UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

When people unite,

in the environmental consumption fight

A netnographic study of the meaning creations within sustainable online communities

Master Degree Project in Marketing and Consumption

Graduate School

Authors: Cecilia Bodén-Malmsten & Marta Kisch

Supervisor: Cecilia Solér

When people unite, in the environmental consumption fight
A netnographic study of the meaning creations within sustainable online communities
Cecilia Bodén-Malmsten & Marta Kisch

Abstract
This study explores three sustainable communities on Facebook and the social interactions between community members, in order to enhance an in-depth understanding of the meaning creations within these communities. A unique analytical model is created by merging the different studies that have been performed within the field of sustainable communities. The model acts as a theoretical framework and is used as an analytical tool, in order to offer a coherent analysis of the different themes of meanings that are detected. This research draws from a netnographic approach that was used in order to discern the meanings that are created within the communities and the connections between these. The findings mainly concern the co-existing of the meanings within the community and the connections between these. These findings both contributes to the theoretical field as connections between meaning have not been examined in a sustainable community context before. The practical implication is realizing the importance of these communities as a significant part in the sustainable consumer movement.

Keywords: sustainable community, sustainable consumption, meaning creation, online community, Facebook, netnography

Introduction
The world stands on the verge of a large and urgent challenge regarding environmental degradation and climate change. This seems to be on the agenda everywhere, from media to politics to discussions around the dinner table. This points towards that actions need to be taken from all entities of the society, including the consumers, in order to aid the climate preservation. Consumers and environmental behaviour is not a new concept within the research field. For instance, extensive research has been done on individuals and their ethical consumption (e.g. Carrington, Neville, & Whitwell, 2010; Antonetti & Maklan, 2014). In pace with the increasing concerns for the environment, there also seems to be an increased interest for consumers to participate in communities that revolves around sustainable interests and consumption (Papaoikonomou, Valverde and Ryan, 2012; Gummerus, Liljander and Sihlman, 2017). Therefore, sustainable communities seem to fill a void, as consumers cannot find enough sustainable contentment, such as inspiration, motivation and solutions, elsewhere in the society. A problem arises where not enough attention has been paid to the power of these communities and what societal role they can play in the fight for sustainability. As consumers make up a great part of the actors that are affecting the environment this further highlights why attention needs to be paid to consumers in various contexts. However, research on individual's ethical consumption in a more collective context is still narrow and as collective efforts can be seen to be more efficient, sustainability should be studied from a community perspective (Papaoikonomou, Valverde and Ryan, 2012).

This study will refer to sustainable communities as people gathered around shared sustainable consumption interest which is in line with Kozinets (1999) discussion regarding communities. The author states that communities and online

communities are gatherings for those of similar interest revolved around consumption (Ibid.). Furthermore, previous studies within the research field have often referred to ethical consumption and communities while this study instead focuses on sustainability. In this study, the term sustainability will be in focus due to the fact that the authors of this paper argue that sustainability also encompasses ethical consumption.

According to Kozinets (2015), the nature of communities has changed due to the rapid development of digitalization and online communities can today be seen as more common than physical ones. Online communities offer larger possibilities for communication than offline communities can provide, due to a greater reach (Etzioni & Etzioni, 1999). This due to the fact that online communities are not bound to a physical space which provides convenient access and enables easier communication (Närvänen, Kartastenpää & Kuusela, 2013). As digitalization have evolved, social media has become an evident part of our everyday lives where consumers engage in different networking platforms. Facebook is one of these online platforms where consumers build communities to share ideas and concerns about ethical matters (Gummerus, Liljander & Sihlman, 2017). These online communities are well suited to connect consumers in the society with the same perceived responsibility towards environmental betterment. This goes in line with the discussion of Chatzidakis and Mitussis (2007) who emphasise the importance of combining research of ethical consumption and the internet.

As discussed, online communities have created a way for people to connect and to unite around certain actions (Kozinets, 1999). This unification enables collective actions which according to Papaoikonomou, Valverde and Ryan (2012) can be seen as more efficient than individual achievements. Collective action could be argued to be when people come together to make an impact towards united goals or gather around shared interests. Which is similar to collectivism where individuals are seen to come together and work for the benefit of the collective group. This is studied by Cho, Thyroff, Rapert, Park and Lee (2013) who pose that the consumers perception of their possible environmental achievements is greater when in a collective. In other words, one's individual effect grows greater through being in a collective; there is strength in numbers. These findings seem to go in line with the research of Signori and Forno (2016) who argue that when people come together, in this case a solidarity purchase group, which motivates ethical consumption. In sum, the studies confirm that collectivism motivates individuals to come together and try to make a difference (Ibid.; Cho et al., 2013).

The power of collectivism and consumption collectives, can be argued to have a positive effect on sustainable actions to preserve the environment. As previously discussed, research has been done to investigate the individual consumer and its sustainable actions (e.g. Carrington, Neville, & Whitwell, 2010; Antonetti & Maklan, 2014). However, studies on collective consumption in sustainable matters has not been as widely developed (Papaoikonomou, Valverde & Ryan, 2012). The studies that have been done, have focused on more practical and descriptive perspectives in the context of ethical communities (Ibid.). As of late, a new stream of research is taking form in order to add more depth to the research field by studying meaning creation within ethical communities (Papaoikonomou, Valverde & Ryan, 2012; DeVincenzo and Scammon, 2015). Due to the intriguing complexity of the meanings within the communities, this will be the foci of this study. The meanings are seen to be created through interactions between community participants and also through the expressions of these participant's experience.

The paper at hand began with a brief overview of the merging streams of

sustainability and online communities as well as the power of collective actions. This is then followed by an overview of the concept of communities, and the research stream of sustainable communities, in order to emphasise the gap within the research field. The section then emanates into the aim and research question. This is pursued by a theoretical framework that is centred around the investigated meanings; enabling of emotions, reinforcement, information sharing, control, effectiveness and influencing. In order to provide a sufficient research foundation and to answer the research question, the authors formed an analytical model. This analytical model has its base in previous research but is combined in a unique way in order to best shed light on the phenomenon at hand. The findings from the gathered data are then presented and analysed from the formed analytical model. Lastly, a conclusion is provided where relevant contributions are discussed.

Communities

Thomas, Price & Schau (2013) define consumption community as "consumers who share a commitment to a product class, brand, activity, or consumption ideology", (p. 1012). A consumption community can also be described to be developed by a group of people that share a certain consumption interest (Kozinets, 1999). To date, most of the research within the field of communities has been performed on brand communities, consumer tribes and consumption subcultures (Thomas, Price & Schau, 2013). Thus, individuals together forming groups or communities around consumption is per sé not a new phenomenon (Papaoikonomou, Valverde & Ryan, 2012) however the transformation that has taken place within this field of research deserves some attention. One of the most important changes due to the digitalization is that the community is no longer bound to a geographical place (Närvänen, Kartastenpää & Kuusela, 2013).

This has resulted in easier ways to create communities around shared ideas and meanings (Ibid.) and thus online consumption communities has increased rapidly (Solomon, Bamossy, Askegaard & Hogg, 2013). Due to the discussed emergence of sustainable initiatives, many of these online communities are addressing sustainable concerns.

Sustainable communities

A gap becomes apparent since only few papers have researched sustainable communities even though there seems to be an increased interest in this phenomenon. Three papers were chosen since their research addressed the phenomenon pertaining this study. Even though other papers also have touched upon the subject they are not deemed suitable since this study addresses meanings derived from communities. Firstly, Papaoikonomou, Valverde and Ryan (2012) present a study based on assessing the motivations to join collectives and the meanings that are created in these collective spaces. The study focuses on analysing collective consumption where a group of people, in an offline community, cooperate with local producers to receive ethical products. The authors found that collective actions had an impact on the consumer control and effectiveness compared to what an individual action would have. (Ibid.) The second paper is presented by DeVincenzo and Scammon (2015), who studied a wind energy programme in a community and investigated different elements that created meanings for the participants. The findings that emerged where that being in a group can create emotional connection, reinforcement as well as enabled exertion of influence upon other members (Ibid.). Lastly, Gummerus, Liljander and Sihlman (2017) conducted a study on the perceived benefits in ethical online communities. This study was performed by using a quantitative method and showed indications of that sustainable consumption behaviour was

encouraged by the community. This study confirmed that an informational benefit could have an effect on the ethical consumption. (Ibid.)

