UNIVERSITY OF TWENTE

Faculty of Behavioral, Management and Social Science

Life in a shoebox: About people and their motivation to go tiny

A qualitative interview study on the intrinsic and extrinsic motivations to follow the tiny house lifestyle

Maria Jebbink

Bachelor's thesis June 14, 2019 Maria Jebbink (s1809466) Bachelor: Positive Psychology & Technology Internal organization: University of Twente Supervisors: 1st Marileen Kouijzer, MSc. 2nd Dr. Christina Bode

Abstract

Background. Over the last decade the population has grown constantly resulting in a larger demand for accommodation. This is accompanied by the fact that people constantly search for bigger homes and more luxury apartments. However, there are people who counter these housing trends: they move to tiny houses. This form of accommodation offers several benefits like less expenses, less energy consumption, autarkic lifestyle and environmental sustainability. Still, there are barriers like to be accepted in the community. This study aims at analyzing people's intrinsic or extrinsic motivations to build a tiny house or move in one.

Methods. In this mixed methods design study semi-structured interviews were conducted with eight participants who differed in age, gender and state of their tiny house. Additionally, the method 'letter from the future was applied. The interview consisted of 35 open-ended questions with main and sub questions. The questions aimed at establishing the general information of the tiny house residents and demographics, their motivational reasons to build a tiny house or their decisions to move into this type of housing. The interview lasted around 60 minutes, was audio-recorded and verbatim transcribed. The method 'letter from the future' included instructions to imagine a life in the participant's tiny house in an imagined future of their desire and write a letter about. Both methods were coded with the same coding scheme and coded by the researcher using an inductive and deductive coding process. Together the data from the letter and the interview were combined and analyzed to provide results.

Results. In this study, participants named intrinsic and extrinsic motivations, most commonly flexibility and curiosity were mentioned as relevant intrinsic motivators. Novel findings concerned the interest in the own building process and the acquisition of new skills as intrinsic motivators. As expected, participants also named environmental sustainability as well as the autarkic lifestyle as motivators. Besides, the participants named cooperation and community due to this lifestyle as extrinsic motivators. A new domain found in this study concerned obstacles like institutional limitations which motivated the participants to overcome them. As expected by former research, the need for an accommodation was also found to be an extrinsic motivation.

Conclusion. These results showed that people have intrinsic as well as extrinsic motivators to follow the tiny house lifestyle. Certain motivators could be found in all cases whilst others were unique to the individual. The study provides limitations as well as strength for the methods used. However, the study filled a gap in research since it concerns a new topic and based on the identification of existing knowledge, more research is needed in this field. Additionally, this study adds value to research since it concentrates on intrinsic and extrinsic motivation and therefore gives a concise overview regarding a new topic. Future research should investigate the topic more deeply in order to find a way to generalize the findings and to establish a broader framework. With the growing impact of the study topic, future research in this domain is advised.

Key-words. Tiny house; Tiny house lifestyle; Intrinsic motivation to build a tiny house; Extrinsic motivation to build a tiny house; Competence; Relatedness; Autonomy; Benefits of tiny house lifestyle; Motivational reasons for tiny house lifestyle

Introduction

The Start of the Tiny House Movement

Over the last decades the population has grown constantly. The current world population consists of 7.3 billion people and is expected to reach 8.5 billion by 2030 and 11.2 billion by 2050 (UN, 2019). Since this growth is followed by an increase in job demand, many people are moving to the city to work and live. Additionally, the increasing amount of people living in the city results in a demand for more food, more houses and more goods (UN,2019).

Besides this, there is a change in people's mindset about the wealth they need to represent with their homes. As supposed by Carlin (2014) the average square feet for e.g. an American home increased significantly during the 21st century. In addition, the average square footage for an American home has increased, with an average square footage of 1.000 in this time. Nowadays, people consider this size as small in relation to the enormous houses and flats which are available (Carlin, 2014). As a consequence, people need to spend much more money on their accommodations resulting in an increasing usage of energy and water. Additionally, the space to build new homes becomes significantly less. (Mutter, 2013). However, there are people who try to counter these enormous housing trends: they are moving to tiny houses (Pflaumer, 2015).

People who live in this living arrangements need less energy, less water and less space. A typical tiny house is not bigger than 100 to 400 square feet and contains all the traditional home utilities which can be found in a normal sized house including a kitchen, a bathroom, a sleeping place and storage place (Pflaumer, 2015). Furthermore, tiny houses can be built on a trailer so that they are moveable or built on a permanent spot. Usually, this form of accommodation is best suited for living alone or as a couple, yet there are people who live in this accommodation with children as a whole family (Pflaumer, 2015). Additionally, tiny houses are cheap in comparison to normal houses or even flats starting with a prize of \$3,000 and can go to quite luxury ones which cost around \$50,000 (Mingoya, 2015).

The idea of living in a small house is not a new phenomenon, it reaches back a few decades and has been part of the Western civilization. The modern tiny house movement as it is known today began in the 1980s in America and had its increasing success in the early 21st century (Carlin, 2014). Much information about tiny houses comes from blogs (e.g. Tinyhouselife.com), newspaper articles or tiny house builders who share their experiences in documentaries (Mangold & Zschau, 2019). Consequently, the tiny house movement became more popular each year. All over the internet people can find instructions for building such a

house on their own or advertisements of companies who offer to build this accommodation (Carlin, 2014).

Benefits and Drawbacks of Tiny Houses

The reason so many people move to tiny houses is that there are a lot of benefits which come along with this style of living. First of all, affordability is one benefit. As shown by Shearer and Burton (2017), living in a tiny house is connected to reducing costs for rent, reduction of housing mortgage debt and general housing affordability. Consequently, these houses give their owners the opportunity to work more flexible and spent significantly less money on their accommodation (Shearer & Burton, 2017).

A second benefit mentioned by Shearer and Burton is the reduction of consumerism and therefore a larger amount of money people can save. Hence, people cannot buy everything they want because of the lack of space (Shearer & Burton, 2017). Additionally, Carlin (2014) mentioned that since people buy less, they become more mindful consumers, specifically they identify what they really need. Third, Shearer and Burton (2017) proposed that tiny houses bring along a deeper community focus. This form of living forces people to act on each other and conduct many of their activities e.g. cooking dinner or having breakfast together because of the limited space. This is also supported by Carlin's study (2014) which states that families have shown to create a deeper bound when living in a tiny house.

Besides the benefits of downsizing, there are also some drawbacks people need to consider after moving into a tiny house. As supposed by Evans (2018) and Carlin (2014) the first problem constitutes the regulatory barriers. Tiny houses are not exactly defined as a type of building and are not considered as permanent residents, so it may happen that living in them becomes illegal. Therefore, people have to face many legal obstacles with the land use policy especially when their tiny house is on wheels and they move around (Evans, 2018). Additionally, Seaquist, Bramhandkar and Santana-Frosen (2015) proposed that the regulations differ from city to city which makes it even harder to find a place for a tiny home.

Furthermore, people are exposed to some obstacles when living in a tiny house. Nowadays, the idea of living in a small house is difficult to establish in the modern, western society. Since cities do not allow tiny house owners to park their houses anywhere they want, they are often excluded from the community (Carlin, 2014). Seaquist et al. (2015) supported this by suggesting that people living in tiny houses need to pay less taxes which are normally used for e.g. school education and road construction. Consequently, tiny house owners do not follow the lifestyle embraced by the majority of the social community (Seaquist et. Al, 2015). These obstacles may raise the question why people still move into this form of living accommodation and enjoy living in it. For this reason, the purpose of this study was to investigate the motivations people have to live in a tiny house from an intrinsic and an extrinsic perspective.

Motivational Reasons to Live in a Tiny House

A study by Mangold and Zschau (2019) suggested that most people did not actively search for this life style, but rather stumbled upon it. They felt the urge to search for a difference, which grew out of the fact that today's culture stresses hard work, material comfort and success. On the opposite, the modern society also embraces the individual's strive for happiness and fulfilment, subsequently people experience a strive for complete mental health (Mangold & Zschau, 2019). They supposed that many tiny house owners reached the path of the tiny house movement in a life situation where they searched for something to change in their lifestyle in order to optimize their mental health. As explained by Mangold and Zschau (2019) this 'better life' mainly includes the categories of financial security, personal autonomy, meaningful relationships, simple living and new experiences. Boeckermann, Kaczynski and King (2018) supported this by mentioning that many tiny house builders want to build their tiny house on their own, with recycled materials, which results in a feeling of self-empowerment. A study by Mutter (2013) identified six motivations to follow this lifestyle: leading a simpler life, environmental sustainability, reduced costs, flexibility and freedom, community focus and customization of own home.

As introduced by literature there are motivational reasons that can make people want to move into a tiny home. Therefore, this study is important to supplement this existing research in order to provide more motivational reasons and to fill a gap in research. It is not yet investigated whether there are additional motivators and if they are experienced as coming from inside of the person, namely intrinsic or if they are coming from extrinsic factors e.g. the society. Therefore, the study adds important value to the topic since it connects a theoretical framework with the motivation to move to a tiny house which is a novel finding. Furthermore, the investigation of intrinsic and extrinsic motivators in connection with the tiny house lifestyle serves as basis for tiny house builders' general motivation since it makes apparent which motivators are involved in the process of building a tiny house and therefore fills a gap in research.

