The Use of Spice – *A Question of Russian Roulette*

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Abstract

The aim of this thesis was to get a deeper understanding for the experience of individuals using Spice. More specifically the study aimed to investigate how do these individuals reason and argue concerning their Spice use, how they describe social relationships and environment when using Spice and psychosocial experiences concerning their Spice use. Semi-structured interviews were held with six informants between 20-30 years of age. The theoretical framework for analysis was ecological system theory and labeling theory. The results showed that the use of Spice predominately was associated with negative physical and psychosocial side effect as well as with impaired well-being overall. The informants reported that Spice affected their social life negatively due to a declined connection to their family. Several withdrawal symptoms such as anxiety, shaking, vomiting, sweating as well as cognitive difficulties such as memory loss, trouble remembering and stuttering were reported. The results also showed that even today when the informants have quit using Spice some still experience difficulties such as troubles following in conversations, lack of self-confidence and anxiety concerning their physical and mental state.

Keywords

Synthetic cannabinoids, Spice use, designer drugs, research chemicals, labeling theory, ecological theory
Foreword

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Introduction

In Sweden it has been recognized, and it has also several times been brought up in media¹, that youth and young adults are the representative group in the consumption of Spice. The attention from media has also emphasized that the Spice use among youths is a constantly growing issue in Sweden. In one article², the police in Gävle express worries about that Spice use in the city have increased, as well as worries about that faulty knowledge about Spice are flourishing in the society. Another article³ brings up an individual case where Spice use has impacted severely on one young individual’s capacity to handle his life, even to an extent where his mum did not recognize him anymore. The topics the articles above touch upon are only a gleaning of what has been written about Spice in Sweden. Due to the increased attention from media about Spice as a social problem, the authors, who are students in international social work, want to find out more about Spice and its effects. Another reason to why Spice comes across as interesting to the authors is also because of the lack of research concerning Spice. The lack of research and low awareness about Spice concerns both physical and psychosocial effects, as well as the use of it in general (Gren, 2014).

The motivation for writing this thesis emerged from that one of the students had a field placement in The Regional Development Council of Gävleborg (FoU Välfärds Gävleborg). During this time she got into contact with researchers working on studies where individuals who had used drugs and their family members, were interviewed about what experiences they had from drug use. Further, the motivation for focusing on particularly Spice in this thesis also emerged due to an increased interest about the drug as an international phenomenon since it is bought and sold over the internet (Madras, 2012). One of the students also participated in a conference called “Cannabiskonferensen” arranged by The Regional Development Council of Gävleborg together with the community and country council of Gävleborg. At this conference Spice, as well as the subject of synthetic cannabinoids that is the active ingredient in Spice, was an overall central topic for discussion.

¹ http://arbetarbladet.se/nyheter/gavle/1.6161324-Spice-ett-allt-storre-problem
http://arbetarbladet.se/nyheter/gavle/1.7080582-kampanj-ska-visa-farorna-med-droger
http://www.aftonbladet.se/nyheter/article19433675.ab
² http://arbetarbladet.se/nyheter/gavle/1.4646900-gavlepolisen-vill-doda-myten-om-drogen-Spice
³ http://www.gd.se/Spice-forvandlade-markus
According to (Madras, 2012) the lack of research concerning the substances used in Spice, as well as the physical and mental symptoms/side effects a use of it can imply are obvious. Knowledge concerning the impacts of synthetic cannabinoid’s on human beings are highly dependent on the users own reports, stories and experiences (ibid.). Therefore, medical care carried out in hospitals and treatment centers relies on individuals’ willingness to share such information. Social work practices, as well as interventions, in providing adequate care to individuals who use Spice or have a desire to quit it, are dependent on professional social workers who have knowledge and understanding concerning Spice and its effects. To reach more knowledge, studies that strive to locate and collect information from former users of Spice are important because it gives the perspective of the user. Since the level of knowledge among professionals are still low, considering Spice’s long- and short-term effects, providing adequate care could be problematic.

This thesis is relevant to social work because of its relation to drug use, in this case the use of Spice, in our society. Since the use of Spice has increased among youths we as authors think that this highly involves social work practice, both in the work with preventing the use of drugs, as well as treatment for youth with dependence of drugs. Professionals in treatment centers and emergency care can then hopefully benefit from this study to gain more knowledge about how to recognize effects of Spice and characteristics of the use in general.

**Aim and research questions**

The aim of this thesis is to get a deeper understanding for the experience of individuals using Spice. To fulfill this aim, three research questions was formulated;

1. How do these individuals reason and argue concerning their Spice use?
2. How do these individuals describe their social relationships and environment when using Spice?
3. Which physical and psychosocial experiences do these individuals have concerning their Spice use?
Background

It is important to understand the complexity, which surrounds Spice when it comes to its emergence, chemical settings and legislation. This section aims to give the reader an understanding about what Spice is, both as a social problem and as a substance. The background chapter will be presented through four different sub-sections. The first section will examine what Spice is and why it has become a social problem. The second section aims to explain the different reasons to why the effects and side effects from Spice are not fully explored. The third section will provide information about the current legislation concerning Spice and the difficulties that permeate it.

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA, 2009) conducted a survey named "Understanding the Spice phenomenon". The material was conducted from 30 different countries with the aim to identify in which countries Spice existed. 21 out of 30 countries reported that Spice were existent in their country (EMCDDA, 2009). Sweden was one of these countries (ibid.).