The already identified gap that have been presented, addresses the lack of research done in the field of sustainable communities. To further contribute to this gap, it has been discerned that the findings of benefits and meanings, posed in the three studies of DeVincenzo and Scammon (2015); Papaoikonomou, Valverde and Ryan (2012); Gummerus, Liljander and Sihlman (2017) have not been investigated all together in the same context. Furthermore, the meanings have not been studied from an interconnected point of view since only the separate parts of meanings have been discussed, but not their linkage as a whole. Thus, this study will form an analytical model based on the above-mentioned themes of meanings; enabling of emotional connection, reinforcement, information sharing, consumer control, consumer effectiveness and influencing (Ibid.). This enables a deeper insight into the meanings that have been found and therefore contribute to the field by unifying these into one holistic view. Based on the studies performed within the field of sustainable communities it becomes evident that the research is mostly performed on physical, offline communities (DeVincenzo and Scammon, 2015; Papaoikonomou, Valverde & Ryan, 2012) and only one of the three studies was applied to an online sustainable community (Gummerus, Liljander & Sihlman, 2017). Furthermore, the study was conducted with by a quantitative research method (Ibid.). With the notion of the evolution regarding online communities and the increased interest in sustainable consumption, an additional gap becomes apparent; that studies have not investigated online sustainable communities with a qualitative approach.

Aim and research question

The introductory section does not only indicate a gap in research but also that there are difficulties with understanding consumers within the community context. A deeper understanding into what happens within the community is therefore needed. It is also important in order to address the problem; where an overall attention to online sustainable communities is missing. This can be done by studying consumer participation in sustainable communities and also provide useful insights. Thus, the study aims to explore sustainable consumer communities on Facebook and the meanings that are produced within these communities. To enable this, the authors of this paper aims to draw on a netnographic study of three online sustainable communities and their multifaceted social interactions. To facilitate this research the following research question was formed:

What meanings are derived from the social interactions and how are these created within the online sustainable communities?

Theoretical framework - The Analytical Model

The authors of this study decided to form an own analytical model to be able to explore the phenomenon of sustainable online communities. The model was based on findings from previous studies by Papaoikonomou, Valverde and Ryan, 2012; DeVincenzo and Scammon (2015); Gummerus, Liljander and Sihlman (2017), who have conducted research within the field of sustainable communities. From these studies, the emerged themes of meanings were communal enabling of emotions, reinforcement, information, control, effectiveness and influence. (Ibid.) To clarify, the research of this paper drew the themes of control and effectiveness from the study of Papaoikonomou, Valverde and Ryan, 2012. From

DeVincenzo and Scammon (2015) emotions, reinforcement and influence where found to be of importance. The last contribution to the model came from the research of Gummerus, Liljander and Sihlman (2017) who discussed information and how this can be argued to produce meaning. In order to further enrich the substance of the analytical model, additional literature was added to the themes of meanings. This theory mainly had its foundation in the community research field which was also extended to include a sustainable and online community context. This model was created in order to aid in the upcoming analysis by specifying the themes of meanings that are the results from what happens within the sustainable online communities.

Communal enabling of emotional connection

According to the findings of DeVincenzo and Scammon (2015) one of the main meanings for a community and its members is the emotional connection. This emotional connection is strengthened when members feel belonging to the group and the belonging is strengthened by the growing emotional connection to the group. The participants of a sustainable community seem to feel a stronger emotional connection to those who live a sustainable lifestyle rather than to those who do not. (Ibid.) It can be argued that those who show their sustainable behaviour and share it with other members, might drive a larger emotional connection.

McMillan and Chavis (1986) discuss that the emotional factor also can be created through a bond to the group where the bond can emerge from shared history and culture. The culture is for instance circled around common values, symbols and myths, which unites the community and make a distinction between people within the community and those outside of it. (Ibid.) It can be argued that a shared interest and an engagement to this interest can create an emotional bond both to and within the community. In addition, DeVincenzo and Scammon (2015) state that the emotional connection, which may unite members of a community, can arise due to the perception of a shared risk. The perceived risk can be connected to the members feeling burdened by the responsibility for the environment, which can be countered by acting sustainably (Ibid.).

Communal enabling of reinforcement

According to DeVincenzo and Scammon (2015), reinforcement is offered when a sense of community arises, which further can hold influential power upon behaviour. Furthermore, reinforcement can be described as an individual's needs being fulfilled through participation in a community (McMillan & Chavis, 1986). These needs can for example range from receiving a status to feel competence or even success in some form (DeVincenzo & Scammon, 2015). Through similarities that emerge between members, reinforcement can be created from confirmation as well as connectedness and thus members seem more willing to contribute to the group. Through this type of reinforcement, bond can be strengthened and connectedness can emerge, which further can lead to a sense of belonging. Reinforcement can also enhance an already existing conviction or intention in order to continue the intended behaviour as well as inspire towards finding new lines of improvement, in line with the direction already taken. (Ibid.) Therefore, it can be argued that if the members feel their needs are met in the community, they seem keen to further strengthen their sustainable conviction.

Communal enabling of sharing information

Gummerus, Liljander and Sihlman (2017) discuss that information that is provided in the online community is of importance for the ethical consumers. The study also

confirms that informational benefits do seem to affect the ethical behaviour (Ibid.). Bickart and Schindler (2001) argue that online communities are suitable in order to give more information than is currently provided by companies. Information in online communities also seems to carry more weight since it can be seen as a type of word-of-mouth, which can be considered more trustworthy (Ibid.). What is therefore suggested, is that information can be seen as a big influential component when it comes to online ethical communities. Hajli (2018) ties into this train of thought, where it is discussed that sharing information on social media creates a social word of mouth. Social word of mouth and finding information useful is also connected where the usefulness is affected by the credibility of the information (Ibid.).

Pai and Tsai (2016) discuss the role of information and argue that factors such as enjoyment, support from other members as well as the informativeness of the community are factors that influence the reciprocity of information. Voluntarily contributing with information in a proactive manner can also help the community to thrive (Ibid). Li (2011) has a similar train of thought regarding the importance of information in communities and more precisely the willingness to contribute to the sharing of information. According to the author, the so called perceived value to contribute with information is connected to whether there is a reward connected to providing information (Ibid.). Perceived value of contribution means how useful the information is perceived to be by others. With rewards, Li (2011) refers to more intangible elements such as getting known and receiving status rather than tangible rewards such as money. In other words, if the information is perceived as useful, the giver of information might feel rewarded and thus increases its willingness to contribute. Furthermore, perceived social approval such as being approved by peers or getting positive feedback, also seems to be connected to the willingness to contribute with information (Li, 2011).

Communal enabling of perceived consumer control

Papaoikonomou, Valverde and Ryan (2012) discuss that consumers can experience lack of control from the society, which can come from feeling powerless against the market and the dominant producers. The consumers may perceive they have no impact regarding which products that should be available on the market, which highly affect the way consumers lead their lives. The connection between the producer and the consumer is often vague which can lead to the perception of having little control in the production process (Ibid.) Shaw, Newholm and Dickinson (2006) state that one way for the consumers to gain control is by boycotting producers that are seen as unethical, and/or buycotting (in other words to support) the producers with approved criterion. Thus, consumers in a group may perceive to have more control through their purchase decisions (Papaoikonomou, Valverde & Ryan, 2012). For instance, in an offline community the members can decide what criterion to base their purchases on, which then goes in line with the lifestyle of the community. The criterion is not based on traditional aspects such as price but rather on ethical components. This leads the group to feel more in control but also shows the market that the consumers can take a stand against the norm (Ibid.). In this case, it could be argued that the community opposes the mainstream norm which is based on unsustainable purchases. Papaoikonomou, Valverde and Ryan (2012) mean that control and power seems to be closely related where consumers experience that the lack of control comes from feeling powerless. Moreover, control can be achieved through the choice of consumption and by acting as a collective, the empowerment gets stronger as the group makes a common decision regarding which producer to support (Papaoikonomou,

Valverde & Ryan, 2012). Papaoikonomou and Alarcón, (2017) state that the power structure in the society is perceived to lie with the multinational companies and their unsustainable actions. In a group, the participants can feel empowered by the collective actions. This kind of empowerment can emanate from consumers perceiving themselves to have additional knowledge compared to others in the society. (Ibid.) Papaoikonomou and Alarcón (2017) also emphasise that empowerment can be gained by the consumer throught the medium of the internet. This could be argued to be of importance in the context of online communities.