Theoretical Framework on Motivation

To further investigate the motivations of tiny house owners, a theoretical framework, namely Ryan and Deci's self-determination theory (SDT) was applied. The theory determines people's internal growth tendencies and psychological needs which are the basis for self-determination and motivational decisions. In this context, the researchers identified three psychological needs: competence, relatedness and autonomy, which need to be satisfied in order to have a complete mental health and engage in decisions and behaviors (Ryan & Deci, 2000b). Competence displays a person's feelings of control over something and the experience to handle it in an intended way, relatedness means the interaction people experience in context with others and how they care about people in their environment. Lastly, autonomy manifests itself through the desire of being in harmony with oneself and to be the causal reason of one's own decisions (Ryan & Deci, 1985). The SDT focuses on intrinsic motivation. Intrinsic motivation manifests a person's inherent tendency to seek challenges and change in order to exercise one's own capacities (Ryan & Deci, 1985).

Since the SDT proposes a theoretical framework for intrinsic motivations, it can be applied to the motivations tiny house builders experience when building their tiny homes. This form of lifestyle mainly grew out of the fact that people want to change their lives in order to improve it. Hence, they want to make decisions on their own so that they can reach their expected fulfillment of life style. Autonomy and competence play a big role in internal decisions and are important for that. Therefore, it might be interesting to find out more about to which extend tiny house builder's experience a fulfillment of competence and autonomy in order to be intrinsically motivated and face the challenges and drawbacks which come along with this kind of lifestyle.

Another component of SDT is the extrinsic motivation. Extrinsic motivation is motivation that is driven by external rewards. Specifically, social support, money or grades manifest extrinsic motivations (Ryan & Deci, 2000a). In this context, Ryan and Deci introduced a sub-theory called organismic integration theory (OIT), (Ryan & Deci, 1985). It suggests that the context which comes along with motivations manifests whether motivations are internalized or not. Specifically, relatedness displays extrinsic motivations since it can influence the self-determination of people. Therefore, the theory suggest that intrinsic motivation is more likely to flourish when people have robust social attachments or extrinsic cues (Ryan &Deci, 2000b). To further investigate tiny house builder's extrinsic motivations, it might be interesting to analyze which components are important and influence people in their decision to build their own tiny house. In this context, it was investigated if tiny house builders experience their decision for building a tiny house as completely self-determined. Altogether the SDT and OIT served as basis to identify tiny house builder's intrinsic and extrinsic motivations.

The Current Study

Since several benefits as well as drawbacks have been named for living in a tiny house, and this study introduced a theory for the motivation why people move into this living arrangement, it investigates motivations of tiny house owners in depth. With regard to the population growth, the widely established attitude of living an affluent lifestyle and the increased environmental pollution caused by this lifestyle the topic of tiny houses becomes quite relevant since it displays a new form of living. This new lifestyle aims at adapting unbeneficial behaviors to be improved and is hence a topic which might get increasing attention in the future. Therefore, the research question of this study was '*What intrinsic or extrinsic motivational reasons do people have to live in a tiny house or build one*?'

Methods

Design

The present study used a mixed methods design including semi-structured interviews and the method 'Letters from the future'. As supposed by Zaharia, Grudney and Stancu (2008), an interview delivers a vivid picture of a person since he/she delivers the information personally. Furthermore, an interview provides the opportunity for the interviewee to lead the conversation and therefore reveals a bigger amount of personal feelings, attitudes and experiences (Zaharia et al., 2008; Forshaw, 2013). Hence, the interview is considered a quite appropriate method in order to find out as much personal information as possible with regard to the topic of this study.

Additionally, examining future perspectives of tiny house builders is important to investigate whether their characters as well as their tiny houses change in a long-term period or remain the same. By using a method called 'letter from the future' as developed by Sools, Tromp & Mooren (2015) it can be examined how tiny house builders/inhabitants expect their desired future in their tiny house to be. This is relevant since it makes apparent that people's motivations to move to a tiny house or build one are resistant over time and if changes are experienced positively (Sools et al., 2015). Furthermore, it examines how individuals imagine their future selves, their life and further illustrated, the future impact the tiny house movement might have on issues such as the legal obstacles that currently restrain it.

Participants

Table 1

In total the study sample consisted of n=8 participants. They included five male and three female participants. The age of the participants ranged from 26 to 70 years. The mean age was 38 with a standard deviation of 15. The demographics are displayed in table 1.

Participant	Age	Gender	Nationality	State of tiny house
1	40	male	German	Living in/ building a
				tiny house
2	70	male	German	Building a tiny house
3	24	male	German	Building a tiny house
4	34	female	German	Living in a tiny house
5	26	female	German	Living in a tiny house
6	37	male	Kyrgyzstan	Building a tiny house
7	25	female	German	Building a tiny house
8	49	male	German	Living in/ building a
				tiny house

Demographic data, state of tiny house

For recruiting participants, the method of purposive sampling was used in order to draw a most informative sample. The participants were selected based on the following inclusion criteria. The participants needed to fulfill the criteria of being in the process of building a tiny house or already living in one. Furthermore, the participants had to speak English fluently or German since the interview was conducted either in English or in German depending on what the participants preferred. Participants were excluded in case of not fulfilling the inclusion criteria since they differed from the target group of this research. For the recruitment process the internet was used. Therefore, the researcher searched for websites where people share their tiny house experiences and contacted them via email. The recruitment message can be found in the appendix (Appendix A). The same message was also posted on Facebook, in a group for tiny house owners to recruit additional participants. The Facebook message turned out to be more effective since more people were addressed at once. In total two participants were recruited via Facebook, the remaining six participants were recruited via connections of the other participants. In general, it was difficult to recruit participants since not many were willing to participate. This was assumed based on previous studies since many tiny house builders were occupied with the building process and it was suppositional to be difficult to find contact information from normal people. Still, the ones who were willing to participate were quite interested and gave detailed answers which were expected to be in line with former literature.

Materials

The materials used for the present study consist of an interview scheme (Appendix B) and instructions for the 'letter from the future' (Appendix C). Therefore, the approach used was a mixed methods design.

Interview

The interview consists of an introduction, a main part and an end. The interview was a semi-structured interview with open-ended questions, in total it consisted of 40 questions including sub and main questions. There were six general questions with eight sub-questions. These main questions included demographic questions focusing on age, gender, nationality and general the state of the tiny house namely in building process or finished. A second section covers questions about general motivations to life in/build a tiny house. The questions aimed at information about general motivation of tiny house builders, estimation of the benefits for this lifestyle and estimation of the drawbacks. The remaining questions more closely and with respectively one question for each aspect.

Thirdly, a section including questions with regard to motivational reasons why people move to a tiny house or build one were asked to the interviewee. In this context the aspects of competence, relatedness and autonomy were introduced. Additionally, three follow-up questions are used in order to gain further insight into some topics so that the interviewee has the opportunity to elaborate on specific aspects. These questions specifically were probing questions like 'Can you explain your answer further?'. The interview schedule is put in the appendix (Appendix B). Furthermore, the researcher translated the interview scheme to German, in case participants want to conduct the interview in German.

Letter From the Future

The letter from the future instruction consisted of a detailed description on how to write this kind of narrative text. First of all, the participant was provided with a general description of the situation and what he/she should imagine while writing the letter i.e. referring to the fact that the letter should be written in the future etc.. Afterwards, the participant received an illustration about where and when he/she could write the letter from the future perspective. This is followed by a description to illustrate what kind of situation the participants could imagine. Lastly, the participant was provided with the information to what kind of person he/she could write the letter to in order to give the participants an idea about

that. As well as the interview scheme, the instructions were also translated to German for the same reason mentioned above.

Procedure

Before starting with the procedure, the study was approved by the BMS Ethics Committee of the University of Twente. The request number for this was 190342. The data collection started approximately on the of 25th March and ended on the third of May. The researcher recruited participants via the internet with a recruitment message which was described in the participant section. Since the participants were all occupied with a job, the researchers needed to set appointments for the meetings in two to three weeks advance. The meeting was scheduled to take place at the participant's house if he/she agreed to it in order to spare them inconveniences. If the participants did not give their consent, the researchers provided the opportunity to conduct the interview in a public place i.e. café. The participants had the opportunity to get into contact before the meeting via telephone in order to ask questions. One participant took this opportunity, the others were content with the information provided by the recruitment message.

The participant was asked whether he/she wanted to conduct the interview in German or English and based on the decision the appropriate interview scheme was used. At the beginning of the interview meeting, the researcher first informed the interviewee about the purpose of the study and handed over the informed consent form which clarifies the confidentiality of the participant's data. Specifically, that he/she could opt out at any time without giving a reason, that all personal information such as names or places would be anonymized, and that the researcher believed that there would not be any harm by participating (Appendix D). Additionally, the researcher asked if it is okay that the interview would be recorded which was also stated in the informed consent form. At this point it was clarified that the interview would take between 30 to 60 minutes.

