Motivations to build a tiny house and continue despite obstacles — a multiple qualitative methods study

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Abstract

Introduction: This research studies the motivations to build a tiny house and challenges during the building process. Research by Mangold and Zschau (2019) already identified motivations such as no rent and more free time. Mutter (2013) found the tiny house community to be a motivation. Literature also identified obstacles, such as a legal grey area. However, those articles are concerned with the U.S.. Furthermore, those studies are explorative and do not employ psychological theories to substantiate findings. This study fills the gap of knowledge about the tiny house movement in Europe (Germany) on the basis of Deci and Ryan's (2000) Self-Determination Theory (SDT), which supposes that people aim to achieve autonomy, competence and relatedness. *Methods*: The study makes use of a multiple qualitative methods design. Participants were selected postulating that they build or have built a tiny house. They were contacted via the Facebook group "Tiny House Deutschland" and via YouTube. Two males and two females were selected, with a mean age of 42 years. Interviews were conducted followed by the "Letter from the Future" method to gain more insight into participants' unconscious motivations. The SDT was used as a guiding structure for analysing motivations, previous research on obstacles provided structure for analysing obstacles. Results: Results showed that gaining autonomy is the most relevant motivation for tiny house builders. However, competence and relatedness also play into the decision, but were not identified as often as autonomy. Furthermore, a category with additional motivations to build a tiny house was found, such as a wish for being environmentally friendly and liking the comfort of living in a tiny house. The most relevant obstacle was finding a parking position for the tiny house. Unexpected results were found about age and gender, as women appeared to be more environmentally concerned and the two younger participants valued flexibility more than the older ones did. Discussion: The findings were in line with existing literature, but also gave further insight into motivations to build a tiny house. A community was found to be critical, as participants did not agree in their opinion. Moreover, participants enjoyed the building phase more than participants in U.S. studies did, implying that they decided for a tiny house without external pressure. Difficulties with the legal status of tiny houses could be replicated in this study, however further obstacles could also be identified. Findings from this study fill the gap in European literature about motivations and challenges to build a tiny house and can help support prospective tiny house builders. The support of builders can serve to solve societal problems like living space shortage.

Introduction

"Less is more!", a famous proverb based on the minimalist movement that has evolved in the 1950s. Despite its relatively long history, the majority of people living in industrial countries do not lead a life according to its principles, but can rather be described as consumerist. Nevertheless, a new movement has developed over the past years that partly has its roots in minimalist thinking - the tiny house movement.

The tiny house movement had a rise in popularity since the 2008 economic crisis (Mangold & Zschau, 2019). Mangold and Zschau (2019) added that the movement in the United States can be seen as a counter movement to the American "bigger is better" lifestyle. Though no official definition exists to classify tiny houses, Mingoya (2015) stated that a tiny house is smaller in size than 19 square metres, includes bed and bath, kitchen and storage. Moreover, it can be either static or placed on a trailer to make it moveable (Boeckermann, Kaczynski, & King, 2018).

As diverse as the possibly resulting tiny houses, are the people living in it. Mangold and Zschau (2019) found that those people either have purely personal reasons or mixed motives, defined as a combination of personal and environmental motivations. This widespread set of motivations to choose tiny house living can be traced back to several perceived benefits of it. As living in a tiny house encompasses the downsizing of personal belongings and therefore simplifying life, it is clearly related to minimalism. Mangold and Zschau (2019) added that choosing tiny living due to perceived benefits of getting rid of unnecessary possessions is categorised as a purely personal motive, whereas downsizing to achieve personal benefits but also to protect the environment is a mixed motive. This implies that simplifying life is a motivation that can either have purely personal, or personal as well as environmental aspects. However, simple living is only one of the motivating factors found by Mangold and Zschau (2019). Further ones include the financial aspect, as living in a smaller house reduces housing costs, renders rent unnecessary and reduces financial obligations. Another driving factor is freedom and autonomy, due to less financial obligations, less work and more free time. Moreover, inhabitants of tiny houses stated that they feel like taking back their lives and finding happiness. A fourth motivation according to Mangold and Zschau (2019) was meaningful relationships, based on the reduction of material belongings and the increase in free time as well as based on families' unavoidable increasing interaction when living in a tiny house together. Lastly, new experiences were found to be a motivation when it comes to choosing tiny house

living. These include the experience of living in a small place as well as having more time and money to travel, pursue hobbies and create experiences.

Apart from the above mentioned motivations to choose tiny house living, there are also other reasons that cause people to downsize. According to Broeckermann et al. (2018), home prices in the US have risen immensely over the past 50 years. Furthermore, space in cities becomes scarce and expensive (Ford & Gomez-Lanier, 2017). This does not only apply to the United States, but can also be observed in European countries. In Germany, rent has increased by 30 percent between 1995 and 2017 (Statista, 2019). In the Netherlands, rents have increased by up to 40 percent in the bigger cities (i.e., Amsterdam, The Hague, Rotterdam and Utrecht) between 2010 and 2018 (Statista, 2019). These increases in rent and home prices as well other financial obligations (i.e. student loans) and a difficulty of finding well-paid jobs, hinder (young) adults from renting or buying houses (Vogel, 2016). However, Pekkonen and Haverinen-Shaughnessy (2015) found that homeownership increases life satisfaction, indicating a wish of many citizens to own their living space despite the increasing difficulties of realising that goal. Mutter (2013) added that motivations for tiny house builders and inhabitants include the distancing from consumerism, reduction of environmental impact, reduced financial obligations, flexibility and having a community with other tiny house builders.

Although the tiny house movement appears to be an appropriate solution for societal problems such as housing shortage, indebtedness and homelessness (Lewis, 2019), there are obstacles that can occur on the way of realising the building of, or living in a tiny house. The most relevant being legal restrictions, as tiny houses fall in a "legal grey area" (Ford & Gomez-Lanier, 2017). First of all, each municipality is allowed to have its own rules concerning where a house is built and whether it has to be connected to local power and water supplies (Vogel, 2016). This results in confusion about where tiny houses are allowed and under what requirements. Moreover, some municipalities have building codes that postulate minimum housing sizes that tiny houses often cannot meet (Vogel, 2016). These legal restrictions can be evaded by making the tiny house movable (i.e. by building it on a trailer). However, that means that the individuals do not have a permanent living space as the tiny house is then defined as a caravan, therefore they need to adjust to new environments regularly.

Further obstacles that might occur while building or starting to live in a tiny house are the building costs. Although the expenses for building a tiny house are lower than those for building a static, normal-sized house, raising an amount starting at \$10 000 at one time can be hard for some people (Ford & Gomez-Lanier, 2017). Another obstacle of tiny house living

worth mentioning is the limited storage for food and the limited space for bathing amenities, resulting in having to go food shopping regularly and relying on friends to use their bathrooms when needed (Ford & Gomez-Lanier, 2017). Lastly, Ford and Gomez-Lanier (2017) found that the lack of privacy can be an obstacle people face when moving into a tiny house. As space is limited, living with a partner or family in a tiny house can be straining at times. Mutter (2013) added that perceptions of other people, that are not fully acquainted with the topic of tiny houses, can be very critical. Negative comments or concerns by family, friends and others in the social environment can also be straining for the tiny house builders in process. Finally, Mutter (2013) stated that the do-it-yourself idea of tiny houses can become an obstacle for many builders, because most builders are not familiar with construction, nor do they always know the legal building requirements, resulting in problems when trying to register their tiny house.