Communal enabling of consumer effectiveness

According to Papaoikonomou, Valverde and Ryan (2012) it seems like the benefit of being in a group with shared interests breeds a bigger belief in having a greater effectiveness. In other words, when coming together as a group, effectiveness can be argued to enable the feeling of having a larger impact then when acting alone. What can be discerned is that an individual consumer seems to have a lower feeling of effectiveness contra those in a group (Papaoikonomou, Valverde & Ryan, 2012). The increased effectiveness can empower the members and this enables a motivation to continue with the cause (Ibid.). Papaoikonomou, Ryan and Ginieis (2011) discuss that in studies of the individual ethical consumer, the effectiveness is low which gives the perception that one's actions only makes a small difference. It can be argued that effectiveness may play a great role in regard to actually acting sustainable, which is achieved more easily when being in a group.

## Communal enabling of consumer influencing

De Valck, van Bruggen and Wierenga (2009) state that more and more of the interaction is done online and thus influence can also be exerted through the medium of online activity. Influence can be argued to be a catalysing power that can encourage others to explore new ideas and try different actions than one is normally used to. According to DeVincenzo and Scammon (2015) communities hold influencing power through inspiration and comparison within the community, and its members. Within a community there are also those that seem to influence more than other which are seen as role models, who holds expertise or knowledge that is shared with the community. These members influence the community by acting as an example and providing knowledge. (Ibid.) The influence exerted through information sharing is also discussed by de Valck, van Bruggen and Wierenga (2009) who discovered that receiving information had the highest effect on the influence of purchase decisions among the members. Other factors that seemed to be influenced by the community is the need for recognition as well as evaluation of pre-and post purchase (Ibid.).

Influence is not only exerted upon a member but the members also influence the community and by this, norms are developed, which act as a reference point for its members (DeVincenzo & Scammon, 2015). Members are also influenced through observing others who share tips on how one can change a behaviour further (Ibid.). This ties into the discussion by de Valck, van Bruggen and Wierenga (2009) who state that the influence experienced by the members is dependent on the membership; how attached the members are to the community and their orientation to the other members. The authors further argue that the stronger the connection is to the community, the more the community can influence the members (Ibid.). In sum, communities indeed seem to have influential effects upon its members, and the members also influence the community as a whole (DeVincenzo & Scammon, 2015; de Valck, van Bruggen & Wierenga, 2009)

The model

These six themes of meaning, that has been discussed above, enabled the authors of this paper to form a model and these meanings represent what can be created within a sustainable community through its social interactions. This is visually represented in Model 1, where the different themes of meanings are portrayed separately.
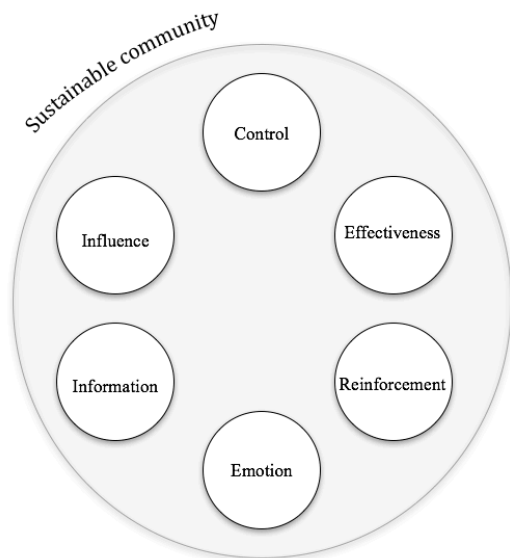
Model 1. Analytical model and visual representation of the themes of meanings within the sustainable community.

Methodology

In order to explore the meanings that are created within the online sustainable communities, a qualitative approach was applied to this study. To simplify the purpose of this qualitative approach, the research can be seen to derive from understanding and interpretation (Eriksson and Kovalainen, 2015). Qualitative methods are seen to help understand the reality created by cultural and social meanings (Ibid.). As this study aims to investigate online communities, netnography was chosen as the specific qualitative method, in accordance with Kozinets (2015). Kozinets (2002) further states that netnography is useful when studying meanings. These meanings are created in the symbolic world through interactions (Ibid.), which is what this study aims to explore. Netnography can be argued to be a rather new method that has evolved due to digitalization and is built upon the ethnographic method Kozinets (2002). Furthermore, Facebook has become a natural way for social interaction to take place for instance by connecting people with a common interest (Kozinets, 2015). Thus, this study draws on cases from three Facebook communities which were all Swedish and in different ways connected to sustainability. The first community, addressed travel by train instead of flying, the second, discussed how to decrease food waste and the third dealt with minimizing littering. These groups differed in size and therefore gave a good overview of the differentiation of communities.

The analytical model was created by merging the findings of previous studies of Papaoikonomou, Valverde and Ryan (2012); Gummerus, Liljander and Sihlman (2017); DeVincenzo and Scammon (2015) in an effort to create a sufficient explanation of the phenomenon at hand. This due to the fact that the authors of this study deemed the previous studies to be inadequate separately in regards of explaining the phenomenon of sustainable online communities.

Community selection

The chosen communities were not the researchers first choice of research, as other groups seemed to provide more rich and interesting data in an initial stage. These Facebook communities were private groups which restricted the researchers to collect data due to dilemma of ethics. In line with the ethical concerns with netnography, a discussion of private versus public spaces have been highlighted within this research method field (Kozients, 2015). Thus, the authors of this study avoided private communities on Facebook out of ethical principles, as closing the groups indicated a form of statement to provide a private sphere for its members. The netnographer

always need to have in mind that behind the online social interactions there are humans who needs to be protected of ethical violations (Kozinets, 2015). For these reasons, public communities were chosen. To further decrease the somewhat ethical uncertainty, consent was asked and approved from those responsible for the three communities.

In the initial state the researchers of this study had the perception that private communities on Facebook could be seen to provide a higher interactivity and richer content. The public groups that were finally chosen did in the end provide sufficient materials for the research. However, some compromises had to be made, such as expanding the time span of the posts and accepting fewer comments. In the end, the researchers deemed that the results of the gathered data were satisfying.

Kozinets (2015) points out certain ethical guidelines that ought to be followed by a netnographer; "(1) identifying yourself and informing relevant constituents about your research, (2) asking for appropriate permissions, (3) gaining consent where needed, and (4) properly citing and crediting culture members." (p. 135). The authors of this study have carefully considered the ethics, however all the steps presented above have not been applied. Regarding the nature of public groups in combination with the large amount of interaction and participants these steps are inapplicable in this study. This means that it is difficult to ask all individual participants for consent as well as crediting them. The study can still be considered to be performed ethically as appropriate permission has been granted from those responsible for the communities.

The researchers of this study, followed some guidelines posed by Kozinets (2015), in order to find suitable communities through search engines. In order to find suitable communities that revolved around sustainability, several sustainable keywords were imputed into Facebook's search engine. These keywords

were waste reduction, plastic reduction, vegan, vegetarian, reduced consumption and palm oil, to mention a few. Some groups were also recommended by peers within similar sustainable research fields. The combination of these two approaches contributed to finding the communities that this research builds upon.