After the informed consent was signed by the participants, the researcher started with the interview. During the interview the two researchers and the participant were present. In two cases the interview was conducted in a room where other people had access to so that in between people came in. However, this did not interrupt the interview process. In one case different participants were present during one interview. Consequently, the interview was conducted with all five of these participants at the same time, but they answered one after another to the questions. After the interview, every participant was thanked for the participation and asked whether he/she had further questions.

Subsequently, the letter from the future was introduced. The researcher gave a short explanation what this was about and informed the participant that the researcher will email him/her the exact instructions. Specifically, the researcher explained that the participant should write a letter about one page long, from a future perspective about his/her life in the tiny house. Then, a deadline when the participants should send the letter from the future was set. Lastly, the researcher finished the interview by thanking the interviewee again and ensuring that the interviewee has no further questions.

Analysis

In order to answer the research question the research program Atlas.ti 8.4.15 was used for analyzing the data. The data was gathered from interviews and from a narrative analysis from the method 'letter from the future'. First of all, the data from the interview was verbatim transcribed by the researcher. In order to analyze the interviews, the researcher removed all personal data i.e. names and places and coded the data with a coding scheme developed by the researcher after ensuring to be familiar with the transcripts.

In total the, researcher identified 11 main codes and 37 sub-codes applied for both the interview and the letter from the future. Conveniently, the analysis of both methods provided the opportunity to use the same coding scheme since they included the same topic. The same coding scheme was used since it was more pragmatic, and it made it possible to gather more concise results. Therefore, both methods were analyzed, and the quotes were added. More specifically, three categories of codes were identified, namely general codes, motivational codes and decision codes. The coding scheme consisted of two levels of coding: Nine main codes and additional sub codes. In order to create the main codes for codes concerning the intrinsic and extrinsic motivation and the decision part, a deductive approach was used. Besides, for the general motivation an inductive approach was used. The coding scheme for motivational and decision codes was derived from the self-determination theory by Ryan and Deci (1985). The separate codes had different sub-codes which were developed inductively. A final coding scheme including the label of codes, definition and example quotes is provided in the appendix (Appendix E).

Results

In the following section the results from the interview and the 'letter from the future' are presented. The results were used to answer the research question '*What intrinsic or extrinsic motivations do people have to live in a tiny house or build one*?'. This section contained three

domains, namely general information about the tiny house builder, intrinsic motivators and extrinsic motivators to follow the tiny house lifestyle.

General Information About the Tiny House Builder

This domain was included in order to provide an overview who of the participants is in the process of building his/her tiny house and who is already living in it. Two of the participants were already living in their tiny houses. Furthermore, two other participants were already living in their tiny houses and additionally building another one. The remaining four participants were in the process of building their tiny house.

Intrinsic Motivators to Follow the Tiny House Lifestyle

After investigating the general information of the participants, the intrinsic motivation was examined in order to answer the research question. Therefore, participants were asked to identify their own motivational reasons. The domain 'intrinsic motivations' concerned the participant's inborn need to seek challenges to exercise own capacities.

The sub code <u>'Flexibility'</u> was most frequently coded as intrinsic motivation. This code defined the opportunity people have in this lifestyle to spontaneously travel around and change their environment as motivation to build a tiny house. Characteristically, the participants experienced a certain freedom in context with the tiny house '*Being mobile, so I would not travel around every week, but not being stuck at one place, that would be nice.*' (P2, male, 70). They explained that they can move their house around which provides them spontaneity '*I am way more flexible. That is in line with my feeling of freedom. I am not stuck at one place.*' (P8, male, 49).

The second most frequently coded sub code for intrinsic motivation was <u>'Curiosity'</u>. This code defined the desire to gain new experiences as an intrinsic motivation to move to a tiny house. As stated by all participants the curiosity to experience something new was the basis to start following the tiny house movement '*I would say a key word for many people is experimenting and trying something*. *I also feel that way*. *I like to have new ideas and a bit of challenge*.' (P6, male, 37). Furthermore, some participants mentioned that they wanted to acquire new skills by building a tiny house which motivated them to start '*For example when water is coming out of this tap, then it is like this because I connected it, that's exciting*.' (P3, male, 24). Additionally, one participant mentioned that she was interested in what kind of thing one needs to have to build such a house '*So what does it take to build such a house,*

what does it take to plan such a house. Just learning how everything works out.' (P5, female, 26).

The sub code <u>'Achieved goals'</u> was often coded in context with competence. Precisely, this code established the participants' experiences that everything worked out as they intended it to result. Therefore, they felt intrinsically motivated since they experienced competence. The participants described that it was encouraging to live in a house in which everything is determined and achieved by the builder '*The person who build the house, has in the end the competence that everything is like he/she indented it to be.* ' (P7, female, 25). Another participant mentioned that it was a positive experience to learn that if you do something you achieve a goal '*This is actually the biggest win, that I learned if I just do something it will be achieved and not just thinking about it.* ' (P4, female, 34).

The next sub code which was coded often was the experience of their 'Own building process'. Especially, this code defined people's experiences to build something on their own and to be in charge of everything as intrinsically motivational reason to build a tiny house. All participants described that they enjoyed an own building process where they could incorporate their own wishes 'I live in a house which I built myself with my own hands. Beginning with the first idea ending in the last wooden board that I screwed on.' (P7, female, 25). Taking this into account the participants mentioned that they like to see whether their plans work out 'I really enjoyed seeing, whether the things I planned are actually working out in the process. '(P5, female, 26) and how their house turned into a home 'It was nice to see, how it became cozier and cozier. Now it is warm, there is light, and you can cook.' (P5, female, 26). This was supplied by the sub-code 'Own interest in building' which described the affection people experience when they build something 'For me it is just like that, I like to build. ' (P6, male, 37). Furthermore, the sub-code 'Own decisions' was in line with that. One participant said that he enjoyed not sharing an office or house when owning a flat so he can do whatever he wants 'And it's a place for my own so I don't have to share an office or a flat with another person. '(P1, male, 40).

A next sub code which was coded was <u>'New friends' which was connected to</u> <u>relatedness but still experienced as intrinsic</u>. This code established the participant's new contacts due to the tiny house lifestyle as an intrinsic motivation to build one. Some participants described that they met other tiny house residents due to this lifestyle *'I have met many people and there is such a big connectivity and networking dynamic*. ' (P5, female, 26). However, other participants mainly mentioned that they got new friends from outside the movement 'A big advantage is that I have met so many new people. I have never met so many new people in such a short time. It is so much fun!' (P3, male, 24).

The sub code <u>'Know-how with wood and technical skills'</u> was coded whilst taking into account competence. This code defined the expertise people acquired in the building process and therefore felt intrinsically motivated since they experienced more competence in the building process '*All the stuff I did on my own, and it worked out. This led to the situation that I became the technical leader for the foundation I work in.*' (P1, male, 40) and '*Well, I would say I am quite competent now in building the house.*' (P8, male, 49).

Besides, the sub code <u>'self-assurance'</u> was found. This code described the confidence people gained during their process of building a tiny house as an intrinsic motivator. One participant suggested that a person achieves competence after starting to believe in his/her self *'I think it is a dynamic development. You gain competences. You first have trust in yourself and then it develops.* '(P5, female, 26). Another participant described that the attitude changed from beginning to the end, initial doubts occurred but after a while she felt more confident in the lifestyle *'In the beginning you are afraid. Now, the house is standing in front of you and you notice that it works out. And you see that you built a cheap residence for you.* '(P1, female, 25).

The sub code <u>'Improved mental health/ better focus'</u> was coded moderately as an intrinsic factor. This code defined the participant's improved well-being as motivation to live the tiny house lifestyle. Two participants stated that they had an improved mental health since moving to the tiny house *'Due to the reduced complexity and due to the reduced stuff in a tiny house I am able to focus more on my work. I am getting calm and I am getting more into the flow of my work. I've never reached this state in a normal house.'* (P1, male, 40).

Next, a sub code was <u>'Based on childhood or youth experiences'</u>. This code defined the participant's experiences of living in small space in former times and how this intrinsically motivated them to now reduce their space and build a tiny house. Some participants described that they were already living in a construction trailer when they were in their twenties '*I already lived in a caravan when I was a student*. *And that was this certain freedom for me, so not having houses around*. '(P8, male, 49), or that they had already has childhood experiences with smaller residences and were therefore used to it '*I can actually start in my childhood*. *We had a caravan in which we always went on holiday with four people*. *Therefore, it was quite normal for me to live in small place*.' (P4, female, 34).

A following sub-code participants moderately mentioned was the <u>'Autarkic/ self-</u> <u>sufficient lifestyle</u>' as an intrinsic motivator. This code established the self-sufficient function a tiny house has. This was especially mentioned by two participants 'One advantage is that you can live autarkic. You can place your house wherever you want to and it's self-sufficient.' (P8, male, 49) and 'You forgot that the house should be autarkic so that you can decide everything own your own, how you built it and how you supply it with energy and stuff.' (P7, female, 25).