As in present literature, the focus was on practical motivations, this study employs a psychological theory to further investigate motivations to build a tiny house. This is relevant in order to get a deeper understanding of the topic. Thus, the Self-Determination Theory (SDT) by Deci and Ryan (1985) will be applied to find out about the motivations and their influence. The theory states that there are intrinsic and extrinsic motivations that interplay with each other. Thus, cultural, social and environmental factors influence people's motivation as extrinsic influences determining people's initiative to act. However, extrinsic motivation is most frequently represented by rewards by others. Moreover, it is supposed that intrinsic motivation is more powerful in making the individual persist in its activities than extrinsic motivation. The SDT supposes that autonomy, competence and relatedness are the most relevant psychological needs individuals have and aim to satisfy. Therefore, if those needs are supported, well-being is increased, intrinsic motivation is high and thus, performance is voluntary. This intrinsic motivation results in people enjoying their activities and being more inclined to proceed with them than when being extrinsically motivated (Deci & Ryan, 2000).

Deci and Ryan (2000) added that behaviours that are motivated intrinsically are mostly self-determined, meaning that they are freely chosen by the individual. This explains their assumption that autonomy, defined as "the ability to make your own decisions without being controlled by anyone else" ("Autonomy", n.d.), is one of the three basic human needs. According to Deci and Ryan (2000), autonomy is supported by giving individuals the time and space to choose what they want to do and by also acknowledging them for their progress and achievements. On the other hand, autonomy can be restricted by control, pressuring or forcing people to do something, resulting in a decrease of intrinsic motivation. When applying autonomy to the tiny house movement in this study, it could become clear that the strive for

autonomy is present. On the one hand, as mentioned before by Mangold and Zschau (2019), autonomy is one of the five motivating factors for building a tiny house, because people desire to be freed of financial obligations, materialist mentality and social structures (i.e. having to work). These findings by Mangold and Zschau (2019) might therefore be replicated in this research. However, supplemental motivations that fall into the SDT's autonomy category will be sought to better explain motivations to build a tiny house.

In addition to autonomy, competence is a psychological need that can, when being supported, lead to increased intrinsic motivation and perseverance (Deci & Ryan, 2000). Competence is defined as "the ability to do something well" in the Cambridge Dictionary ("Competence", n.d.). Deci and Ryan (2000) added that feelings of competence are enhanced by receiving positive feedback for actions. That is because positive feedback signifies to the individual that the shown action is successful, effective and appeals to others, which in turn leads to need satisfaction and increased motivation. In the field of tiny houses, competence could be related to the do-it-yourself mentality Mutter (2013) mentioned, as when being able to cope with building challenges and legal restrictions, individuals feel accomplished and competent. Moreover, competence could be fostered by the fact that tiny house builders manage to own a house, despite the current difficulties of purchasing property. These assumptions will be investigated in this research.

Thirdly, Deci and Ryan (2000) mentioned relatedness as a psychological need that individuals seek satisfaction for, which is "the state of being related or connected" ("Relatedness", n.d.). Elaborating on it, Deci and Ryan (2000) stated that relatedness occurs in environments where individuals feel secure and supported. Thus, when the social context is characterised by connections with others, increased intrinsic motivation results. Within the tiny house movement, (online) communities have developed (Mutter, 2013). These communities could play a major role in supporting the need for relatedness in tiny house builders. Due to the exchange of ideas, advice and feedback, the builders are part of an environment of support in which they can feel secure. This in turn leads to increased intrinsic motivation, making it easier to overcome problems in the building process.

To conclude, motivations present in literature constitute the freedom of financial obligations, having to work less, minimalism and relationship building (Mangold & Zschau, 2019). Further motivations found by Mutter (2013) are having a community, being flexible, the do-it-yourself factor and the reduced environmental impact. Despite the number of already identified motivations to build a tiny house, this study is presumed to create relevant and new findings in the field of tiny house research. First and foremost, the aforementioned articles rely

on interviews with US citizens only. As Mangold and Zschau (2019) found, the tiny house movement has its roots in the economic crisis and the resulting in indebtedness of many US citizens. Therefore, motivations for tiny houses are expected to be different for the anticipated German citizens interviewed in this study. Moreover, this study combines knowledge about motivations with challenges of tiny houses, which has not been done in previous research. In addition to that, only few articles about motivations to build a tiny house have been published, therefore this study also functions as a tool to validate and complement present knowledge. Furthermore, existing literature is based on interviews only, whereas this study also employs a method to investigate unconscious motivations, producing deeper insights into the motivations. In addition to that, existing research can be categorised as explorative in the field of tiny house motivations, while this study works with an existent theory about motivation. Lastly, as Lewis (2019) identified tiny houses as a solution for societal problems, understanding the underlying motivations and identifying obstacles is relevant when considering to support the popularisation of tiny houses.

Thus, this study aims at finding out what the motivations are to start building a tiny house and how that motivation is kept throughout the process despite challenges that occur. Based on the psychological needs mentioned in the SDT, the research question "What are motivations to start building a tiny house and continue despite obstacles?" will be answered in the course of this paper.

Methods

Participants

Inclusion criteria for the participants were a minimum age of 18 years to circumvent dealing with minors. Furthermore, the participants had to either be in the process of building a tiny house or be living in a tiny house for less than a year. Four tiny house builders volunteered to participate in this study, two of them were female, two were male. The participants had a mean age of 42 years with a standard deviation of 12,62. Participant characteristics are displayed in Table 1. Participant two and three are already living in a tiny house and at the same time build a new one.

Table 1

Participant Characteristics

Participant	Age	Gender	Tiny House Status
1	29	Male	Living
2	34	Female	Living + Building
3	49	Male	Living + Building
4	56	Female	Building

Materials

This study made use of a multiple qualitative methods design, as it includes a semi-structured interview as well as Sools and Mooren's (2012) "Letter from the Future" method, which were both used to study the same topic of motivations and obstacles. The interview aimed at revealing tiny-house builders' motivations and goals as well as challenges they faced in the process of building. A semi-strucured interview was chosen to derive detailed information by giving the participants the opportunity to elaborate on what is important to them. The interviewees were requested to answer all questions with extensive answers, closed questions were avoided. As participants were not native in English, the interview questions were translated into German. The interview scheme (Appendix A) consisted of a total of 21 planned open questions, however, further questions were added when regarded as being suitable and beneficial for the research, such as asking more about one participant's living situation in a tiny house community. Moreover, probing questions were used to yield more extensive answers. The questions were categorised into three categories, starting with general questions about the person and their tiny house, as well as their decision process to build the tiny house. The second category concerned the different motivations participants experienced when deciding to build and move into a tiny house. Those questions are based on the autonomy, competence and relatedness aspects of the SDT. The last category covered the challenges that participants faced during their building process, as well as their coping strategies which were again asked by using questions from the second category.

The participants were further instructed to write a "Letter from the Future". The "Letter from the Future" is a strategy that is frequently used in narrative psychology, mainly aimed at improving participants' emotional well-being (Sools & Mooren, 2012). Writing a Letter from the Future gives people the opportunity to write about a point of time in the future and includes what people think will be relevant in their lives at that time. Furthermore, it gives insight into

highly personal thoughts about how people will feel about their lives and how they managed the past to reach that state in the future (Sools & Mooren, 2012). Moreover, Sools and Mooren (2012) stated that people include unconscious goals in their letters which they could not express verbally.