When selecting the chosen communities, certain criterion aside from that the community should be public, were set in beforehand with help by guidelines from Kozinets (2015). Firstly, the three communities were relevant (Kozinets, 2015) as they all revolve around subjects that aim to improve sustainable concerns. The communities were also both active and interactive (Kozinets, 2015) which is seen through the many different topics and interactions. However, the degree of the interactions in the comment sections varied between the different groups and so did the posting frequency. The first community had both high activity and very interactive data, thus the data was collected from two months back to fill a satisfying level. The second group had rather recent posts and the data was collected five months back in time from the starting point of the collection. The collected data from the third group was dated back to last year (2018) for six months which can be argued to be due to the groups seasonality. Kozinets (2015) discuss more criterion for selecting a community; substantial, heterogeneity, rich in data and experiential. The additional criterion was all fulfilled to varying degrees. In addition, the data that was collected from these groups was guided by the research question and was collected until the researchers of this study did not find any further insights, in accordance with what is proposed by Kozinets (2002).

The three chosen communities differed in size and content therefore a description is deemed necessary in order to provide an understanding of the groups. The first community had the primary purpose of travelling by train in order to travel more sustainably. Since it was a rather large

group there were a large amount of interactions and discussions within the group. The topics of discussions were varied and for the researchers of this paper the discussions were very rich in data. The second community was a fairly new group and there were quite a few members given its newly established status. The primary purpose of this group concerned how to diminish food waste in the home by using different methods. The group was deemed sustainable since it aided in the possibility to discard as little as possible and use the food resources to its utmost. Even though it is a fairly new group, and still getting established, there were quite a few discussions. The third and last community was a fairly small group primarily centred around taking care of the trash that is thrown away in the nature. Since trash is not visible at all times, for example when snow prevents the visibility, the interactions occurred primarily during spring, summer and autumn which makes the group seasonally dependent. The sustainability aspect of the group is to pick up trash and recycling rather than letting it lie in the nature. This gives a chance to not waste the resources and preventing damages to nature.

	Description	Members	Activeness	Interactiveness
Community 1	Sustainable travelling by train instead of flying.	88 118	High	High
Community 2	Diminishing food waste.	529	Medium	Medium
Community 3	Collecting and recycling trash from littering.	829	Medium	Medium

Table 1. Summary of the investigated sustainable online communities.

Data collection

After doing extensive exploration into different relevant communities and selecting the three groups, the data collection begun. According to Kozinets (2015), netnographers face a large amount of data and have to focus on the context and relevance. These are the key concepts when collecting the data through netnography (Ibid.). In this study, the collection of relevant data was guided by the themes of meanings formulated in the analytical model. All posts and interactions that seemed at least slightly relevant were collected and then reduced in the coding stage. The research topic and research question were primarily the focus of the netnographers, however still keeping an open mind to find the unexpected (Kozinets, 2015). This led to vast amounts of data since everything that seemed slightly relevant was collected, even if not all parts were later deemed as useful.

The researchers immersed themselves into the chosen communities over a time span of 14 days between the 28th of March 2019 to the 11th of April 2019 and collected data. The authors of this study put aside this time span for solely collecting data but was still open for the possibility of extension, if time would be considered not be enough to reach satisfactory levels of the data. Satisfactory levels where deemed to be reached when the venues of investigation, in accordance with the analytical model, were all exhausted as well as portrayed a richness in the data that would enable the analysis. Kozinets (2015) suggest that the researcher should set certain criterion beforehand to select the conversations. One criteria, that the researchers of this study chose, related to the interactiveness of the conversations. A minimum of ten comments on the initial post was decided as a prerequisite for acceptance. However, this was revised during the data collection process as some conversations could be seen as rich even with fewer comments. The selected conversations in the communities were as current as possible, nothing past a year back in time, in order to provide an accurate and present insight.

The data was collected thread by thread from the communities, which entailed the initial posts followed by the comments. These conversations were downloaded and divided into different

documents assigned to each specific community. This study also considered the ethical concerns regarding not to harm the participants, similar to what is suggested by Kozinets (2015). Thus, cloaking (Kozinets, 2015) was applied, which in sum can be explained to be anonymizing to as great length as possible. Large emphasis was therefore put on cloaking i.e. protecting the sensitive personal information such as name, gender and profile picture. The names of the communities were censored as well and instead the topics of the communities were described to enhance the cloaking. Kozinets (2015) discuss that in the emerging state of using netnography as a research method, anonymizing the source was seen as enough when quotes were used in research papers. However, new discussions of the accessibility to track a person's words or quote that are published online have increased (Ibid.). This strengthen the choice of anonymizing the name of the studied communities. As the studied communities were Swedish, the conversations were written in the Swedish language. Thus, the quotes were translated and transformed to fit the English language, which further enhances the difficulties to track specific quotes published in this study.

Data analysis

This study adopted traditional content analysis in order to analyse the gathered data since it allows for an understanding of the content and context (Eriksson & Kovalainen, 2015). Coding becomes essential for this kind of traditional analysis as the categorization builds on the theoretical framework, therefore the applied coding follows the themes of research (Ibid.). The coding in this study was performed by colour coding and highlighting the relevant downloaded data. The coded sentences and interactions where those that showed attributes that could correspond to one or more of the themes of meaning posed in the analytical model. The extractions where also subcategorized,

according to their corresponding community, under each theme of meaning. According to Kozinets (2015), data can be analysed by adopting a subjective interpretation of the data with a predetermined focus, also called an autonetnographic approach. During the analysis for this paper it can be argued that an autonetnograpic approach was applied. This due to the fact that the data was analysed by a predetermined focus on the meanings in the analytical model, created by the authors. Furthermore, in the analysis the authors of this paper considered both the parts and the whole, in line with the reasoning of Kozinets (2015). In other words, consideration was paid both to the parts, in this case the different themes of meanings, and to their possible connections as a whole. The authors of this paper applied the process of interpreting and then reinterpreting in order to try deepening the analysis by new insights (Kozinets, 2015). Since a lot of data was analysed, this process also allowed for a reflection on what part of the analysed data that could be used to highlight the findings in a suitable way in order to answer the research question. The analysis was conducted by understanding and paying attention to the extractions from a contextual point of view, which was emphasized by Kozinets (2015) to be one of the main objectives for a netnographer.

Trustworthiness

This qualitative study was based on the aspects of trustworthiness which entail dependability, transferability, credibility and conformability (Eriksson & Kovalainen, 2015). Dependability refer to that the researcher has conducted the study in a manner which can be traced, logically formulated and noted in order to show dependence (Eriksson & Kovalainen, 2015). In this study, these aspects have been continuously considered and have followed through the work as a red thread. Due to ethical considerations, the data has been

cloaked which makes it harder to trace without the uncensored notes. The hindering of traceability can be argued to be very important since all the collected data is available in public forums on Facebook. The data has also been carefully documented and the cloaked data and coding is available however not included in this paper in its entirety. Therefore, the criteria of documentation is deemed fulfilled. It can also be argued that the research has been conducted in a logical manner throughout process, from the initial research period to the writing of the paper. Transferability in the manner discussed by Eriksson and Kovalainen (2015) can be argued to be fulfilled as this study builds on three studies in the field of sustainable communities. These studies were found during the extensive literature study that preceded this research. Due to that the analytical model has its roots in these three studies, a clear connection can be seen between this study and previous studies that the analytical model is based on.

Both credibility and confirmability have carefully been applied in accordance with Eriksson and Kovalainen (2015). For instance, the researchers of this study both possess previous knowledge within the field of sustainability as well as having first-hand experience of interacting through social media. Attention has also been paid in order to portray the findings of the study in a manner that can be argued to be logically interpreted. The process of this can be seen to be accurately interpreted to the best of the authors knowledge and ability. The trustworthiness can further be argued to be strengthened since the researchers of this paper acted in accordance with Kozinets (2015) and both interpreted and reinterpreted the data. This process of interpretation also allowed the researchers to see both the parts and the whole within the meanings of the communities (Ibid.).