The sub code <u>'Environmental sustainability'</u> was rarely mentioned by the participants. This code described the reduced waste and energy consumption achieved with this lifestyle as a motivational reason. Two out of eight participants mentioned this as motivational reason *'From the appearance and my personal needs to the needs of all people: the house is built of natural material and sustainable.* (P7, female, 25).

Lastly, an intrinsic motivator for people was their self-determination. The sub code <u>'Self-determination'</u> described the participant's self-assurance and assertiveness in relation to the tiny house building as an intrinsic motivation to build a tiny house. Some participant mentioned that they experienced self-determination when they live in a house they built on their own *'I believe that it is quite satisfying to wake up in a house, which I build myself and where I took all the decisions*. '(P7, female, 25).

In sum, the participants identified flexibility and curiosity as most important intrinsic motivations. Furthermore, their experience of their own decisions in their own building process were important intrinsic motivators as well as the acquisition of technical skills during the process. Lastly, the participants mentioned the autarkic lifestyle and the environmental sustainability as motivating.

Extrinsic Motivators to Follow the Tiny House Lifestyle

Next to the intrinsic motivations of participants, also extrinsic motivations were found. The domain extrinsic motivation described motivation which is driven by external rewards and supports the motivation to move to a tiny house.

The most frequent coded sub code was <u>'Community'</u>in connection with relatedness. This sub code defined the relationships people experienced within the tiny house lifestyle as an extrinsic motivator. All participants mentioned community as an important factor in their lifestyle. One participant suggested that it was an advantage to have people close to you because of this lifestyle which is different in other dwelling forms '*I think a big advantage is that in such a small space you have more contact with the world around you. You have the people directly around you not like in a normal flat.* ' (P4, female, 34). Another participant mentioned that one got to know a lot of new people and developed a certain curiosity about the lifestyle which creates community 'You meet so many people, curiosity, you get into contact with others easily and your neighborhood environment is more important.' (P5, female, 26). Additionally, one participant suggested that there is no anonymity since they share e.g. the same garden which created a stronger community 'Just this not being anonymous is a benefit. You are in contact with others constantly.' (P6, male, 37).

The next sub code for extrinsic motivation was <u>'Interest from outside'</u>. 'Interest from outside' defined the curiosity expressed by people from outside of the tiny house movement as an extrinsic motivator. Two participants mentioned that they felt support by good feedback from others "*Good feedback from neighbors for example. When you notice that you convince and inspire the people with the things you do.*' (P3, male, 24). Additionally, another participant mentioned the admiration of others with regard to what they are doing '*What I also like is that older people admire our houses and like them a lot.*' (P4, female, 34).

Another sub code was coded namely <u>'Cooperation'</u>. The sub code characterized the participants' actions or attitudes they need to adapt in order to profit from each other and live in harmony as an extrinsic motivator. This code differed since the participants described different groups of people with whom they were cooperating. One participant mentioned cooperation in context with people who possess different skills '*Yes, the competence I connect to cooperation. The exchange between each other. So, I can do something with energy, or I have technical skills what do the others have?*' (P2, male, 70). Another participant mentioned respect as a form of cooperation in context with his family living together in a tiny house '*There is something else, the respect, I learned that in this small space you need to have extreme respect, when you are living with a partner or children.*' (P8, male, 49).

Furthermore, the sub code <u>'Positive dependence'</u> was found in this context. Positive dependence was defined as the support the tiny house residents receive from each other in their life as form of relatedness. Specifically, one participant described that there was an immense dependence, but it was not a negative one '*The first word which comes into my mind is dependence, but not in a negative way. I am for example depended on water, or I need technical advice and stuff like that.*' (P5, female, 26). The sub-code <u>'Practical problem solving'</u> supplemented this topic by defining the participants' different strength they used to help each other. One participant mentioned that different skills led to a greater overall strength in the building process *'Everyone could integrate strength. The people who helped us, as well as participant three and me. We could strengthen our teamwork and amended each other.* '(P7, female, 25).

Next, the sub code 'Less expenses' was coded often. This code manifested the reduced costs people have when following the tiny house lifestyle as an extrinsic motivation. In this context participant mentioned that they did not need to spend much money for their everyday life '*The most trivial motivation is that I have to spent less than 150 euros per month in about 15 square meters which is quite cheap.*' (P1, male, 40). Moreover, a participant mentioned that there were reduced costs because of reduced energy levels '*I think that it also has an energetic benefit. I have way less expenses.*' (P8, male, 49) and that it relieved him from stress to have less expenses '*This takes away a burden in general, and of course the financial burden.*' (P8, male, 49).

A next sub code found was <u>'Need for a place to stay'</u>. This sub code defined reasons for a need for an accommodation and therefore a motivation to build a tiny house. Specifically, the participants described that they did not have enough money for an apartment or that they did not want to live in a certain form of residence '*My flat share dissolved itself and then I was confronted with the decision what should be done next. A new flat share was no option and I couldn't afford an own flat. Therefore, I started this project.* '(P5, female, 26).

Additionally, sub-code which was found often was <u>'Institutional limitations</u>' as an extrinsic factor in context with motivation. This code described the participants' barriers they experienced which reduced their autonomy. However, they still experienced motivation to build a tiny house. The participants explained that they needed to take many guidelines into consideration while building their house which decreases their autonomy immensely '*I needed to change a lot, if you build something like this you need to stick to the guidelines by the technical supervisory association. You are bonded to these guidelines.*' (P4, female, 34). Another participant added that she did not feel competent at all, *I needed to take so much responsibility for that thing.*' (P5, female, 25).

The sub code <u>'Not accepted in community'</u> was slightly coded as an extrinsic factor to be demotivating. One participant mentioned the dislike by the community as a demotivating factor, still he would always continue the lifestyle *'This can also bring problems. There are still people who don't like this lifestyle. You gain a lot but you also always need to take respect to the others which may be exhausting.* ' (P4, female, 34). Another participant described that some people were skeptical about this form of residence *'I think that in other official dwelling forms, the existing, living and working is accepted, but here it is not. We need to work further to come along with the people around.* ' (P5, female, 26).

Lastly, the participants mentioned the complex supply of the tiny house and the residents as demotivating factors. Therefore, the sub code <u>'Complex supply'</u> was established. This code described the effort people needed to take to take care of their supply. They described that it was not as self-evident as in a normal flat to have water and energy supply, still it motivated to continue the lifestyle since a person can get used to it *'For my current tiny house, I would say that all that can be found in a normal flat or house is firstly not here. If I want to have water, I need to take it to the place.* '(P5, female, 26).

In conclusion the participants identified community as most important extrinsic motivator. Cooperation was a second important motivator for them. Additionally, they identified obstacles like institutional limitations and complex supply which however motivate them to overcome these obstacles. Finally, the participants mentioned the need for a place to stay as extrinsic motivation to build a tiny home.

Discussion

The purpose of this study was to examine the participant's intrinsic motivations in context with competence and autonomy and their extrinsic motivations in context with relatedness. In the following part, the most relevant findings are interpreted and supported by literature. Furthermore, new findings and findings which are in line with former research are presented.

Intrinsic Motivators to Follow the Tiny House Lifestyle

The most relevant intrinsic motivator people mentioned in context with the tiny house lifestyle is flexibility. Participants experience flexibility as a strong motivator since it provides them with freedom and room for development. Furthermore, they identify it as a motivator since it gives them the opportunity to travel. This finding is in line with a study by Mutter (2013) who identified six motivations to move into a tiny house resulting in one factor being flexibility and freedom, subsequently tiny house residents identify flexibility as an intrinsic motivator in this study as well. Next to flexibility, curiosity is quite relevant as an intrinsic motivator to follow the tiny house lifestyle. This finding is novel since participants say that they want to know how a tiny house is build and what needs to be done for that. Furthermore, they have a strive to try new things which challenge them in order to gain more satisfaction which is in line with a study by Mangold and Zschau (2019) who supposed that people who feel the need to change their lives, search for new or different forms of living.

Another novel intrinsic motivation is the participants' interest in the own building process. They are interested in working with wood and acquiring knowledge about how things

are built. Specifically, the participants feel self-assured when they create things on their own and therefore feel intrinsically motivated to go on. This is in line with the findings by Mangold and Zschau (2019) and Boekermann et al. (2018) who suggested that people want to build their house on their own in order to experience self-empowerment. Additionally, participants feel more autonomous since they incorporate their own decision in the process as supported by Mutter (2013) and Boekermann et al. (2018) stating that the own decisions people take in this process makes them reach a higher state of autonomy. As suggested by Firth (2012) autonomy encourages people to think beyond the dominant forms of residents which are available and therefore it serves as motivating factor for the tiny house lifestyle. In line with this is the novel finding of acquiring new skills in the technical domain as an intrinsic motivator. The participants feel the urge to learn something new and further develop their skills. Consequently, they feel self-empowerment and more independence. Some participants state that they already had experiences with technical tasks whereas others learn these skills completely new.