The participants were therefore informed about this method by explaining them that they should write themselves a letter from the desired future to the present. Moreover, they were asked to imagine being at a point of time in five years. This point of time was chosen as five years represent a time frame in which the tiny house building is assumed to be finished, so that the participants can imagine leading their life in the tiny house. In the letters, the participants should write about their thoughts and feelings about living in a tiny house as well as developments, changes and obstacles that happened in the five years mean time.

Procedure

Before recruiting participants for this study, it was approved by the Ethical Committee at the University of Twente (190342). After that, participants were sought by making use of convenience sampling. In April 2019, a post asking for volunteering participants was posted in the Facebook group "Tiny House Deutschland". Three people contacted the researcher thereafter via Facebook. They were then informed further via email about the procedure of the study, the interview and the "Letter from the Future". The fourth participant was contacted via email after viewing her videos about tiny houses on Youtube. After stating her interest to participate, she was also informed about the procedure. The information the participants received before accepting to participate included information about the goal of the study, the expected duration of interviews, the content of the interviews as well as the use of the "Letter from the Future" method.

Following that, appointments were made for the interviews, three of them were conducted via Skype, one was conducted face-to-face. Before the interviews, the participants were informed about the confidentiality, recording and nature of the study based on the informed consent (Appendix B). The informed consent also briefed the participants about their right to opt out of participation at any point of time. Furthermore, it gave the researcher the permission to use the collected data for this study and store it for the duration of four months. Lastly, the document informed the participants about the possibility to contact the researcher for questions, remarks, or information about the study results. The researcher sent the informed consent forms via mail, in one case handed over the printed informed consent, and asked the

participants to sign them after reading and send them back. If questions about the study came up, they could be posed to the researcher.

Following that, the semi-structured interview was conducted. In all interviews, the same kind of information was sought, however the questions were adapted to the flow of the interview and to the content of what was already said. The interviews had an average duration of one hour. At the end of each interview, the participants were further informed about the "Letter from the Future" they had to write. Upcoming questions were answered and instructions were given about when the letters were due. Eventually, the participants were thanked for their contribution and asked to send back the letters to the researcher via email.

Data Analysis

Before the analysis, the interviews were transcribed and translated from German to English. When the "Letters from the Future" were received, they were translated to English as well. All eight documents were then uploaded to Atlas.ti version 8.4.2., which is a program used for the coding of qualitative data. A draft coding scheme for the four interviews was deductively developed on the basis of the SDT's three categories (autonomy, competence and relatedness) as well as on existing literature about obstacles. Moreover, additional to the three categories of the SDT, a supplementary category called "other" was inductively created to encompass codes that did not fit in one of the other categories. When applying that coding scheme to the interviews, it was iteratively adapted to their content by creating sub-codes for each category. This adaptation was made using Atlas.ti in an inductive manner resulting in the final coding scheme (Appendix D), which comprised 27 codes in five categories. After the finalising of the coding scheme, it was also applied to the four "Letters from the Future". The results of the coding procedure were combined and presented in a written form. As the multiple qualitative methods design was applied to have complementing findings from the two methods, it was possible to link the separate results with each other.

Results

The coding of the interviews and "Letters from the Future" gave insight into the different motivations of tiny house builders. These are divided into four major categories - autonomy, competence and relatedness (based on the SDT) as well as other, containing supplementary motivations. Furthermore, the different obstacles that participants faced and perceived are summarised.

Autonomy

The first category "Autonomy" encompasses the subsequent motivations. Autonomy, as defined by the Cambridge Dictionary (n.d.), is "the ability to make your own decisions without being controlled by anyone else". Furthermore, codes in this category encompassed participants' expressions about their independence and freedom gained through building and living in a tiny house. The "Affordability" of tiny houses was a frequently mentioned motivation for building or buying one. Tiny houses have been described as being more affordable to build than renting or buying a house. One participant mentioned that she felt that she was "able to build my dream house for as little as 10 000 €." (P2). Another added that he "bought most products second hand, so in total the house was very affordable." (P3). Another factor that participants implied was the "Autonomy" gained through living in a tiny house, the independence they experience," I enjoy the solitude, the autonomy I have. It calms me to know that I am not dependent on others anymore" (P1). This is related to the participants' wish for "Having an Own Space" as they "just want to have my own space where no one is eligible to terminate my flat" (P2) instead of renting. Furthermore, participant 1 and 2 experienced the "Fixed Costs" as appealing, implying that a tiny house is more manageable in its monthly costs than a flat. Both stated that these costs make it easier to plan financially, as they are freelancers. Participant 1 added that those fixed costs "take a burden off" him.

All four participants declared that "Flexibility" attracts them, meaning that they can change and adapt their living situation when needed. Participant 1 highlighted that he liked the idea of being "quite flexible, if I do not want to stay here, I could just have my house moved to a different location. No one can force me to stay anywhere, not my job, not my house". Also, participants mentioned that they feel a "Relief", as they can be more autonomous and do not have the same stressors as they had before. Participant 4 stated that "it relieves me to know that I can enjoy other things and not having to worry about paying rent and having a well paid job". Participant 3 added that he "felt pressured into marrying and buying a house, but I realised it is not what I wanted.". Related to that is the feeling of "Working for Rent Only" that some participants expressed. This code included statements about the perceived obligation to work in order to pay rent instead of working in order to enjoy life. This feeling resulted for participant 2 in "not being able to enjoy my flat. I was spending so much time at work, that paying rent was almost for nothing because I did not spend time at home". This perceived drawback of renting influenced three participants in their decision to move into a tiny house. Resulting from that is that those three participants stressed their wish for "More Free Time", meaning that they want

to have more time as well as money for other activities and things in life. "I want to enjoy other things than just work, maybe travel or just have some more days off than just the weekend" (P2).

These needs were to be fulfilled by the tiny house building. Moreover, "Fewer Restrictions" for tiny houses because of being in a legal grey-zone were appealing to participants. Furthermore, because of the legal status, more freedom in design and building techniques were granted. "I had fewer restriction than when building a static house, so I could adapt my tiny house to my wishes and needs" (P4). Participant 2 agreed and further specified that she "could afford much more high-quality materials due to the smaller space and fewer materials needed", resulting in "More Money for Renovation". "More Money for Renovation" entailed having more money for the building and design of the tiny house despite limited money. All four participants mentioned that they aimed to achieve their goal of having "Peace of Mind". This means that they wanted to lead a more peaceful, simple life by "reducing unnecessary belongings and space." (P1) and by "concentrating on what is essential in life" (P4). Participant 3 added that his tiny house "is a refuge, there is a small pond in front of my house and it is all just peace and quiet.". All codes presented refer to autonomy because what participants said was linked to gaining back control over their life and having the freedom to make their own decisions without concerning with other's opinions.

As can be seen in Figure 1, differences between the young and the older participants become clear when considering "Autonomy". Whereas for the younger participants flexibility and the resulting freedom is appealing, the older participants see their gained autonomy rather as giving themselves time and a certain peace of mind.