Certain aspects might have affected the result of this study and thus its trustworthiness. An aspect that needs to be discussed is that the data and analysis is based on those people in the group that are actively participating. There is also an unrecorded element that is composed by those who are not actively partaking, yet are still receiving the benefits from the group; the lurkers. Thus, this study has narrowed the scope to those that are attainable which are the active ones in the community. In other word, the way netnography was applied in this study, the reach of the investigation was limited to those active in the communities. This could however be considered to be a limitation rather than an issue of trustworthiness. An argument that could question the trustworthiness is what Kozinets (2002) discusses about what is portrayed online might not necessarily correspond to neither the person itself nor their actions in real life; it cannot be guaranteed that the persons behind the accounts are who they say they are. Since the researchers of this study are unable to go beyond the reach of the community, they can only see what the members want to portray. Kozinets (2002) also highlights the difficulties of generalizing beyond the studied communities due to the interpretative nature of the methodology and the absence of a true identification of the participants. In sum, these issues of trustworthiness are connected with the method of netnography rather than the application of it in this study.

Finding and Analysis

Communal enabling of emotional connection

In the three investigated communities, the emotional theme is present in a similar manner and can be seen as an underlying and subtle meaning creation. This connection is mainly evident by comments on the feeling of sharing a common risk for the environment. For instance, *"Hi all fantastic members, all of you who make the world a little bit better to live in /.../ at the same time as we today are having huge*

problems with plastic in our oceans...". This shows an emotional connection that is created through the joint risk of unsustainable actions in the society, in line with DeVincenzo & Scammons (2015) discussion. These emotional connections can grow stronger when a sense of belonging exist in the community (Ibid.). Thus, belonging together with the notion of a shared risk, seems to encourage a meaning creation of emotions. This becomes evident in comments regarding changes in the society, as portrayed here, *"Wow-now things are happening. It is a structural transformation in material meaning in parallel with a spreading of awareness, people are starting to understand, "we can make an impact""*. The bonding experience can also be illustrated by the sharing of common values (McMillan & Chavis, 1986). Here, participants in the community can be seen to express this bonding, *"We *community* have to carry each other and support encourage help with suggestions and advice on how to proceed to attract more people to this good cause"*. This quote further highlights what McMillan and Chavis (1986) discuss as a division between those who are in the community and those not partaking in the group. These extractions can be seen as examples of subtle emotional connections, which appear as comments now and then in the communities. However, in a few cases the connections seem stronger and more substantial. A participant expresses their deep anxiety over the climate change and receives similar compassion, portrayed in this interaction:

> *"Suffers from such severe ecophobia. Is it only me? Trying to be positive but sometimes it just feels hopeless. Thoughts?"*

> *"Me too. Every time I see and actually visually trying to understand the production of products and food, I panic. But I'm trying to eat veg and be more*

climate smart than usual, to consume less, to take the bike instead of transport (even bus) and to shop second hand (just learned the phrase preloved which I LOVE(...)"

This interaction also indicates what DeVincenzo and Scammon (2015) state to establish an emotional tie over the same sustainable lifestyle. Even though this interaction, and the other extractions, confirm a creation of an emotional connection within the communities, these posts do not generate as much interaction compared to some of the other themes of meanings. Thus, it could be argued that members in the communities share the increased environmental risk but could be seen to mainly search for other meanings to be fulfilled through the social interaction in the communities.

Communal enabling of reinforcement
Within the three studied communities reinforcement could be discerned to certain degrees in all of the groups. Foremost, reinforcement seems to occur as feedback to an initial post rather than being the origin itself, thus it can be argued that reinforcement seems to be more of a by-product than the main quest. It can also be stated that reinforcement is pursued through making a post in quest for other meanings, for instance by influence, which enable feedback and act to confirm a form of need. This goes in line with the discussion of McMillan and Chavis (1986) who state that reinforcement arises, amongst others, when a need is fulfilled. This need varies, but it could manifest itself by for example people feeling competence or success and thereby strengthening the bond to the group (DeVincenzo & Scammon, 2015). However, in the largest group (community 1) a few posts could be seen to actively ask for reinforcement when insecurity about a decision arose. This could be exemplified by this post, *"...My gut feeling tells me to*

travel, and I want to listen to myself. But I'm just a lost 20-year-old…". Here the person can be argued to be looking for reinforcement by acquiring confirmation to pursue the intended action.

Reinforcement can be argued to be a great part of a community as the members are seen to endorse each other by acknowledging each other's advice. The advices most often emanate from influencing and informational posts for instance, *"Here are some ideas what you can do with old bread before it gets bad"*. These are complemented with reinforcement comments as, *"Very good advice"* or *"Wow, really impressive! …"*. By encouraging each other in these interactions, it enhances the feeling of accomplishment and competence (DeVincenzo & Scammon, 2015) which can be argued to be important when it comes to acting sustainable.

Reinforcement can also take place if similarities are acknowledged in the interaction which can breed confirmation (DeVincenzo & Scammon, 2015) This is exemplified by these quotes, *"same here"* and *"also think it is hard to minimize that type of waste!"*. This implies that similarities, in this case regarding shared issues, can help the members to connect and create bonds in the community (Ibid.). DeVincenzo and Scammon (2015) argues that reinforcement also acts as strengthening the bonds within and to the group. It becomes evident that not only the instigator gets reinforced but the other members of the group as well, which can be seen as a "spill-over" of reinforcement. An example of this is when a member writes feedback in the following way, *"It is wonderful to read your post X! /.../ It is truly a push into the direction I aspire to head!"*. This seems to argue for the type of bond and reinforcement that the authors put forth, since members seems to feel reinforcement by seeing other members engaging in the cause (DeVincenzo & Scammon, 2015).

Communal enabling of sharing information

Within the three communities, information can be discerned of various degrees from being almost absent to taking a primary part of the posts. There seems to be a clear difference primarily between community 1 and 3; community 1 has vast informational elements whereas community 3 does not. It seems that in community 3, other meanings as influence and control make out a greater part of the interactions. Community 2 could be argued to be somewhere in between but closer to community 1 on the information spectra. Thus, the examples anchored to the theory will primarily be drawn from community 1.

What can be seen within the sustainable community is that indeed information seems to play a part for its members who both seeks and gives information to one another regarding their travelling decision. This is seen here, *"Youths can apply for scholarships for train travel, I think it's funded by the EU…."* or *"I seem to recall there being a group discount if the number of passengers exceeds X people travelling"*. This could be similar to what Gummerus, Liljander and Sihlman (2017) discuss regarding the power that information holds in influencing ethical behaviour. Often the search for information, within the sustainable community, seem to have the roots in feeling that information is not received elsewhere. This also becomes evident here, *"There is a lot of information here in regard to what routes that require tickets for seating. On other trains, you just board!"* where a reference to the community is made to provide the information, rather than relying on the service companies. This can further be exemplified by a member who has gotten an answer from the community and responds, *"...ok. But they still could have given this information within the service"*. The statement ties into the reasoning by Bickart and Schindler (2001) where the authors discuss that ethical communities fills an

15

informational void. The recipient of this information seems to find the information useful and then express their disappointment of not receiving this information from the company. The feeling of receiving inadequate information falls in line with what is discussed by Bickart and Schindler (2001) regarding shortcomings of information from companies. Instead the community provides useful information through the social word of mouth which also affects the credibility for the recipient regarding the knowledge provided (Hajli, 2018). This is addressed by a member who provides useful information exceeding the question posed by trying to encourage, *"Or The solo female traveller network. The best Facebook group for those of us traveling solo"*. This person might fit in to what Li (2011) discusses about the willingness to contribute once being in the group. Therefore, one can see that indeed information is shared within the group and, even if the reasons for sharing might differ, it also seems to provide the sought-after tools that can aid in one's sustainable endeavour.