As expected, people identify environmental sustainability as an intrinsic motivator to follow the tiny house lifestyle. However, this motivator is only rarely mentioned. The participants stressed that they have less usage of energy and water, resembling propositions by Wu and Hyatt (2016) and Pflaumer (2015). However, a distinction can be made between environmental sustainability of the tiny house residents. Some built their tiny houses with recycled material whereas others built their tiny houses with biological materials. Boekermann et al. (2018) suggested that people feel a need to build their tiny house out of recycled materials in order to be sustainable. Lastly, the participants see the autarkic style of living provided by the tiny house lifestyle as an intrinsic motivator. They experience intrinsic motivation in this context since they are independent from sources for supply and therefore have the opportunity to move around freely. This is in line with the expectations since a study by Shearer and Burton (2018) demonstrated that the tiny house lifestyle grants an autarkic lifestyle and serves as advantage when following the lifestyle.

Extrinsic Motivators to Follow the Tiny House Lifestyle

As most important extrinsic motivator participants mention community. They feel stronger bonds to the people around them since they need to adapt to them all the time and therefore develop themselves further. This is in line with a study by Carlin (2014) who stated that since people are living closer together, they establish stronger bonds within their community. Besides, the residents strengthen their bonds especially during the building process since they need a lot of support from each other. Consequently, participants experience positive relationships and therefore identify community as most relevant extrinsic motivator. An interesting new finding in this context is that some tiny house residents also life in solitude and therefore do not associate community with extrinsic motivation. A possible explanation could be that they consciously decided to live on their own and therefore do not consider community as a motivator to follow the lifestyle but solitude. Moreover, it turns out that the participants identify cooperation as an important extrinsic motivator. As supposed by Eng, Chew and Lee (2014) shared competences and production capacities are the basis for capabilities and therefore simplify a building process. Hence, the cooperation turns out to be especially important during the building process. Furthermore, the participants identify cooperation in context with their community. They need to adapt to the people around them since they share the same space which gave them more prudence. A study by Shearer and Burton (2018) suggested that people in tiny house communities are forced to act on each other since they live close to each other which supports this finding.

A novel domain which becomes apparent during the analysis is the demotivating factors which are identified as extrinsic. First of all, participants see institutional limitations as demotivating factor since it hinders them in their building process. However, they feel more motivated by these obstacles since they want to overcome them. A study by Evans (2018) supported this by stating that there are many regulatory barriers tiny house builders encounter. Besides the participants clarify that the tiny house lifestyle is not accepted in the community yet, which was demotivating. They experience negative attitudes like skepticism from outside the movement. A study by Carlin (2014) and a study by Rollin (2014) supported that by stating that tiny houses are not allowed in every place in cities and therefore people are often excluded from the community. Surprisingly, the participants mention that this negative attitude encourages them to convince the people to change their attitude and to spread the idea of the tiny house movement. Moreover, participants experience that in some cases the people change their attitudes themselves which lead to the fact that they see it as an extrinsic motivator for following the lifestyle.

A finding which was expected based on literature was the tiny house residents' need for a place to stay. Most of the participants describe an impossible former living situation e.g. a divorce a relocation in a different city. Furthermore, some base the motivation to follow the lifestyle on their inability to pay for a normal accommodation. As supposed by Mangold and Zschau (2019) the motivation to move to a tiny house often results from existential crises e.g. not being able to afford the rent. Therefore, it is not surprising that it was mentioned by the participants.

Strengths and Limitations of the Study

In the study context it is possible that limitations have influenced the results. A first limitation was the location where the interviews were conducted. In some cases, the environment was noisy since people walked around in the same environment. Furthermore, one interview was conducted as a focus group interview so that sometimes the participants talked at the same time. In order to ensure precise and complete answers, the researcher asked the participants to elaborate on their answers when necessary. A second limitation was that some participants were conveyed by participants who already took part in the study. Therefore, certain participants shared the same context of life and hence the answers to the questions were based on the same values. In further research the participants should be recruited independently. However, the participants represented the group of tiny house owners in Germany accurately.

The third limitation was the quality of the data since it was manifested by the interviewer. The quality of the data strongly depended on the researcher's skills and his/her biases. However, the researcher controlled these biases and worked in a professional and concise manner to gather valid and reliable data. In doing so, the researcher stack completely to the interview scheme so that no personal attitude would have come present during the interview. Besides, the study also provides strength since the topic is a new field of research.

The first strength was the use of qualitative methods namely interviews. The use of interviews provides the opportunity to gather an accurate picture of the participants and their motivations. A face-to-face interview creates a vivid picture of the participant since it gathers verbal and non-verbal cues and provides a precise picture. On top of this, the method 'letter from the future' also provides strength to the research. It examined how individuals imagine their future selves, their life and the future impact the tiny house movement will have so that the researcher is provided with the subjective view of the participant and a picture of the participants attitude close to reality. These methods combined ensure a better understanding of the problem and provide more data regarding this topic.

Moreover, the mixed methods approach added a strength to the study design and the replication of the study. Specifically, it provides the opportunity to expand the context in which the data is collected and therefore ensures validity. As supposed by Greene, Caracelli and Graham (1989) a mixed method approach combines inductive and deductive reasoning which is also a strength of this study. The use of mixed methods further ensures that the

researcher is able to collect more complete data for the research question, subsequently the use of two methods provides the opportunity for both methods to fill gaps which may occur by applying only one.

Another strength was the semi-structured interview scheme. The questions were openended so that the researcher could gain a lot information and would still be in control of the interview, focused on relevant aspects. As supposed by Horsburgh (2003) the reflexivity of the researcher namely knowing that his/her actions will have an impact on the outcome of the study will provide a valid outcome if he/she act in a professional manner. Therefore, the researcher of this study guided the interview and it was conducted in real time so that all information relevant was included. As stated by Yardley (2007) in qualitative research the researcher is inevitably involved since he/she developed e.g. the interview scheme or used other methods chosen on his/her own. Hence, to eliminate the influence of the researcher in order to provide standardization and to reduce biases would make it difficult to retain the benefits which come together with this method (Yardley, 2007). Since the researcher of this study took influence in the interview scheme and provided the self-chosen methods for the study, it shows a high validity in context of validity assessment in qualitative studies.

Lastly, the reliability was considered. In order to assess the reliability for this study the administration of measures was taken into account. Therefore, the researcher provided a detailed description of the materials used, a precisely described procedure and a concrete analysis plan, the study is considered high in reliability since it is replicable as supported by Yardley (2007).

Implications and Recommendations for Future Research

The findings of this study support that people experience intrinsic and extrinsic motivations to build a tiny house and follow the tiny house lifestyle. This topic is not yet covered by much existing research and therefore fills an important gap. Since general motivations have already been discussed in research the focus on intrinsic and extrinsic motivation is a novel approach. It gives insights in the people's personal motivations; the benefits they experience within this lifestyle and the drawbacks they perceive but still stick to the lifestyle. Participants identify motivations which are shared by all of them, yet they also identify separate motivators which are important for them personally. In this context it becomes apparent that there is not much existing knowledge about the population of tiny house builders discovered yet. Therefore, this study is quite relevant and novel, subsequently future research should pay more attention to examine this population.

Future research should investigate a more representative sample by applying quantitative measures in order to find out more about the tiny house resident's motivations and to make them generalizable. A possibility for this would be to e.g. invent a survey in order to get more respondents. In this context future research can identify the motivations more precisely and provide the tiny house movement with support since it informs people about this lifestyle. Besides, future research should distinguish between tiny house communities and people who live in solitude since some motivators were analyzed to be different based on these circumstances.

Conclusion

In sum, the tiny house residents have similar motivational reasons to follow the lifestyle, both intrinsic and extrinsic. For the intrinsic ones the most important are flexibility and curiosity whereas novel findings include the admiration of the own building process and acquisition of new skills. For extrinsic motivation the tiny house residents identify community and motivation as most relevant. Moreover, the study has revealed that a new domain concerns demotivating factors like institutional limitations which they want to overcome and therefore are motivated by them. Still, since the residents differ in their age and/or living situation they also identify different motivators. Hence, all the tiny house builders have their own personal intrinsic and extrinsic motivations to follow the lifestyle. Additionally, the study has a high societal impact. The tiny house movement is increasing as suggested by Pflaumer (2015). Therefore, more people are motivated to follow the lifestyle. In this context the results of this study are quite relevant for the general public and for other research.