"Something else I really	"I always knew that
like about tiny houses is	eventually I would find
that I am free. I mean, I	something suitable and
can go wherever I want. If	feel at home. I also always
I want to try something	had that dream in mind,
else, other than living in a	and was just looking
tiny house, I can do that	forward to having my
too" - P2	small, cosy space. I
	wanted to start something

				new and that's what I was aiming at." - P4
The young participants find the flexibility -		woman		The older participants take autonomy to another
possibility to move with	young		old	level, having peace of
the tiny house - attractive.		man		mind, enjoying free time for themselves.
"I am quite flexible, if I do not want to stay here at this camping site, I could just have it moved to a different location or even a totally different part of Germany." - P1				"I have so much more free time and I enjoy every minute of it. There is no more "leisure stress", no more pressure to work - I am my own boss and that is great." - P3

Figure 1. Exemplary Utterances Related to Autonomy

Competence

The second category "Competence" comprises five codes. Competence is defined as "the ability to do something well" ("Competence", n.d.). Moreover, this category incorporated expressions by the participants related to their abilities to build a house as well as to positive experiences they encountered during the building process. All codes in this category were labelled as treating competence, because they refer to what participants described as being able to do something well, which is in line with competence's definition. The first one is "Design Input" which means the opportunity to influence the design of the tiny house and adapting it to the builder's wishes and needs. The two female participants described the building phase as aiming "to build it my style" (P2) and "building it cosy, I want to feel at home and welcome" (P4). Related to that is the wish to "Express Oneself" in the building phase. This means that participants wish to express their personalities and preferences in the design of the house, which is not always possible in static houses. "I want to make it the most beautiful home for myself, just the perfect place for me to stay", implying the need for individualisation and expression. A further motivation is the "Do It Yourself" factor of tiny house building. That describes the

opportunity to build the house oneself instead of hiring a company. All participants mentioned that they were attracted to that idea; nevertheless, participant 4 did hire a company in the end.

Linked to the "Do It Yourself" motivation are "Personal Growth" and "Self-Reliance". "Personal Growth" means a personal growth due to trying out things and feeling accomplished when managing them. Furthermore, "Personal Growth" entails that participants become more able to cope with building challenges. It was frequently mentioned by all participants, as they acknowledged that they were hesitant towards some tasks of building in the beginning, but eventually managed to complete them. This led to personal growth and problem management. Participant 1 explained that he "enjoyed all the things I could realise, all the things I learned and managed.". "Self-Reliance" is defined as finding out what one is actually able to do and what is achievable. "Self-Reliance" is thus closely linked to personal growth. "I definitely got more self-reliant throughout the building process. I found out what I can do and that I can rely on my abilities, which is what I wanted to achieve." (P3).

Figure 2 visualises differences between the four participants in relation to "Competence". The two women highlighted that influencing the design of the tiny house and doing it in a suitable way for themselves were motivational factors. The two men rather put emphasis on the physical building act and their growing ability and competence when it comes to constructing a tiny house.

"I built it myself. I did	Put emphas	sis on the infl	"All in all, it gave me	
everything on my own, I	have on the	design and	building of	freedom to express myself
feel like I have grown	the tiny ho	use.		and make it the most
together with it." -P2				beautiful home for myself.
				I love that I could have so
				much influence and
				realise so many ideas in
				the building process." -
				P4
		woman		
		woman		
	young old			
		man		

"I did all that for myself and only for myself. Whenever I felt like things were about to collapse around me, I thought about that - whatever I did well, I did well for myself, whatever went wrong was my own fault and I was the only one "suffering" from it but also the only one who could fix and improve it." - P1

Both men put emphasis on the fact that they got more self-reliant and enjoyed finding out what they were actually able to do by themselves.

"Do-it-yourself is a big factor, it's nice to put hands on it." - P3

Figure 2. Exemplary Utterances Related to Competence

Relatedness

The category "Relatedness" consists of five codes. As relatedness is defined as "the state of being related or connected" ("Relatedness, n.d.), codes referred to participant statements about feedback and support from their social environment. The first code is "Community for Information and Support", which was a motivation for only one of the participants, participant 4. "Community for Information and Support" means that participants actively seek a tiny house community in order to receive help. Participant 1 expressed that she wanted to have the possibility "to receive help and support from others when needed. I am growing older and might not be able to realise all that I want. Also it is nice to have younger people around to stay upto-date". Participant 4 fulfils this need by living in a tiny house village, nevertheless she added "I still want to lead my own life". Participant 1 added that, although he does "not need a community, I am more of an individualist", he appreciates "to receive news and information through the Facebook tiny house community", constituting a more digital sense of relatedness.

Contrary to that, the three remaining participants that do not live in a community (P1, P2, P3) expressed their dislike of living in a tiny house community, which is the following code "No Community". This code comprises all expressions about participants not having interest in being part of a community and consider themselves as individualists. Participant 1 mentioned

that he does "not feel belonging to a group, I do not need that. I like to make my own decisions. I do not want anybody to interfere with what I am doing". Furthermore, participant 3 said that he does "not like having people around all the time, I enjoy being on my own. Sometimes I just want to be alone and do nothing".

One further code described the existing support from the social environment, this code is labelled "Peer Interest and Support". It describes participants' enjoyment of support from family and friends. It also comprises expressions in which peer help is used. Participant 2 stated that "many people are really interested and find it cool what I am doing. I think it is mostly because tiny houses have become such a trend, they are interesting and prevalent in the media". Participant 1 said that his "girlfriend really liked the idea and helped. She was also the one who encouraged me to loan the money for my tiny house, I am grateful for that!".

However, despite the mentioned support from the social environment, a further code crystallised - "Lack of Parental Support". This code entails statements about parents not being in favour of the tiny house idea. The younger participants (P1 and P2) both mentioned that they had discussion with their parents about their plan and that they disapproved of the tiny house idea. Participant two mentioned that her "parents found it terrible! My mum cried when she first visited me, she was afraid that something would happen to me – a girl living alone in a caravan". Participant 1 added that his "parents were afraid of stigma and social downgrading. I mean, what kind of people live on a camp site...". It should be mentioned that this code belongs thematically in the category of "Relatedness", however acts not as a motivating but rather debilitating factor. The codes mentioned here are grouped in the category of relatedness as they represent participants' thoughts about being connected to others – which is the definition of relatedness. Furthermore, participants expressed their feelings about their environment's degree of support, which represented relatedness to the people in their lives.

Other

The category of "Other" consists of three codes that acted motivating on the participants but could not be assigned to the three aforementioned categories. The first one is labelled "Nature", which explains the wish to live closer to nature and more environmentally friendly. Participant 2 explained that she wanted "to live in a more ecological way to protect the environment. We already have such a big negative impact, paying attention to the environment when building is the least I can do". Participant 4 mentioned that she "always wanted to live on the countryside, close to nature" and that she fulfilled her dream with living in a tiny house. The second code

of this category is "Comfort of Living", which entails the felt advantages of living in a tiny house. All four participants mentioned their personal advantages, which were mainly the "cosiness" and the "cave-like feeling". The young woman elaborated that "it's like a cave, I feel snug, secure and comfortable". The last code is "Time pressure", which was motivating for both the young and the older man. Time pressure was mentioned in relation to having external pressure to move out of participants' old living space and into the tiny house. The younger man explained that he had "already terminated his flat" and thus had to finish the building of his tiny house. The older man explained that he needed to move into the tiny house due to time pressure caused by separation from his wife.