Communal enabling of perceived consumer control

The meaning creation regarding consumer control differs greatly in all three communities. In community 1, both the expression of lacking control and the efforts to gain control make up a major part of the community interactions. Furthermore, the other themes of meanings all seem to interplay with control in some way. In community 2, the meaning creation about control seems to be missing to a large extent and only one interaction seems to touch upon this theme. In community 3 there are quite a few examples of control, primarily in regard to gaining control through their actions. Thus, the analysis that follows will focus on community 1 and 3, since these are the ones showing the theme of control.

The findings indicate two different ways through which control is expressed; gaining and lacking control, where the latter most often acts as the theme of an initial post. Lacking control is portrayed by the expression of that something is missing in order for control to occur or when a feeling of powerlessness arises. However, gaining control is mostly seen as an expression and encouragement of *"taking things into own hands"*. This relates to what is discussed by Papaoikonomou, Valverde and Ryan (2012) regarding that consumer control can occur both as a gain and a lack of control. Papaoikonomou, Valverde and Ryan (2012) also discuss that the lack of control has its roots in the consumers' experience of an effect on its lifestyle caused by the absence of certain products on the market. This goes in line with the conducted study, however instead of the absence of products the consumer's experience a deficiency in the service supply provided by the market. An example of lacking control can be portrayed by this quote, *"Hm, that is something to consider. However, there was no shame involved but rather a sense of aversion when I was forced (!) to fly within my job."* This goes in line with the reasoning of Papaoikonomou, Valverde and Ryan (2012) who discuss the feeling of lacking control can translate into feeling unequipped to exert influence. In this case the person does not want to fly, but is unable to influence the mode of travel and is instead forced to adhere to the route posed by the employer. This lack of control and feeling unable to achieve the desired influence seems to be reoccurring within the community. However, sometimes instead of feeling a lack of control against a producer, the sense of powerlessness seems to be aimed towards the society or the municipality. One person writes *"...when picking up trash yesterday many people discussed that they were saddened by how much trash it is in the environment, yet it does not be on the agenda for those in charge, regardless of municipality."*. This is argued to portray the lack of control that Papaoikonomou, Valverde and Ryan (2012) discusses against

those who can be considered to be in charge in some way.

There are also examples of trying to gain a form of control from the group by encouraging to take control and underlining that there is strength in numbers, as portrayed here, *"I would write and ask the fair how one is able to get there by train. The more people that request this the sooner better service can emerge"*. This coincides with the reasoning of Papaoikonomou, Valverde and Ryan (2012) regarding the feeling of having more control when being part of a group. It also ties into the discussion about buycotting (Shaw, Newholm & Dickinson, 2006) where the quoted person encourages to use one transportation mean instead of another since it is better for the environment. The gain of control that Papaoikonomou, Valverde and Ryan (2012) discuss seem to arise within the groups. A person writes for example, *"reported the cigarette butts to the municipality since I didn't have the energy to pick it all up from below some benches and indeed the butts where picked up a few days later."*. This can be argued as a mean to gain control since the person decides to not pick up the trash but rather report it and therefore "force" the municipality to pick it up. Through this the municipality perhaps also becomes more aware, which by extension can lead to that the people in charge may grasp the issue and might lead to even more control being gained.

Communal enabling of consumer effectiveness

The meaning creation of consumer effectiveness, was only discovered in two of the studied communities; community 1 and 3. However, effectiveness seldom seems to occur on its own and is often seen to be expressed in relation with consumer control. Effectiveness often seems to arise when referring to the strength in numbers and actions that make greater impact when done together, similar to what is posed by Papaoikonomou, Valverde and Ryan (2012)

It is discussed by Papaoikonomou, Valverde and Ryan (2012) that there is a greater belief in reaching effectiveness by being in a group with shared interests. This can be exemplified by this interaction, *"I will not go on the trip if the only option is to fly /.../ However, I feel that it is so unreasonable to fly that I think the trip should be cancelled."* This statement was made in regard to a student who feels that flying in order to make a school trip is unreasonable and that they should rather go by train. This was followed by someone, presumably another student in the class posting, *"I'm in, I won't go either if it'll be by plane"*. In this case the investigated sustainable community became a medium in which group support was built for the cause, which is indicative of gaining effectiveness in the manner discussed by Papaoikonomou, Valverde and Ryan (2012) In this case, this could also have a greater effect and may eliminate the feeling of inadequacy in regard to effectiveness (Papaoikonomou, Ryan & Ginieis, 2011).

Regarding effectiveness, the authors pose that being in a group seems to enhance the belief in making a difference (Papaoikonomou, Valverde & Ryan, 2012). This feeling, that there is a strength in numbers, is something that can clearly be seen. For example, in this interaction:

> *"Feel free to take pictures of your "findings" and post them here, big or small!! Then we'll see that it is not such a small difference we make!!"*

> *"Thank you for these thoughts. We become more and more that do our share. #onecannotdoitallbuteverybody candosomething"*

These statements can be argued to fall in line with what is discussed by Papaoikonomou, Valverde and Ryan (2012) since within the group one seems to strengthen the belief as well as feel a greater sense of effectiveness.

Communal enabling of consumer influencing

Influence is something that consistently play a large part in all of the three investigated communities and is portrayed in similar manners. This is rather unique since in the smaller communities (community 2 and 3) influence is one of the few meanings that really stands out and is visible throughout the entire data set. It is deemed interesting since it plays the main role of the initiating posts in these two communities. Influence is also evident in community 1 however not to the same extent, where the initial posts are also to great extent involving information and control.

According to de Valck, van Bruggen and Wierenga (2009) online interactions allows influence upon one another to flow through the medium of the internet. A way that influence was shown, regarded the sharing of expertise as discussed by DeVincenzo and Scammon (2015) who argue that sharing knowledge can influence others. This can be exemplified by this, *"Sounded exciting, so I couldn't help myself and started sketching an idea - this is how I would have made the trip…"*. Here the person provides knowledge to the person requesting the tip, which is followed by the response, *"Thank you… Very nice plan you made. I will now review your plan for the upcoming trip…".* It could be stated that this is an example of influence exerted upon the recipient from the person showing expertise, which is in line with what is discussed by DeVincenzo and Scammon (2015).

DeVincenzo and Scammon (2015) argue that influence can also arise from inspiration and comparison to other members within the group. For example, one member wrote, *"I myself went by train for a trip from Kalix to Berlin with approximately 30 people from the school.".* This answer could be suggested to act both as an inspiration and as a mean to compare their own situation to the one stated (DeVincenzo & Scammon, 2015). The members also seem to give each other new ideas which ties into the discussion by the authors where influence can be spread within a community as the individuals are inspiring each other especially with new concepts (Ibid.). An interaction where this became evident, was regarding which food that most often is thrown away. This further created new influences between the members, shown as a response here, *"my neighbour came with a lot of vegetables to us when she was going to travel because she did not want them to get bad. We got happy and she got happy, win-win!".* Within the groups there also seem to be clear signs of influence in the manner discussed by DeVincenzo and Scammon (2015). For example, when a member writes, *"We strengthen each other in our vision of a better world and everybody can contribute - small as well as big actions - easiest to the most creative. I can say that I have become really influenced by this group in regard to my commitment"* This statement clearly proves the point DeVincenzo and Scammon (2015) makes regarding offering members comparison and inspiration. Furthermore, the authors also discuss the reflection upon what place one holds in comparison to other members (Ibid.). This can be argued to be the case in the example above, since the member seem to become more committed after seeing the interactions within the group.

The community has great confidence in each other through comments such as, *"Then I will excitingly wait for the others answers, I Am also curious"* and *"crossing my fingers that we have a specialist in the group!".* This goes in line with the influential power where some members are seen to have more expertise which is shared within the community (DeVincenzo & Scammon, 2015). Furthermore, it can be argued that this high reliance and trusting other members to shared and help each other can be seen as a norm in the community. Thus, the community has

developed in line with the interaction of the members and norms have been created (DeVincenzo & Scammon, 2015).