References

- Boeckermann, L. M., Kaczynski, A. T., & King, S. B. (2018). Dreaming big and living small: examining motivations and satisfaction in tiny house living. *Journal of Housing and the Built Environment*, 34(1), 61–71. https://doi.org/10.1007/s10901-018-9616-3
- Carlin, T. M. (2014) Tiny homes: Improving carbon footprint and the American lifestyle on a large scale. *Saint John's University. 35* http://digitalcommons.csbsju.edu/elce_cscday/35
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York, NY: Plenum DOI: 10.2307/2070638
- Eng, S. W. L., Chew, E. P., Lee, L. H., (2014). Impact of supplier knowledge sharing competences and production capacities on radical innovative product sourcing. *European Journal of Operational Research*, 232(1), 41-51 https://doi.org/10.1016/j.ejor.2013.06.031
- Evans K. (2018) Overcoming barriers to tiny and small home urban integration: A comparative case study in the Carolinas. *Journal of Planning, Education and research*. 1-12 https://journals-sagepub com.ezproxy2.utwente.nl/doi/pdf/10.1177/0739456X18788938
- Firth, R. (2012). Transgressing Urban Utopianism: Autonomy and Active Desire. Geografiska Annaler: Series B, Human Geography 94 (2), 89–106. Retrieved from: https://www.jstor.org/stable/23254569?seq=1#page_scan_tab_contents
- Forshaw, M. (2013). Your Undergraduate Psychology Project A student Guide (2nd ed.). Chichester, The United Kingdom: British Psychological Society and John Wiley & Sons Ltd.
- Greene, J. C., Caracelli, V. J., Graham, W. F. (1989). Towards a Conceptual Framework for Mixed-Methods Evaluation Design. *Educational Evaluation and Policy Analysis*, 11(3), 255-274 https://doi.org/10.3102/01623737011003255
- Horsburgh, D., (2003) Evaluation of qualitative research. *Journal of Clinical Nursing*, *12(2)*, *307-312* https://doi-org.ezproxy2.utwente.nl/10.1046/j.1365-2702.2003.00683.x
- Mangold, S., Zschau T. (2019) In search of the 'Good life': The appeal of tiny house lifestyle in the USA. *Social Sciences* 8(26) doi:10.3390/socsci8010026
- Mingoya, C. (2015, June). *Building together*. *Tiny house villages for the homeless: A comparative case study*. Massachusetts Institute of Technology. https://dusp-mit-

edu.ezproxy2.utwente.nl/sites/dusp.mit.edu/files/attachments/news/mingoya_2015.p df. Accessed 25 Feb 2019.

- Mutter, A. (2013). Growing tiny houses: Motivations and opportunities for expansion through niche markets. Lund University. http://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=4196 241&fileOId=4196242. Accessed 25 Feb 2019.
- Pflaumer, D.H. (2015, May). *Tiny house handbook*. Ball State University. Retrieved from: http://cardinalscholar.bsu.edu/handle/123456789/199621
- Rollin, J. G., (2017). Living tiny legally. Senior Honors Project, 296 Retrieved from: https://commons.lib.jmu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=135 9&context=honors201019
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25, 54-67, doi: 10.1006/ceps.1999.1020
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 11(4), 227-268* Retrieved from: https://selfdeterminationtheory.org /SDT/documents/ 2000_Deci Ryan_PIWhatWhy.pdf
- Seaquist, G., Bramhandkar, A., Santana-Frosen V. (2015). Tiny Homes: Big Concerns. NYSEA Proceedings 9. https://nyseconomicsassociation.org/content/proceedings/2016/2016%20NYSEA%20 Proceedings%20Vol%209A.pdf#page=9
- Shearer H., Burton P. (2018). Towards a typology of tiny houses. *Housing, Theory and Society* Burton https://www-tandfonline com.ezproxy2.utwente.nl/doi/full/10.1080/14036096.2018.1487879?scroll=top&need Access=true
- Sools, A. M., Tromp, T., Mooren, J. H. (2015). Mapping letters from the future: Exploring narrative processes of imagining the future. *Journal of Health Psychology 20(3)*, 350-364 DOI: 10.1177/1359105314566607
- United Nations (2015). World population projected to reach 9.7 billion by 2050, Department of Economic and social affairs Retrieved from: http://www.un.org/en/development/desa/news/population/2015-report.html

Wu, W., Hyatt, B., (2016). Experiential and Project-based Learning in BIM for sustainable living with tiny solar houses. *Procedia Engineering 145*, 579-586

https://doi.org/10.1016/j.proeng.2016.04.047

- Yardley, L., (2007) Demonstrating validity in qualitative psychology. *Qualitative Psychology: A Practical Guide to Research Methods, 235-251* Retrieved from: https://books.google.nl/books?hl=en&lr=&id=lv0aCAAAQBAJ&oi=fnd&pg=PA257& dq=qualitative+interviews+validity&ots=eNKNhuelMt&sig=4AmRTcb53-N2JGENnCqLYqnokqE#v=onepage&q=qualitative%20interviews%20validity&f=false
- Zaharia, R. M., Stancu, A., Dainora, G., (2008). Qualitative research methods: A comparison between focus-group and in-depth interview. Retrieved from: https://www.researchgate.net/publication/46533517_QUALITATIVE_RESEARCH_METHODS_A_COMPARISON_BETWEEN_FOCUS-GROUP_AND_IN-DEPTH_INTERVIEW

Appendix A

Recruitment Message

Dear Tiny House Community,

We are two Psychology students who are currently writing their Bachelor Theses about the topic 'Tiny Houses'. We study at the University of Twente in the Netherlands. In our Bachelor Theses, we aim to discover the reasons for your decision to move into a tiny house. In this context, we are interested to find out more about your intrinsic and extrinsic motivations that inspired you to downsize your belongings and to change your ordinary lifestyle. Also, we want to investigate how the use of strengths in the tiny house lifestyle is important and how it affects your well-being. Several existing studies suggest that tiny house builders and residents experience increased well-being and that strength use elevates well-being as well. Therefore, we generally aim to explore your subjective well-being as well as your conscious strengths use to discover which strengths might influence your subjective well-being while leading the tiny house lifestyle.

The study consists of two methods. First, we conduct an in-depth interview that takes approximately 60 minutes. During this interview, you will be asked to answer several questions about your motivations, decisions, well-being and strengths. Afterwards, you are asked to write a 'Letter from the Future'. In particular, you need to imagine your desired future in your tiny house. Of course, your data will be handled confidentially.

If you are interested to participate in our study, we will provide you with further information. We need 8 participants who are currently building or already living in their tiny houses. We would prefer to meet you in person when you are willing to help us out. Otherwise, Skype interviews would be possible too.

Looking forward to hearing from you!

Kind regards,

Mia and Hannah

Appendix B

Interview Scheme

Introduction

Hello,

My name is [...]. First of all, I would like to thank you for taking the time to participate in my study. In the following, I am going to ask you various questions regarding your decisions and your motivations to live in a tiny house. Also, I would like to explore your opinion on whether the conscious use of strengths in the process of building and living in a tiny house might have contributed to your subjective well-being. Your responses will help me and my colleague for our bachelor theses that we are writing for the bachelor Psychology at the University of Twente.

The following interview is going to be audio recorded. All the data you provide will be handled confidentially. This means that all your personal data will be anonymized. The audio recordings will be destroyed after we transcribed the interviews. We do not believe that you should experience any discomfort. However, if this should be the case you can opt-out of the study at any time, without having to name a reason. We assume that the interview will last approximately 60 minutes. You can ask questions at any time during the interview if you do not understand a specific question or a concept that is covered during the interview.

Do you have any questions or expectations you would like to mention now before we begin with the interview? [*answer questions*] If you agree to these conditions, I would like you to read and sign an informed consent form [*handing over informed consent + signing*]. Thank you! The interview will start now [*start audio-recorder*]

General Questions

Okay so first, we start with some general questions.

- 1. Demographic questions
 - a) How old are you?
 - b) Female or Male?
 - c) What cultural background do you have?
- 2. Are you currently in the process of building your tiny house or are you already living in it?
 - a) If you finished building your tiny house: since when are you living in a tiny house? How many months/ years?

- b) If you are currently building your tiny house: since when do you build it and how long to you expect the building process to take? Why? Were there any obstacles?
- 3. What made you aware of the tiny house lifestyle? Can you give an example?
- 4. What/who motivated you to follow the tiny house lifestyle? Why? Can you give an example?
- 5. How do you intend to live in the tiny house?
 - a) If you already live in the tiny house, how is your living situation? Do you live alone or with a family etc.? Why? How do you experience this?
 - b) If you are not yet living in the tiny house, how do you expect your living situation to be (i.e. living alone or with a family etc.)? Why?
- 6. How did you design your tiny house? Or how do you want to design your tiny house? Which steps do you need to take in order to build this tiny house?
 - a) What does your tiny house look like? (mobile tiny house, permanent tiny house, what facilities, etc.). Why does it look like this? Why did this have your preference?

Motivation Questions

Thank you for your responses so far! Now, we will continue with some questions concerning motivation. Specifically, motivation is a reason to act in a particular way. The following questions I am going to ask are about your motivation to build a tiny house or to follow the tiny house lifestyle. Thereby, I can gain a clear picture of your motivations.

- 1. What factors motivated you to build your tiny house/ to live in a tiny house? Can you give examples? Why did they motivate you?
- 2. What benefits do you see in building/ living in a tiny house? Why? Can you give examples?
- 3. What drawbacks do you see in building/ living in a tiny house? Why? Can you give examples?