Figure 3 gives insight into statements falling into one of the three codes for the category "Other". Women mentioned the nature aspect more, whereas men mentioned the time pressure aspect more frequently.

"I like that it is like a	Both young	g and old	l wo	men	enjoy	"I always wanted to live
cave, I feel snug, secure	being close	e to natu	ıre,	wan	ted to	on the countryside, even
and comfortable. I sleep	achieve	that	a	nd	be	wanted to have my own
the best in my trailer." -	environme	ntally f	frien	dly	with	farm with animals, but I
P2	their tiny h	ouse.				realised that being alone
						was not good for me,
						especially when becoming
						older, being totally on my
						own was not my ideal
						vision anymore." - P4
		woma	ın			
	young			(old	
		man				
"I already terminated my	Both clearly mentioned their time			"The therapist said that		
flat, so I had to move out	pressure as a motivating factor,				we need a break from	
by the end of March. I	presenting	their tin	ny h	ouse	as a	each other, so I built the

managed it mos	stly	short-term solution that they came	house within a short time
because of that, it v	was	to appreciate.	and moved in." - P3
quite close." - P1			

Figure 3. Exemplary Utterances Related to Other

Obstacles

In addition to the motivations to build a tiny house, the participants were asked about obstacles they faced during the building phase. This was done to find out about what kind of obstacles were present and how they could be linked to the motivations. All participants except for participant 3 experienced "Bad Weather conditions" as a challenge. Participant 1 stated that "the weather was so bad, the ground was frozen and I could not continue working on my house. Also when I wanted to transport it to its final position, the ground was muddy and the wheels kept on being stuck, that was frustrating." Participant 2 mentioned that her first "winter in the tiny house was extremely cold, everything was frozen solid. In the summer, it was extremely hot, I had to remove a window and build in an AC to sleep." Participant 4 experienced delays because of bad weather conditions "I initially wanted to move in before Easter, but because of the storms and cold, my house could not be finished on time. That is really hard, I have been looking forward to moving in and now I have to continue being patient.."

Another challenge frequently mentioned were the "Legal Restrictions" for the tiny house. Participant 1 said that he "had trouble registering my house because of the district's requirements. I was lucky to find this camp site, otherwise I am not sure if I would have found a place to place the house." Participant 2 added that she could not register her house so she "decided to not do it. I feel like I do not harm anybody by living in my tiny house, I live on my own property and I do not see why I should ask anybody for permission." Participant 4 mentioned, that she "was looking for a suitable permanent parking position for such a long time, I was almost about to give up on it."

Participant 3 experienced "Negative Comments" from his environment as a challenge, "I live in a small village, people talk a lot around here. It was hard to know that there were rumours going around. Also, one of them reported me to authorities because I did not register my tiny house, I live on my brother's property..". An additional obstacle for him was the "drastic reduction of belongings. I owned so much when I was living in the big house before and could only bring so little to my tiny house.".

Conclusion and Discussion

This study was aimed at revealing the different motivations to start building a tiny house and to continue in face of obstacles. The tiny house movement is of growing relevance for housing solutions caused by living space shortage. Therefore, finding out about the different motivations underlying the decision to build a tiny house is of interest. Based on the SDT, four interviews and participants' "Letters from the Future" were analysed in order to investigate that question. It appears that autonomy was mentioned the most and thus represents the most relevant motivator for the participants. The autonomy in this study was defined using several subcategories. However, the relation between having to work less, not having to pay high rents and achieving more free time appears to be most relevant to the participants, as all of them agreed on that chain of reasoning.

Further findings of this study are that competence played a role for participants of this study, however it appears to be less relevant than the autonomy factor. Expressions related to competence have not been mentioned as much as statements related to autonomy. Nevertheless, all participants highlighted that they enjoyed having an influence on the tiny house building, either by being able to influence the design or by actually working on the tiny house. Moreover, participants stated that they enjoyed growing with the building of the house, as they learned how to cope with building challenges.

Relatedness seems to be of varying relevance to tiny house builders, as half of the expressions about relatedness were positive, the other negative. Especially the belonging to a community was controversial, two participants were members, the others not. Moreover, the two that were not part of a community clearly stated their aversion towards living close to others and being dependent. On the other hand, the ones that do belong to a community value the help and support they receive. Support from the environment also appears relevant as the younger participants experienced negative comments from their parents, which was debilitating for them. The other participants did not mention that, however that is most likely due to their older age and less dependence on their parents. Further findings of this study are that the impact of environmental concern, the comfort of living in a tiny house and time pressure to move in represent motivations for participants of this study.

Unexpected results of this research were produced by the proportion of two female and two male participants in two distinctive age groups. Even though, the sample size is too small to draw conclusions, these incidental results are still of interest especially for future studies. The younger participants highlighted that flexibility appeals to them, whereas the older

ones mentioned the inner peace they experience by downsizing. Furthermore, women focused more on the positive environmental impact of tiny house living than men.

Results about the influence of autonomy agree with findings by Mangold and Zschau (2019) who found that the financial aspect of tiny house living is appealing to builders, because of less work and more free time. Therefore, those motivations found in the U.S. were replicated in Germany and thus appear to be relevant in cross-cultural contexts. Furthermore, findings by Boeckermann et al. (2018) stated that tiny house builders seek housing solutions with lower or no rents. This study's participants also mentioned high rents as a motivation to choose a different way of life. Again, this implies correlation between motivations to build a tiny house in the U.S. and in Germany. The age difference concerning flexibility is in line with findings by Weiss (2001) who stated that flexibility decreases in the course of life and is at its low between ages 54 and 56.

Findings about competence in this study coincide with findings by Mutter (2013) who stated that the do-it-yourself factor appeals to many builders. Thus, an additional parallel between the U.S. and Germany can be drawn, as the influence on the building constitutes a relevant motivation to tiny house builders in both cultures. However, existing literature does not tackle the personal growth of tiny house builders that was found in this research. Therefore, tiny house builders in Germany appear to enjoy and value the building phase more than builders in the U.S., which could be due to the lack of financial pressure that tiny house builders of this study reported.

Findings about relatedness are not completely in line with existing literature. Mutter (2013) found that tiny house communities are appealing to builders to give them support and structure. Half of the participants shares that motivation, the other half does not agree at all. This could imply that half of the participants actively aimed at avoiding community due to their personal preferences and their lifestyle. The two participants highlighted that they identify as individualists and do not enjoy having people around them all the time. Therefore, it can be supposed that they would not enjoy being part of a community in a different living situation (other than a tiny house) either.

Mutter (2013) also found that protection of the environment is a motivation. This was also found in this research, as "Nature" appeared as a motivating factor for the two female participants. This finding coincides with Stern and Dietz's (1994) result that women perceive environmental issues as more pressuring than men do.

Existing literature does not identify the comfort of living in a tiny house as motivations to build a tiny house. Thus, this study is first to reveal these motivations. The comfort of living

could be due to the fact that participants wanted to move into a tiny house, were not pressured by external factors like U.S. participants.