Connecting the themes of meanings

As shown in previous sections, the meaning creations discussed in the analytical model have been addressed separately. From this research, there is evidence that several meanings are connected and thus patterns and relationships were discovered between the meanings. In accordance with the insights of Kozinets (2015), what was discovered is that no community is completely like the other. The connections between the meanings are therefore of interest as they interplay to a great part in the interactions within the communities. This also ties into the aim of the research and therefore it is important from a scientific perspective. The most important connections that were found will be discussed further in this section.

As discussed in the analysis section regarding consumer control, lack of control is often expressed in the community, where other members aid in minimizing this feeling. All the other themes of meanings seem to contribute to gaining this control. The perceived consumer control seems to be the red thread which can be discerned in most of the sustainable online communities. However, the most common and clearest connection seems to be between expressed lack of control and the influence to gain control and vice versa, as seen in this interaction:

> *"I'm new to the group but I'm shocked by how complicated it seems to be to travel by train with bookings here and there ... in regard to Europe. Was thinking of backpacking by train this summer, but it won't happen"*

The person express that the market does not supply a convenient service, which ties into

the reasoning of Papaoikonomou, Valverde and Ryan (2012) where the absence of products and services prevent a sustainable lifestyle. Other members aid with influential comments in order to help diminish the feeling of lacking control, which can be seen in the responses to the initial post:

> *"yes and in all honesty it should be acknowledged that especially in France and Spain the spontaneity is tested, with their interrail policies ..... but luckily there are a lot of other countries in the interrail system!"*

> *"I would like to read what opinion X has on the matter after all the comments will there be a train trip this summer?"*

> *"Me too, of course you should go by train! I also got eager to go without too much planning!"*

> *"There will probably be a trip, thank you all for great tips and advice*
> *And encouragement ..."*

> *"I was thinking the same as you, before I interrailed. Read about the booking systems in different countries, thought it seemed so inconvenient. But it is not!"*

Here it becomes evident that the responses are expressed in an influencing manner, by providing inspiration as well as encouraging to take control over the deficiencies in the booking systems and policies. Even though, the data shows an interplay between the meaning creation of consumer control and influencing, there is no clear connection in the theory presented in the analytical model. However, the discussion on how empowerment is strengthened by collective actions (Papaoikonomou & Alarcón, 2017) and the

discourse on how inspiration and comparison within the community creates influence upon the members, could be argued to be somewhat connected (DeVincenzo & Scammon, 2015). Influencing can therefore be seen to be a sort of empowerment to gain control in the community.

The data also shows indication of a relationship between the meaning creation of consumer control and effectiveness which is expressed in the cited interaction below. The interaction regards the frustration of going on a school trip by plane and where classmates, that also seems to be a part of the online community, come together to travel by train instead:

> *"I will not go on the trip if the only option is to fly, but unfortunately I do not think that all my classmates will be too happy if the trip will be cancelled. However, I feel that it is so unreasonable to fly that I think the trip should be cancelled."*

> *"I'm of the same opinion, why should we encourage air travel within the EU."*

> *"I'm in, I won't go either if it'll be by plane".*

The interaction suggests that the initial comment is expressing lack of control, against the school's choice of means for transportation and the other members seem to support the idea of alternative travelling. The strength in numbers seems to provide a feeling of effectiveness in line with what is posed by Papaoikonomou, Valverde and Ryan (2012). The connection between the two themes of meanings can be explained by that lacking control is experienced in a state of powerlessness and where the control can be gained by for instance boycotting producers (Shaw, Newholm & Dickinson, 2006); to boycott the flight

providers. When consumers gain control collectively, it enables consumer effectiveness (Papaoikonomou, Valverde & Ryan, 2012), as in this case, the feeling of making a larger impact if several classmates decide to travel by train.

Within the communities information and influence seems to be connected which can be since influence can be created through sharing knowledge within the community (DeVincenzo & Scammon, 2015). In the studied communities, interfaces between these two themes can be seen to create useful meanings for the members. An interaction concerned problems with lunch boxes where influential advice was sought, *"Okay, hit me with your best tips! /.../ Do you have any suggestions on how I can keep them fresh? Or should I just learn to live with it?"*. In reply, information was provided, *"Invest in a lunch box made of glass, it is much more easy to wash an you don't get any nasty from the plastic when its heated up"*. The member that asked for advice was influenced trough this information which can be seen by this comment, *"I have not thought about that there exist boxes made out of glass?! Thank you all for the responses (...)"*. This show an interplay where the meaning of information can be seen as an essential ability to influence other community members (de Valck, van Bruggen & Wierenga, 2009).

In addition, there is also a connection found between gained control and being reinforced. This can be portrayed by this interaction:

> *"Today me and another person picked up these bags in two hours together with the campaign Håll Sverige Rent…"*

> *"Woow, great job you did! you go!"*

> *"Really good job!!! :-D"*

> *"What a job!!"*

"Yes, what an amazing job you did!"

The member seems to have joined a voluntary movement to pick up trash from common areas, in an effort to keep the environment clean. Since the discussed community is centred around decreasing littering, this effort can be seen as a response to the inadequacy shown by the municipality and fellow man. According to the theories of control and reinforcement there does not seem to be a clear connection. However, when control is taken by going against the grain, and is shared with the community it can be argued that reinforcement is bestowed to the one that took control, and is therefore confirmed by their peers. Thus, the community has taken a stand against the norm, which can be seen as a way to gain control for the group (Papaoikonomou, Valverde & Ryan, 2012). This seems to catalyse the creation of meaning through reinforcement, as a response to the control that has been taken. Reinforcement in the form of confirmation by other participants can thus be argued to take place due to similarities that have emerged in the community (DeVincenzo & Scammon, 2015).

To illustrate these findings of the connections between the themes of meanings, this is visually presented in Model 2. The connections are as discussed, in the analysis, between control and influence, control and effectiveness, information and influence and lastly, between control and reinforcement.
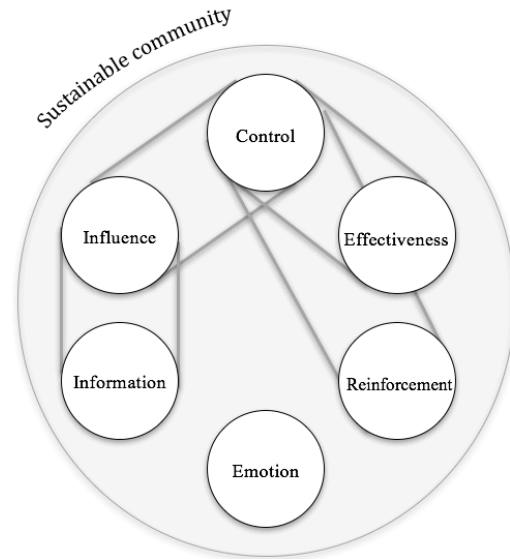
Model 2. The altered analytical model which visually represents the connections between the meanings found in the analysis.

Conclusion and Discussion

All the themes seem to contribute to meaning creation where consumers enable sustainable efforts and intentions. These exist to various degrees within the three studied communities. The most interesting finding during this research were the connections discerned between the different themes of meanings. These connections have not been addressed within the previous studies of sustainable communities (Papaoikonomou, Valverde & Ryan, 2012; DeVincenzo & Scammon, 2015; Gummerus, Liljander & Sihlman, 2017). and these meanings have not been co-existing in the same study before. In this study, there were four main connections found between the meanings of; control-influence, control-effectiveness, influence-information and control-reinforcement. These connections are found to breed each other to create meanings between the participants in the community and some of these connections can be found to be theoretically linked.

The meanings of gaining control and consumer effectiveness presented by Papaoikonomou, Valverde and Ryan (2012), can be seen to have similar traits

where strength in numbers matter and therefore this connection can occur. There could also be argued to be a theoretical connection between the meanings of control discussed by Papaoikonomou and Alarcón, (2017) and influence discussed by DeVincenzo and Scammon (2015) where influencing can be seen to be as a sort of empowerment to gain control in the community. The connection between information and influence can be seen to be rather visible in theory where information provided by knowledge sharing can influence within the community (DeVincenzo & Scammon, 2015). The last remaining connection is difficult to deduce from a theoretical perspective however, a vague connection could be argued to exist; taking a stand against the norm enables control (Papaoikonomou, Valverde & Ryan, 2012) and this action generates reinforcement by reactions to the action taken (DeVincenzo & Scammon, 2015).