Thank you for your previous responses. Now, I have some more specific questions. Specifically, motivation can be divided into intrinsic and extrinsic motivation. Intrinsic motivation is a person's inborn tendency to seek challenges and change in order to exercise own capacities. For instance, being ambitious is an intrinsic motivation. In contrast, extrinsic motivation is motivation that is driven by external rewards. Therefore, social support or money include extrinsic motivations. Did you understand the difference between both concepts or do you need further explanation?

- 4. What intrinsic motivators can you identify as personal reasons for building/ living in a tiny house? Why would these be intrinsic? Examples?
- 5. What extrinsic motivators can you identify as contextual reasons for building/ living in a tiny house? Why would these be extrinsic? Examples?

Decision Questions

Next, I will ask you some questions about your decisions to move into a tiny house. Some of these questions are linked to specific concepts which I am going to explain more in depth. Three concepts are involved in decision making. These concepts are competence, relatedness and autonomy.

Competence concerns a person's feeling of control over something and the ability to handle it in an intended way. I would like to give you an example for this. A competent person would be a person who is determined to do something and succeeds in doing so as he/she is able to execute it in the manner as he/she intended to.

1. To what extent do you experience competence in building a tiny house/ leading a tiny house lifestyle? How? Examples?

The next concept involved in decisions is relatedness. Relatedness involves the interaction people experience in relation with other people. It involves how you care about other people in your environment. For this, an example would be having contact and meaningful relationships with people you care about such as family or friends.

2. To what extent do you experience relatedness in building a tiny house/ leading a tiny house lifestyle? How? Examples?

The final concept involved in decisions is autonomy. Autonomy manifests itself through your desire of being in harmony with yourself. It also means that you are the causal reason of your own decisions. To illustrate this definition, I would like to give you an example of an autonomous person. Such a person is confident and able to make his/her own decisions.

3. To what extent do you experience autonomy in building a tiny house/ leading a tiny house lifestyle? How? Examples?

Well-being Questions

Now, I will continue with some questions concerning your subjective well-being. Altogether, well-being entails frequent positive experiences, high satisfaction with life and rarely occurring negative emotions.

I now have two general questions regarding your well-being.

- 1. Do you think the tiny house lifestyle affected your well-being? How? Examples?
- 2. Could you compare your well-being before and after your decision to lead a tiny house lifestyle? Why do you think that?

Thank you for your answers! In addition, it is believed that well-being consists of six dimensions. So, in order to gain a complete understanding of your well-being, I have some more specific questions concerning these components of well-being. Please be careful to also consider your tiny house lifestyle when answering these questions.

- 3. So, self- acceptance is the first component of well-being. This involves perceiving yourself as favorable and accepting positive as well as negative parts of yourself. To what extent do you experience self-acceptance? How?
- 4. The second component of well-being entails positive relations with others. This includes nurturing, meaningful and satisfying relationships with different people. To what extent do you experience positive relations with others? How?
- 5. Next, experiencing autonomy is involved in well-being. This means that you are free and independent as well as able to take control over your life by resisting social pressures. To what extent do you experience autonomy? How?
- 6. Another component of well-being is environmental mastery. Environmental mastery compromises the ability to manage and to create environments suitable to personal needs and values. To what extent do you experience environmental mastery? How?
- 7. Last but not least, purpose in life is a defining component of well-being. This means that you have goals that you pursue to find meaning. To what extent do you experience purpose in life? How?
- 8. Finally, personal growth is the last component of well-being. Personal growth means that you continually develop yourself in that you are open-minded towards new experiences and self-knowledge. It also involves trying to reach your potential. To what extent do you experience personal growths? How?

Strengths Questions

Next, I will continue with some questions on your strengths. Strengths are positive characteristics that contribute to your personal fulfillment, enjoyment and well-being. Thereby, your strengths express themselves in your actions as well as in your emotions. Generally, strengths are important because they help you to achieve specific goals by enabling you to transform your dreams into reality.

1. What strengths do you generally think you have? Could you name them and give me some examples?

Thank you, these are already some good examples! Now, I would like to provide you with a list of 24 strengths as foundation for answering the next questions. Take your time to read the list carefully! [*handing over list*]

Do you have questions regarding the classification? Okay then, I would like to ask you some further questions about your strengths on basis of the list you just read.

- 2. What strengths do you believe you possess? How/when do you use these strengths? Examples?
- 3. What strengths do you consciously and actively use? Why/how?
- 4. What strengths do you believe you need for building a tiny house and/or leading a tiny house lifestyle? Why?
- 5. Do you think the use of strengths is important in building/ living in a tiny house?

Strengths and Well-Being Questions

- 1. Do you think the use of strengths is related to well-being? Why?
- 2. Do you think the use of strengths is important in increasing well-being? Why? How?
- 3. Do you think the use of strengths affected your well-being in the process of building/ living in a tiny house? Why? How? Examples?

Follow-up questions

In case participants answers are unclear, I probe deeper when necessary by asking:

- 1. Can you explain your answer further?
- 2. I am not sure what you mean. Can you explain that again?
- 3. Could you provide me with an example?

The Ending

Thank you for your participation! If you may have further questions or information you still want to discuss, we can do this now. We now would like to ask you to read the instructions on writing a 'Letter from the future' that is part of this study. After reading the instructions, you have the opportunity to ask questions if anything is unclear. If everything is clear, we would like to give you time to write the letter from the future and send it to us when you are ready. Preferably within 1 week after this interview. *[give e-mail address to participant or discuss other options AND discuss 'deadline']*

Appendix C

Letter of the Future Letter from the Future - Instructions for Tiny House Builders/ Residents

Dear participant,

You are asked to write a letter from a desired future. Imagine yourself years from now living in your tiny house. Be aware that you are writing the letter from a desired future to the present. This means that the future you are imagining has already been realized at the moment you write this letter. Consider the letter as a possibility for envisioning what possibilities your future might have to offer. Feel free to be creative and use your full imagination. You do not need to worry about grammar and spelling. Instead, be open and share whatever comes to your mind. In the following, a few clues are presented that might help you in writing and structuring your personal letter. The duration of writing the letter is estimated to last 20 minutes. However, you can take as long as you wish. As a guideline, the length of the letter could be about 1 A4 page.

Where and When?

Envision as vividly as possible where and when you are in your future. In particular, know how far in the future you travel regarding months, years or decades. Please state that explicitly. If you are building your tiny house right now, it is important that you imagine yourself living in it.

It does matter that you are still living in your tiny house when you envision your desired future. Still, you can imagine yourself living in a tiny house in any environment you desire. You may also think about yourself. In particular, imagine how you look and feel and who might be with you in your desired future.

What?

Imagine that your envisioned future is real. This might concern fulfillment of dreams and wishes as well as positive changes and personal achievements. Tell your own story in a manner that makes explicit how you have become the person you are in your desired future! In doing so, consider which motivations may have played an important role in your personal development and in the process of building your tiny house. Also, examine what specific strengths might have helped you in designing your desired future and your tiny house.

Thereby, feel free to mention issues that may have been difficult for you or which are unresolved.

Describe your personal path (including motivators and strengths) towards this future. Maybe you want to give advice as well. How did your future emerge? How do you look back on your life?

To Whom?

You can choose to write the letter to any person in the present. You could write the letter to your present self or to another person which might be close to you.

Appendix D

Informed Consent



Informed Consent

Investigators: Hannah Hanckmann & Mia Jebbink

Contact Persons: Hannah Hanckmann (<u>h.hanckmann@student.utwente.nl</u>), Mia Jebbink (<u>m.jebbink@student.utwente.nl</u>)

Dear participant,

We invite you to participate in an interview study. If you agree to participate, you will have to answer questions regarding your situation of living in a tiny house or building a tiny house. These questions will concern your demographics, your motivations, your decisions, your strengths and your well-being related to the tiny house lifestyle. The information you provide by answering the interview questions serve as data for bachelor theses of students of the University of Twente.

Additionally, we invite you to write 'A letter from your future'. If you agree, you will have to imagine yourself being in the desired future. Specifically, you write a letter from the future to the present. You can address the letter to any person in the present. In doing so, you explain what your life in a tiny house looks like years from now. The information extracted from your letters will again serve as data for the researchers' bachelor theses.

The goal of both methods is to find out motivators for living in a tiny house as well as whether the use of character strengths elevates tiny house builders' well-being.

We do not believe that any personal threats or discomforts arise from participating in this study. Your participation is voluntary, and you can opt-out at any time, without having to give a reason. Your data will be handled confidentially. Specifically, all personal information such as names, birth dates or places will be anonymized. Your data will be used for the research

purposes of two bachelor theses. Be sure that you have understood every instruction concerning the study. If you have any questions about the study, you can contact the researchers by using the contact details mentioned above.

The researchers will provide you with a copy of this document for your records. Also, the researchers themselves will keep a copy for the study records. In addition, by agreeing to participate in this study you allow the researchers to keep audio records of the interview.

Your participation in this study will have the advantage of informing existing research with novel findings. No disadvantages should arise by your participation.