Most frequent obstacles revealed in this study are legislation, weather conditions and negative comments. Mutter (2013) also found that negative comments from the environment impede motivation, which conforms with this research's findings. Ford and Gomez-Lanier (2017) revealed that the legal grey area status of tiny houses is a challenge in the U.S., which was replicated by statements of German participants. That indicates that the legislation for tiny houses in the U.S. as well as in Germany presents a challenge. The two participants that did not mention this as a challenge live on their own property and thus do not require to follow the laws concerning registration. Bad weather conditions have not been revealed as a challenge in existing literature. This could be due to worse weather conditions in Germany than in the U.S., as especially winters can be hard.

Based on these results, the research question can be answered that aspects increasing autonomy constitute tiny house builders' motivation the most. Further aspects are the do-it-yourself factor and - for people with corresponding personalities – tiny house communities. Moreover, challenges – especially negative comments – are avoided and coped with by receiving support and help from the social environment. Finally, it appears that tiny house builders see their goal of living in a tiny house to lead an easier, happier and more independent life as motivation to cope with challenges.

Strengths and Limitations

One strength of this study is the multiple qualitative methods design. The design combining semi-structured interviews with the "Letters from the Future" led to triangulation of results. Through the triangulation, the validity of information received is increased, as the data extracted from both methods conformed. Creswell and Miller (2000) found that triangulation helps identifying common themes with different results and thus increases validity. Furthermore, validity appears to be high because the interview questions were open-ended and not leading (Newton, 2010). However, Newton (2010) also found that the face-to-face nature of interviews increases the risk of leading the participant in a certain direction by conscious or unconscious use of (body) language.

Nevertheless, the validity of semi-structured interviews should be perceived as a strength, as should the reliability. All interviewees were asked the same questions, ensuring reliability of the interview scheme and resulting data. Furthermore, probing questions were

asked to achieve better understanding of the interviewees' opinions. Hutchinson and Skodol-Wilson (1992) stated that probing questions increase reliability by clarifying issues with the participant as well as by resolving inconsistencies.

Overall, semi-structured interviews are considered to produce in-depth information (Newton, 2010). The "Letter from the Future" method appears to show a high validity, as participants could write about anything without control or restrictions, thus no pressure or leading in a certain direction was present. However, that results in a decreased reliability. Especially because instructions for writing the "Letter from the Future" in this research were short, the resulting letters showed a great variance in their content and scope.

Contrary to what was expected, the letters written by the participants did not give additional insight into their motivations. This could have two reasons. Firstly, a challenge of the "Letter from the Future" method was that participants did not see a reason to write them. Although they were informed about the necessity of writing them before their participation, they appeared to avoid writing. Two participants did not send their letters on time, so they were contacted whether they still wanted to participate in the study and again informed about the voluntariness of participation. They declared that they would still write the letters and asked for some more time, so eventually all letters were received, however with a delay. Moreover, the content of the letters posed a problem, as participants frequently asked about what they should write about. After having received the letters, it could be seen that the participants mentioned the same motivations as in the interviews.

A second reason why the method did not give further insight was that the participants had already elaborated on their motivations during the extensive interviews and seemed to not be able to find additional thoughts on tiny house building. On the one hand, nudging might have taken place, as the participants were influenced by what the interview was about and thus could not think of other information to add in the letters. On the other hand, Sools and Mooren's (2012) method is aimed at identifying unconscious motivations and goals. The method could therefore have been misapplied in this setting, as the participants already showed profound insight into their motivations during the interviews. Moreover, as tiny houses developed to become a trend, the participants frequently talk about their decision which supports their awareness of motivations and goals they pursue.

Due to these reasons, it would be advisable to rethink the order of methods as to avoid the nudging from the interviews and the participants' repugnance towards writing the letters. Thus, first asking participants to write the "Letter from the Future" and then conducting the interview would have prevented these limitations. Furthermore, in order to counteract confusion

about the letter's content, clearer instructions could be given to the participants, such as a creating a specific situation in which they should imagine themselves in.

Implications

This research gave insight into the practical applicability of Deci and Ryan's (2000) Self-Determination Theory in the context of tiny house building. It could be shown that the autonomy aspect of the SDT applies well to the tiny house builders' motivations. Furthermore, competence was shown to also fit into that context. Nevertheless, as already discussed, relatedness did not represent a clearly relevant motivation for tiny house builders. Therefore, the SDT cannot fully be applied to the context of tiny houses.

Furthermore, obstacles that participants experienced were discovered. These findings could be helpful for people interested in tiny houses in order to prepare them for what might come, how to prevent or cope with challenges. Obstacles, such as problems with registering the tiny house or with finding a suitable position, could be avoided by changing legislation for tiny houses. Furthermore, knowing about the impeded life in a tiny house during winter and bad weather conditions can help future owners to prepare themselves for those situations in a practical as well as mental way. The findings about tiny house builders' motivations are relevant to municipalities or governments. As tiny houses are perceived as suitable solutions for housing shortage and other societal problems (Lewis, 2019), supporting tiny house builders in their building and initial decision making might be an interesting way of counteracting and solving those problems.

Conducting this research helped to fill the gap of knowledge identified in the introduction. That gap of knowledge constitutes itself of the lack of psychological theory supporting motivations and the differences between the United States and Germany. Furthermore, this study is the first to investigate tiny house builders' motivations in combination with challenges they face by making use of two complementary qualitative methods. This study represents the first one with German participants, thus giving insight into motivations and challenges related to tiny houses in Germany. Moreover, the triangulation of data as well as basing this research on findings of other studies results in highly relevant data about tiny houses.

Future Research

In future research, findings of this study should be validated. The results of what kind of motivations and obstacles present themselves to tiny house builders in Germany should be further studied, especially with regard to age and gender differences. As they were unexpectedly revealed in this study, there was no initial focus on them. However, those differences could be of additional interest, as they give more specified insight into tiny house builders.

Another suggestion for prospective studies is to adapt the SDT that was used to analyse motivations in this study. As was revealed, the SDT does cover tiny house builders' motivations, however not all aspects are of equal relevance. Thus, expanding the SDT as to cover additional motivations or applying a different motivational theory to this context could give deeper insights.

In conclusion, more research should be done on motivations and challenges of tiny house builders in order to make use of its findings to handle societal problems of housing shortage and homelessness.

References

- Autonomy (n.d.). Retrieved from https://dictionary.cambridge.org/dictionary/english/autonomy on June 11, 2019.
- 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. doi: 10.1007/s10901-018-9616-3
- Competence (n.d.). Retrieved from https://dictionary.cambridge.org/dictionary/english/competence on June 11, 2019.
- Creswell, J. W. & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory into Practice*, 39(3), 124-130. doi: https://doi.org/10.1207/s15430421tip3903 2
- Deci, E. I., & Ryan, M. R. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behaviour. *Psychological Inquiry*, 11(4), 227-268. doi: 10.1207/S15327965PLI1104 01
- Ford, J., & Gomez-Lanier, L. (2017). Are Tiny Homes Here to Stay? A Review of Literature on the Tiny House Movement. *Family and Consumer Sciences Research Journal*, 45(4), 394-405. doi: 10.1111/fcsr.12205
- Hutchinson, S. & Skodol-Wilson, H. (1992). Validity threats in scheduled semistructured research interviews. *Nursing Research*, *41*(2), 117-119.
- Lewis, P. (2017). Tiny houses: Salvation for the homeless or a dead end? Retrieved from https://www.theguardian.com/us-news/2017/mar/23/tiny-houses-solution-homelessness-seattle on March 7, 2019.
- Mangold, S., & Zschau, T. (2019). In Search of the "Good Life": The Appeal of the Tiny House Lifestyle in the USA. *Social Sciences*, 8(26). doi: 10.3390/socsci8010026
- Mingoya, C. (2015). Building Together. Tiny house villages for the homeless: A comparative case study. Massachusetts Institute for Technology.

 https://dusp.mit.edu/sites/dusp.mit.edu/files/attachments/news/mingoya_2015.pdf.

