers. *Scandinavian Journal of Public Health*, 38(3), 81-89. doi: 10.1177/1403494809352104

[161] Nikitin, J., Schoch, S., & Freund, A. M. (2014). The role of age and motivation for the experience of social acceptance and rejection. *Developmental Psychology*, 50, 1943-1950.

[162] Feinstein, B., Hershenberg, R., Bhatia, V., Latack, J., Meuwly, N., & Davila, J. (2013). Negative social comparison on Facebook and depressive symptoms: Rumination as a mechanism. *Psychology of Popular Media Culture*, 2(3), 161-170. doi: 10.1037/a0033111

Understanding who I am references:

[163] Erikson, E. H. (1950). *Childhood and society*. New York, NY, US: W W Norton & Co.

[164] Moran, M. (2014) *Identity and capitalism*. London: Sage.

[165] MacInnes, D. (2006). Self-esteem and self-acceptance: an examination into their relationship and their effect on psychological health. *Journal of Psychiatric and Mental Health Nursing*, 13(5), 483-489. doi:10.1111/j.1365-2850.2006.00959.x

[166] Turner, J. C., & Tajfel, H. (1986). The social identity theory of intergroup behavior. *Psychology of intergroup relations*, 7-24.

[167] Crutchfield, R. (1955). Conformity and Character. *American Psychologist*, 10, 191-198.

[168] Erikson, E. (1968). *Identity Youth and crisis*. New York W. W. Norton & Company.

[169] Kernberg, O. (2006). Identity: Recent Findings and Clinical Implications. *The Psychoanalytic Quarterly*, 75(4), 969-1004. <http://dx.doi.org/10.1002/j.2167-4086.2006.tb00065>

[170] Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3(5), 551-558. <http://dx.doi.org/10.1037/h0023281>

[171] Kenrick, D., Griskevicius, V., Neuberg, S., & Schaller, M. (2010). Renovating the Pyramid of Needs. *Perspectives on Psychological Science*, 5(3), 292-314. <http://dx.doi.org/10.1177/1745691610369469>