Sustainable communities can be seen to allow individual to reflect upon sustainable choices in a group with like-minded people. This goes in line with the description of a consumption community Thomas, Price and Schau (2013) and a commitment can be argued to arise around a sustainable activity. As meaning creation has been highlighted as an important element in research within ethical communities this study also acknowledged the connection that can be created between these. For instance, as control can be gained by other members giving influential suggestions and inspiration this can be seen to carry more weight rather than control on its own. These connections can thus be argued to have a higher effect on the intentions on sustainable behaviour for the members in the communities. In other words, this can then contribute to a higher efficiency due to the collective efforts (Papaoikonomou, Valverde & Ryan, 2012) of sustainable actions. As online groups enable easier participation in the communities for more people (Närvänen, Kartastenpää & Kuusela, 2013), it could be argued that more connections between the meanings can be created which further can have a larger effect on the participants in the community. However, this argument needs to be further researched in order to fully grasp the significance of this finding.

In sum, these theoretical connections have not been studied in previous research which emphasise the contributions of this study. Interestingly, consumer control is evident in three of the four found connections in this research which underlines the importance of the role control seem to play in the communities. Consumers seem to experience a lack of control, in regard to sustainable choice, from other entities in the society. Thus, the community can dampen this feeling by helping each other and create different meanings through the interactions that occur within the group. This can be seen as a response to the sustainable problems that have become more evident and affecting the consumer lives to a large extent. It confirms that consumers are seen to join sustainable online communities to aid in dealing with this issue. In two of the communities, control was seen to make up a large part of the interactions which revolved around topics on a societal level rather than an individual one. The meaning creation of control in the third community was lacking as the topic of the community is not focused on the societal level but more on the individual level. This due to the fact that the topic in the community (Community 2) addressed diminishing food waste in the household which can be due to that control is easy to obtain since the choices are only dependent on oneself.

It can be argued that online sustainable communities can play a part in the endeavor of a sustainable future. This is due to the fact that online activity nowadays takes a central role in our lives, and where much of the social interactions occur. This medium enables a buzz to be created around environmental issues and can create an awareness as well as understanding which can affect the consumption behaviour.

These platforms act as a good interface for sustainable problems to be addressed as seen in the meaning creations in this study. Furthermore, as communities can enable collective actions, this can be argued to contribute to changes, for instance due to the power of consumer effectiveness in gaining control. The unity of consumers in the sustainable communities can affect producing and deciding entities in the society to thrive towards a more sustainable future. The findings also indicate that as some meanings are highly connected and boost each other, as these constellations can be used by entities in other situations outside the community in order to promote sustainability. Therefore, it is argued that greatness can be achieved when people unite in the environmental consumption fight.

References

Antonetti, P. & Maklan, S. (2014). Exploring Postconsumption Guilt and Pride in the Context of Sustainability. *Psychology & Marketing*, 31(9), pp.717–735.

Bickart, B. & Schindler, R. M. (2001). Internet forums as influential sources of consumer information. *Journal of Interactive Marketing*, 15(3), pp.31–40.

Carrington, M., Neville, J. & Whitwell, B. (2010). Why Ethical Consumers Don't Walk Their Talk: Towards a Framework for Understanding the Gap Between the Ethical Purchase Intentions and Actual Buying Behaviour of Ethically Minded Consumers. *Journal of Business Ethics*, 97(1), pp.139–158.

Chatzidakis, A. & Mitussis, D. (2007). Computer ethics and consumer ethics: the impact of the internet on consumers' ethical decision-making process. *Journal of Consumer Behaviour*, 6(5), pp.305–320

Cho, Y-N., Thyroff, A., Rapert, M. I., Park, S-Y. & Lee, H. J. (2013). To be or not to be green: Exploring individualism and collectivism as antecedents of environmental behaviour. *Journal of Business Research*, 66 (8), pp. 1052–1059.

de Valck, K., van Bruggen, G. H. & Wierenga, B. (2009). Virtual communities: A marketing perspective. *Decision Support Systems,* 47(3), pp.185–203.

DeVincenzo, M. H. H. & Scammon, D. (2015). Principle-based consumption communities: Exploring the meanings derived from socially conscious consumption practices. *Journal of Public Policy and Marketing,* 34(2), pp.143–155.

Eriksson, P. & Kovalainen, A. (2015). *Qualitative Methods in Business Research*. Second Edition. London: SAGE Publications Ltd.

Etzioni, A & Etzioni, O. (1999). Face-to-Face and Computer-Mediated Communities, A Comparative Analysis. *The Information Society*, 15(4), pp.241–248.

Gummerus, J., Liljander, V. & Sihlman, R. (2017). Do Ethical Social Media Communities Pay Off? An Exploratory Study of the Ability of Facebook Ethical Communities to Strengthen Consumers' Ethical Consumption Behavior. *Journal of Business Ethics*, 144(3), pp.449-465.

Hajli, N. (2018). Ethical Environment in the Online Communities by Information Credibility: A Social Media Perspective. *Journal of Business Ethics*,149(4), pp.799-810.

Kozinets, R. V. (1999). E-Tribalized Marketing?: The Strategic Implications of Virtual Communities of Consumption. *European Management Journal*, 17(3), pp. 252–264.

Kozinets, R.V. (2002). The Field behind the Screen: Using Netnography for Marketing Research in Online Communities. *Journal of Marketing Research*, 39(1), pp.61–72.

Kozinets, R.V. (2015). *Netnography: redefined.* Second Edition. London: Sage Publications Ltd.

Li, X. (2011). Factors influencing the willingness to contribute information to online communities. *New media & society,* 13(2), pp. 279–296.

McMillan, D. & Chavis, D. M. (1986). Sense of Community: A Definition and Theory. *Journal of Community Psychology*, 14 (1), pp.6–23.

Närvänen, E., Kartastenpää, E & Kuusela, H. (2013). Online lifestyle consumption community dynamics: A practice-based analysis. *Journal of Consumer Behaviour*, 12(5), pp.358–369.

Pai, P. & Tsai, H-T. (2016). Reciprocity norms and information-sharing behavior in online consumption communities: An empirical investigation of antecedents and moderators. *Information & Management*, 53 (2016) 38–52.

Papaoikonomou, E., Ryan, G. & Ginieis, M. (2011). Towards a Holistic Approach of the Attitude Behaviour Gap in Ethical Consumer Behaviours: Empirical Evidence from Spain. *International Advances in Economic Research*, 17(1), pp.77–88.

Papaoikonomou, E. & Alarcón, A. (2017). Revisiting Consumer Empowerment: An Exploration of Ethical Consumption Communities. *Journal of Macromarketing*, 37(1), pp.40–56.

Papaoikonomou, E., Valverde, M., & Ryan, G. (2012). Articulating the meanings of collective experiences of ethical consumption. *Journal of business ethics*, 110(1), pp.15–32.

Shaw, D., Newholm, T. & Dickinson, R. (2006). Consumption as voting: an exploration of consumer empowerment. *European Journal of Marketing*, 40(9/10), pp.1049–1067.

Signori, S., & Forno, F. (2016). Closing the Attitude-Behaviour Gap: The case of Solidarity Purchase Groups. *Agriculture and Agricultural Science Procedia*, 8(2016), pp.475-481.

Solomon, M., Bamossy, G., Askegaard, S. & Hogg, M. (2013). *Consumer behaviour: a European perspective.* Fifth Edition. Harlow: Pearson Education.

Thomas, C.T., Price, L.L. & Schau, H.J. (2013). When Differences Unite: Resource Dependence in Heterogeneous Consumption Communities. *Journal of Consumer Research*, 39(5), pp.1010-1033.