 Accessed on March 4, 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=4196241&fileOId=4196242. Accessed February 28, 2019.
- Newton, N (2010). The use of semi-structured interviews in qualitative research: strengths and weaknesses. Retrieved from https://www.academia.edu/1561689/The_use_of_semi-structured_interviews_in_qualitative_research_strengths_and_weaknesses on June 12, 2019.
- Pekkonen, M., & Haverinen-Shaughnessy, U. (2015). Housing satisfaction in Finland with regard to area, dwelling type and tenure status. *Central European Journal of Public Health*, 23(4), 314-320.
- Relatedness (n.d.). Retrieved from https://www.lexico.com/en/definition/relatedness on June 11, 2019.
- Sools, A., & Mooren, J.H. (2012). Towards Narrative Futuring in Psychology: Becoming Resilient by

 Imagining the Future. *Graduate Journal of Social Sciences*, 9(2). Retrieved from http://www.gjss.org/sites/default/files/issues/chapters/papers/Journal-09-02--10-Sools-Mooren.pdf
- Statista (2019). Average rent price of residential property in Amsterdam, The Hague,

 Rotterdam and Utrecht (the Netherlands) from 1st quarter 2010 to 4th quarter 2018

 (in euros per square meter). Retrieved from https://www.statista.com/statistics/612227/average-rent-in-four-largest-cities-in-the-netherlands-by-city/ on March 7, 2019.
- Statista (2019). *Mietpreisindex für Deutschland bis 2017*. Retrieved from https://de.statista.com/statistik/daten/studie/70132/umfrage/mietindex-fuer-deutschland-1995-bis-2007/ on March 7, 2019.
- Stern, P. C. & Dietz, T. (1994). The Value Basis of Environmental Concern. *Journal of Social Issues*, 50(3), 65-84.
- Vogel, R. (2016). *Proceedings of the New York State Economics Association*.

 Paper presented at 69th Annual Meeting. Farmingdale, New York. Retrieved from https://nyseconomicsassociation.org/content/proceedings/2016/2016%20NYSEA%20

 Proceedings%20Vol%209A.pdf#page=92 on March 7, 2019.
- Weiss, C. R. (2001). On flexibility. *Journal of Economic Behaviour and Organization*, 46(3), 347-356. doi: https://doi.org/10.1016/S0167-2681(01)00183-4

Appendix A - Interview Scheme

Introduction

First of all, thank you for having me! Before we start the interview, I would like to introduce myself and the study you are participating in. I am a Psychology student at the University of Twente and I am in the process of writing my Bachelor thesis about motivations for tiny-house living. In the next approximately 45 minutes, we will have a conversation about your building process. Thus, I will ask you some questions and you are welcome to elaborate your answers as much as suits you. After the interview, I would like to ask you to write a Letter from the Future, which is a method to put oneself in a future position. Therefore, you will imagine that you have been living in your tiny house for five years and write a letter in which you describe your feelings, thoughts, challenges and in general how you get along.

Finally, I want to inform you that I will try to anonymise your information as good as possible by changing your name and other personal information. Moreover, if you do not want to answer any questions, please do not hesitate to say so, in that case we can skip the question. Do you have any more questions?

General Questions

When did you first hear about tiny houses?

When did you decide to start building a tiny house?

When did you start building your tiny house?

How did you decide to build a tiny house? What appealed to you? Which considerations did you have?

How did you built/ do you build your tiny house?

With how many persons do you live in your tiny house? Do you have pets?

Motivational Questions

Can you describe what about tiny houses appeals to you?

Why did you decide to build a tiny house?

Can you describe your motivations?

Which goal(s) do you want to achieve with building a tiny house?

Did the do-it-yourself factor contribute to the decision? (also ask about influence of being able to physically build something)

Did the reduction of financial obligations influence your decision? (also ask about having to

work less and gaining more free time)

Did the opportunity of being part of a tiny house community appeal to you?

What were reactions from your environment?

Challenges

Did you face challenges in the building process?

What kind of problems occured? (Think about permissions, building difficulties, finances,

negative comments from the social environment)

What did you do to manage or solve them?

Letter from the Future

Please choose a point of time in five years. Imagine your life in the tiny house, what would it

look like? Write yourself a letter telling yourself about the developments, thoughts and feelings.

In the letter, please write about your envisioned thoughts and feelings at that point of time -

what does your life in a tiny house look like? What kind of challenges did you face in the

meantime? What kind of challenges are you facing at that time? How do you cope with them,

what supports you? What kind of motivations do you have?

You can write the letter as extensive as you like, the more information the better. Once you feel

like you have finished, please send me the letter.

Ending

Thank you very much for your time and participation! If you have any further questions or

remarks, you can contact me via email.

Appendix B - Informed Consent

Investigator: Pauline Sophie Böllert

Contact Person: Pauline Sophie Böllert (p.s.bollert@student.utwente.nl, +4915785420166)

Dear participant,

I invite you to participate in an interview study. If you agree, you will be asked questions

regarding your situation of building and, if applicable, living in a tiny house. The questions will

concern your decision making process, the problems you've faced, your goals and motivations.

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The information you disclose by answering the questions will serve as data for my bachelor thesis at the University of Twente.

Additionally, I will ask you to write "A Letter from the Future". You will have to imagine yourself and your living situation in five years, supposing that everything went the way you planned it. Please write a letter to your present self. In your letter, I would like you to describe what your living situation looks like, what you feel and think about your tiny house, challenges that occur at that time or have occured in the five years mean time and how you coped with them. The information that I will extract from the letter will be additional data for my Bachelor thesis.

Both methods are aiming at examining intrinsic and extrinsic motivators for building a tiny house.

It is not expected 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 any reason. Your data will be handled confidentially. Your personal information will never be published in a way that you can be recognised. Be sure that you have understood every instruction concerning the study. If you have any questions about the study, you can contact me.

I provide you with a copy of this document for your records. Also, I will keep a copy for the study records. By agreeing to participate in this study, you allow me to keep audio records of the interview. The records will only be kept until the end of the bachelor thesis, will thus be deleted after four months.

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 researcher. My questions have been answered to my satisfaction. I agree voluntarily to participate in this study. I reserve the right to withdraw from this consent without providing any reasons and I am aware that I may withdraw from the study 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 anonymous. My personal data will not be disclosed to third parties without my permission. If I request further information about the research, now or in the future, I may contact the person mentioned."

.....