'I hereby declare that I have been informed in a manner which is clear to me about the nature and method of the research as described by the researchers. My questions have been answered to my satisfaction. I agree of my own free will to participate in this research. I reserve the right to withdraw this consent without the need to give any reason and I am aware that I may withdraw from the experiment at any time. If my research results are to be used in scientific publications or made public in any other manner, then they will be made completely anonymous. My personal data will not be disclosed to third parties without my express permission. If I request further information about the research, now or in the future, I may contact the contact persons mentioned.'

.....

Date, Name subject Signature

I - the researcher - have provided explanatory notes about the research. I declare myself willing to answer to the best of my ability any questions which may still arise about the research.'

.....

Date, Name researcher Signature

Appendix E

Coding Scheme Table

Table 2Code label, code levels, example quotes, variations and remarks

Code Label	Code	Level 1	Level 2	Example	Variation/
	Definition			Quotes	Remarks
General Codes	The general living situation of the tiny house resident/ builder	State of tiny house	Building a tiny house	"I am currently building."	Some participants were building a tiny house but were already living in one
			Living in a tiny house	"Yes, it is finished, and I already live in here."	
Motivational Codes	Motivation is a reason to act in a particular way. Specifically, intrinsic and extrinsic motivations are involved.	Factors that motivated	Environmental sustainability	"From the appearance and my personal needs to the needs of all people: the house is built of natural material and sustainable."	The aspect of sustainability was not mentioned by all participants, some took it for granted.
			Flexibility	"I am way more flexible. That is in line with this feeling of freedom. I am not stuck at one place."	Flexibility sometimes overlaps with the code of own decisions
			Family circumstances	"I needed to quickly find a place to stay and the alternative of a flat was not an option for me."	
			Based on childhood/ youth experiences	"I can actually start in my childhood. We had a caravan in which we	Half of the participants answered the question in the same manner namely in childhood. The

, ,	1	[
			always went	other half had
			on holiday	different
			with four	motivations later
			people.	in their life.
			Therefore, it	
			was quite	
			normal for me	
			to live in	
			small space"	
		Need for place	"My flat share	All participants
		to stay	dissolved	mentioned the
		to stuy	itself and then	aspect of needing
			I was	a place to stay,
			confronted	however for
			with the	
				different reasons.
			decision what	
			should be	
			done next. A	
			new flat share	
			was no option	
			and I couldn't	
			afford an own	
			flat.	
			Therefore, I	
			started this	
			project."	
	Benefits	Autarkic/ self-	"One	
		sufficient life	advantage is	
			that you can	
			live autarkic.	
			You can place	
			your house	
			wherever you	
			want to and	
			it's self-	
			sufficient."	
		Own building	"I live in a	
		process	house which I	
		×	built with my	
			own hands.	
			Beginning	
			with the first	
			idea ending in	
			the last	
			wooden board	
			that I screwed	
			on."	
		Improved	"Due to the	The participants
		mental health/	reduced	differ in their
		better focus		
		oener rocus	Complexity and due to the	opinion of
			reduced stuff	improved mental health. Three
			in a tiny	main topics are
			house, I am	work, hobbies
			able to focus more on my	and personality.

			work. I am	
			getting calm	
			and I'm	
			getting more	
			into the flow	
			of my work.	
			I've never	
			reached this	
			state in a	
			normal	
			house."	
	Drawbacks	Exhausting to	"One	
		build	disadvantage	
			is that is it	
			sometimes	
			takes a lot of	
			timethe	
			building	
			process."	
		Not accepted in	"I think that	
		community	in other	
			official	
			dwelling	
			forms the	
			existing,	
			living and	
			working is	
			accepted, but	
			here it is not.	
			We need to	
			work further	
			to come along with the	
			people	
		D:00 1	around."	
		Difficult with	"I think it	
		family	might be a	
			problem for a	
			lot of people.	
			Especially	
			with kids.	
			Many people	
			would not be	
			able to do	
			this."	
		Complex	"For my	7
		supply	current tiny	
			house, I	
			would say	
			that all which	
			can be found	
			in a normal	
			flat or house	
			is firstly not	
			here. If I want	
			to have water,	
I I	L		to have water,	

		I need to take	
			1
		to the place	
		with me."	
Intrinsic	Own interest in	"It started	
motivations	building	with the fact	
1		that we had a	
1		small flat and	
1		I started to	
1		deal with	
1		many	
1		different little	
1		solutions and	
1		building."	
1	New friends	"I have met	Some
1		many people	participants
1		and there is	described other
1		such a big	tiny house
1		connectivity	residents, some
1		and a	described people
l		networking	from outside.
1		dynamic."	
l .	Self-	"I believe that	
1	determination	it is quite	
1		satisfying to	
1		wake up in a	
1		house, which	
1		I build myself	
1		and where I	
1		took all the	
1		decisions."	
1	Less expenses	"The most	
1	-	trivial	
1		motivation is	
1		that I have to	
1		spent less	
1		than 150	
1		euros per	
l		month in	
l		about 15	
l		square meters	
l		which is	
l		pretty cheap."	
l .	Curiosity	"I would say	
l	-	a key word	
l		for many	
l		people is	
l		experimenting	
l		and trying	
l .		something. I	
l .		also feel that	
l		way. I like to	
l		have new	
l		ideas and a bit	
l .		of challenge."	
Extrinsic	Interest from	"Good	
motivation	outside	feedback	
Destainsis		than 150 euros per month in about 15 square meters which is pretty cheap." "I would say a key word for many people is experimenting and trying something. I also feel that way. I like to have new ideas and a bit of challenge."	

Decision Codes	Decisions manifest a conclusion about e.g. and action reached after considering something. The concepts competence, relatedness and autonomy are	Competence	Impossible former living situation Know-how with wood/ technical skills	from neighbours for example. When you notice that you convince and inspire the people with the things you do." "The motivation that I couldn't pay my rent with my pension for my old flat." "All the stuff I did on my own, and it worked out. This led to the situation that I became the technical leader for the foundation I work in."	Participants differed in the extent that some mentioned money as reason and some personal reasons e.g. divorce
			Acclimatization	"The more you engage with the building and living, the more you grow into it."	
			Achieved goals	"The person who build the house, has in the end the competence that everything is like he/she intended it to be."	
			Self-assurance	"I think it is a dynamic development. You gain competences.	

 1		1	
		You first have	
		trust in	
		yourself and	
		then it	
		develops."	
	Help from	"It depends a	This code differs
	others	lot in which	
	others		for people who
		context you	build their tiny
		place the	house alone, they
		house. Here	mainly stated that
		there is more	they developed
		or less a	their own
		network of	competences.
		competences	
		which merge	
		together.	
		Everyone	
		incorporates	
		something	
		which amends	
	Coord ti	the whole."	This 1 1100
	Cooperation	"Yes, the	This code differs
		competence I	since some
		connect to	people describe
		cooperation.	their tiny house
		The exchange	in connection
		between each	with other tiny
		other. So, I	house residents,
		can do	and some
		something	describe their
		with energy,	personal life
		or I have	within their tiny
		technical	house and e.g.
		skills and	visitors like their
		what do the	children
		others have."	
Relatedness	Community	"I think a big	
		benefit is that	
		in such a	
		small place	
		you have way	
		more contact	
		with the	
		world around	
		you. You	
		have the	
		people	
		directly	
		around you	
		not like in a	
		normal flat."	
	Positive	"I am	
	dependence	surprised that	
		our strength	
		amended each	
		amenucu cach	
		other so well.	

		Practical problem solving	Your creativity and perseverance made it easier for me to put something in action." "Everyone could integrate strength. The people who helped us, as well as p.3 and me. We	The code practical problem-solving overlaps in some cases with the code of cooperation.
	Autonomy	Creating a	could strengthen our teamwork and amended each other." "I think first	
	ruononiy	space for tiny house	of all we are autonomous in relation to paperwork and building authorities. You are quite autonomous when you have a place to build, then	
		Own decisions	you can start quickly." "This is this thing which I need a lot. Autonomy. That it's also a reason why I wanted to live like this. Just to not be dependent on others, so that I can decide myself how to	As already mentioned, this code shows a slight overlap with the code of flexibility. The participants mention similar aspects in both categories.
		Institutional limitations	live." "I needed to change a lot, if you build something like this you need to stick to the guidelines by	

	the technical	
	supervisory	
	association.	
	You are	
	bonded to	
	these	
	guidelines."	
Financial	"You are also	
limitations	limited	
minutions	financially. If	
	you would	
	not need to	
	save money,	
	everything	
	would be a lot	
	easier."	
Independence	"So being	Independence in
in everyday life	independent	everyday life
In everyday Inte	in your life,	overlaps with
	for example	own decisions.
	from the	Some of the
	municipal	quotes coded
	utilities. This	with own
	makes it	decisions also
	attractive."	describe
	attractive.	independence in
Financial	"I think it	everyday life.
benefits	made me	
benefits		
	pretty	
	autonomous. I	
	don't have to	
	ask a bank to	
	give me a	
	credit because	
	I can do all	
	for my own. I	
	don't have to	
	spent more	
	than 150 euro	
	for a home	
	and an	
	office."	