Date, Name Participant, 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 C - Informed Consent German

Untersucherin: Pauline Sophie Böllert

Kontaktperson: Pauline Sophie Böllert (p.s.bollert@student.utwente.nl, 004915785420166)

Liebe(r) Teilnehmer(in),

Ich lade Sie ein, an einer Interview Studie teilzunehmen. Wenn Sie einverstanden sind, werde ich Fragen über den Bauprozess des Tiny Houses und, wenn zutreffend, das Leben darin, stellen. Die Fragen werden Ihren Entscheidungsprozess, eventuelle Hindernisse, Ihre Ziele und Motivationen betreffen. Die Informationen, die Sie durch das Beantworten dieser Fragen mit mir teilen, dienen als Daten für meine Bachelorarbeit an der University of Twente in Enschede, Niederlande.

Zukunft", zu schreiben. Dabei stellen Sie sich vor, wie Ihr Leben in fünf Jahren aussieht, vorausgesetzt alles ist so gelaufen, wie geplant. Ich möchte Sie bitten, in dem Brief zu beschreiben wie ihre Lebenssituation aussieht, wie Sie sich fühlen, was Sie über Ihr Tiny House denken, welche Hürden und Probleme während der vergangenen fünf Jahre aufgetreten sind

und wie Sie damit umgegangen sind. Die Informationen, die ich aus diesem Brief gewinne,

werden zusätzlich für meine Bachelorarbeit genutzt werden. Der Brief sollte zwischen zwei und

vier Seiten lang sein.

Beide Methoden, das Interview und der "Brief aus der Zukunft", dienen dazu, die intrinsische

und extrinsische Motivation für den Bau eines Tiny Houses näher zu beschreiben.

Ihnen werden keine Unannehmlichkeiten durch die Teilnahme dieser Studie entstehen. Ihre

Teilnahme ist freiwillig, Sie können jederzeit ohne Grund die Teilnahme beenden. Ihre Daten

werden vertraulich behandelt. Ihre persönlichen Informationen werden nie in einer Weise

veröffentlicht, dass Sie damit in Verbindung gebracht werden können. Stellen Sie sicher, dass

Sie alle Bedingungen der Studie verstanden haben. Sollten Sie noch Fragen haben, kontaktieren

Sie mich bitte.

Ich gebe Ihnen eine Kopie dieses Dokuments für Ihre Unterlagen. Eine weitere Kopie behalte

ich für die Aufzeichnungen der Studie. Durch Ihre Einwilligung zu diesem Interview, erlauben

Sie mir Audioaufnahmen des Interviews zu behalten. Die Aufnahmen werden nur bis zum Ende

der Bachelorarbeit gespeichert, das heißt sie werden nach vier Monaten gelöscht.

Ihre Teilnahme an dieser Studie wird den Vorteil haben, bestehende Forschungen zum Thema

"intrinsische und extrinsische Motivation für den Bau eines Tiny Houses" durch neue

Ergebnisse zu verbessern. Die Teilnahme wird keine Nachteile für Sie haben.

"Hiermit erkläre ich, dass ich in einer verständlichen Weise über die Natur und Methoden dieser

Forschung durch den Forscher informiert wurde. Meine Fragen wurden zu meiner Zufriedenheit

beantwortet. Ich nehme freiwillig an dieser Studie teil. Ich behalte mir das Recht vor, meine

Einwilligung zurückzuziehen, zu jeder Zeit und ohne mich erklären zu müssen. Falls die

Ergebnisse der Studie veröffentlicht werden, werden meine Aussagen anonymisiert. Meine

persönlichen Daten werden nicht ohne meine Erlaubnis an Dritte weitergegeben. Falls ich, jetzt

oder in Zukunft, weitere Informationen zu dieser Studie haben möchte, kontaktiere ich die

genannte Person."

......

Datum, Name Teilnehmer, Unterschrift

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"Ich,	der Forscher,	habe E	rklärungen	zu meiner	Studie	abgegeben.	Ich	erkläre	mich	bereit,	in
Zuku	nft aufkomme	ende Fra	gen über di	ese Studie	bestmö	iglich zu bea	antw	orten."			

.....

Datum, Name Forscher, Unterschrift

Appendix D - Coding Scheme

Main Category	Code	Explanation	Example
Autonomy	Affordability	Living in a tiny house is more affordable than renting a flat	"I was able to build my dream house for as little as 10000€."
Autonomy	Autonomy	Being independent	"I enjoy the solitude, the autonomy I have"
Autonomy	Having Own Space	Owning living space	"I love having my own space, it gives me the feeling of having an overview of my life."
Autonomy	Fixed Costs	It is easier to plan ahead, especially when not earning a lot of money, there is only a small sum to be paid each month	"I have fixed costs, which takes a burden off of me"
Autonomy	Flexibility	Notion of being able to change living space whenever wanted or needed	"I am quite flexible, if I do not want to stay here, I could just have my house moved to a different

			location."
Autonomy	Relief	Being more autonomous brings relief from everyday stress	"It relieves me to enjoy other things and not having to worry about paying rent"
Autonomy	Working for Rent Only	Feeling of working for rent and not for own enjoyment	"I was just working for the rent and couldn't even enjoy my flat."
Autonomy	More Free Time	Having time and money for other things to enjoy in life	"I want to enjoy other things than work only."
Autonomy	Fewer Restrictions	Having more freedom for building the TH	"I had less restrictions than I would have when building a static house."
Autonomy	More Money for Renovation	Having more freedom in spending money for the tiny house, depsite limited money	"I could afford much more high-quality materials."
Autonomy	Peace of Mind	Aiming for peace in life	"Reducing unnecessary belongings and space gives peace."
Competence	Design Input	Influencing the design of the tiny house	"Build it cosy and "my style"."
Competence	Express Oneself	Possibility of creating a personal and adapted living space	"I wanted to express myself and make it the most beautiful home for myself."
Competence	Do It Yourself	Being able to build the house oneself	"I built it myself. I did everything on my own."
Competence	Growing with Tasks	Personal growth due to trying new things + coping with	"I enjoyed all the things I could realise, all the things

		challenges	I learnt and managed."
Competence	Self-Reliance	Finding out what one is able to do, what is achievable	"I got more self- reliant and efficient."
Relatedness	Community for Information + Support	Using TH community for sharing information + news	"Leading my own life and still being able to receive help and support from others when needed, that was what I wanted."
Relatedness	No Community (negative)	No interest in being part of a community, being individualist	"I never wanted to be part of one of those communities."
Relatedness	Peer Interest + Support	Enjoy support from others that are in favour of tiny living	"Many people are really interested and find it cool what I am doing."
Relatedness	Lack of Parent Support (negative)	Parents not in favour of TH idea	"My parents found it terrible, my mum cried."
Other	Nature	Living closer to nature and environment	"I want to live in a more ecological way"
Other	Comfort of Living	Cosiness of living in a small space	"It's like a cave, I feel snug, secure and comfortable"
Other	Time Pressure	Urge to move in tiny house due to time pressure	"I already terminated my flat"
Obstacle	Bad Weather	Bad weather conditions complicating building or living in a tiny house	"Winter in tiny house was extremely cold, everything was frozen solid."
Obstacle	Downsizing	Reducing personal belongings	"I owned so much when I was living in the big house before and could only bring so little to my tiny

			house."
Obstacle	Negative Comments	Negatie comments by the social environment about the tiny house	"I live in a small village, people talk a lot around here."
Obstacle	Legal Restrictions	Inscrutable restrictions about where parking is allowed	"I had trouble registering my house because of my district's requirements."