Cannabinoids

All Cannabinoids belongs to the same family of compounds, though they have some distinct differences. According to Vardakou (2010) cannabinoids can be defined and identified based on their origin and how they are produced. The variety of cannabinoids as various compounds does also have different impacts on the human body (ibid.). As Vardakou (2010) explain, cannabinoids can be identified by considering their origin, which also classify them into three different groups; Phytocannabinoids, Endocannabinoids and Synthetic cannabinoids (ibid.) Phytocannabinoids is the cannabinoids that is found in the smoke from the cannabis plant when burned. This is also the cannabinoids that is normally referred to as “cannabis” or “marijuana” (Vardakou, 2010). In contrast to Phytocannabinoids, Endocannabinoids is a part of our everyday life. This category of cannabinoids functions as “lipid messengers” and is produced naturally in the human body (Vardakou, 2010). Synthetic cannabinoids are the last group of cannabinoids, which will also be focused mostly upon in this thesis due to that it is the active ingredient in Spice (ibid.). Vardakou (2010) states that
Synthetic cannabinoids and Phytocannabinoids affect the same receptors in the brain; however, synthetic cannabinoids target the receptors more effectively.

According to Musselman et al. (2014) synthetic cannabinoids are, as the name reveals, a variety of different cannabinoids. Approximately hundreds of synthetic cannabinoids have been engineered in the world (ibid.). Several of them have during later years been detected in Spice products4. However, in January of 2014 four new types5 were discovered at the market.

Some of the synthetic cannabinoids used in Spice, were initially developed for medical purposes (EMCDDA, 2009). Due to that clinical studies concerning these synthetic cannabinoids have been conducted, more knowledge about the effects and symptoms are documented about them (ibid.). Other synthetic cannabinoids, which some are added lately in Spice products, are less explored or not explored at all (Madras, 2012). In this thesis the group of cannabinoids, which comes from the plant Phytocannabinoids, will be referred to as “herbal cannabis” and synthetic cannabinoids will be referred to as “synthetic cannabis”.

**Designer drugs/Spice**

The use of synthetically produced drugs has increased tremendously during the last decade in Europe and research is lacking due to its quick spread on the market (Madras, 2012). The fast spread of Spice since it entered the market has been highly dependent on the way it is labeled and sold by the companies (ibid.). According to Griffiths et al. (2010) the websites, which sell Spice, often use exotic names for advertising their product in order to make it more attractive and appealing to youth. The Spice products have been advertised and marked as herbal mixes with various names, such as; ‘Spice Gold’ and ‘Spice Diamond’ (ibid.). Other names of products containing synthetic cannabinoids which falls into the category of Spice is; “Aroma”, “K2” and “Dream” (Madras, 2012).

Griffiths et al. (2010) claim that the rapid spread and the desire to buy this drug also relates to its low price. Synthetic drugs falls under the category of designer drugs and are chemically produced in laboratories. This comes with a faster and lower production cost, while herbal

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4 JWH-018, JWH-073, JWH-200, CP47–497 (Food And Drug administration, 2012)  
5 PB-22, 5F-PB-22.AB-FU-BINACA and ADB-PINACA (Drug enforcement Administration, 2014)
cannabis is grown naturally and demands more resources. This in turn affects the price at consumer level.

The purpose and main goal in the production of designer drugs is to create drugs similar to, but not identical with, “real” psychoactive drugs (Madras, 2012). The basic idea of such production is to overcome restrictive drug legislation (ibid.). Spice is to be found as one type of these designer drugs (Madras, 2012)

**Youth and Spice**

When it comes to the users of Spice, youth and young adults have mainly become the target group (Madras, 2012). One reason to why youth is a vulnerable group is that they are generally low-income takers. Apart from this, youth are an especially targeted group due to high accessibility, which relates to that Spice products can be bought legally through Internet (Madras, 2012). The reason to the continuing legal status of Spice will be explained in the following section. The Swedish Council for Information on Alcohol and Other Drugs (CAN) (2013) states that Spice is the most common “internet drug” among students in the 9th grade at high school and second year at college. According to CAN (2013) 2% of girls in the second year of college, as respectively to 5% of the boys that have tried Spice.

**Legislation**

As mentioned earlier, Spice is a collective name or branding of composure of synthetic cannabis, chemicals and herbs, of which several are unidentified (Madras, 2012). This composure is unfixed. It is difficult to get into detail of the exact components due to that they are under constant change (ibid.). According to Madras (2012) the chemical components within Spice are purposely and continually changed in order to avoid legislative measures. When the specific type of synthetic cannabis in a Spice product is classified as illegal it is replaced by a new, in which way a new drug is born. This makes it legal to possess or sell a Spice product without legal sanctions (Madras 2012). This could imply that consumers misperceive Spice as a less hazardous drug to their health than conventional “street drugs”, building on the truth that Spice is legal (ibid.). Madras (2012) states however, that because chemical composure in recent Spice is unresearched, it could imply the opposite of
consumers believes and in fact be more hazardous to health. Several of the chemicals, including synthetic cannabis, used in the Spice products have never been tested on human beings (Kathryn et al, 2012). It is thus impossible to know how the product will react inside the body and what effects and symptoms it may bring both long and short term (ibid.).

It is important to note that Spice is a branding and it is not possible to criminalize Spice itself (Madras, 2012). It is the active ingredients, which could be various synthetic cannabis, which can be criminalized (ibid.). Several of the synthetic cannabis used in different types of Spice have already been classified as illegal in Sweden. Other synthetic cannabis has been classified as goods that are hazardous to the health and can, therefore, be taken into possession by the police. These can then be destroyed but the person who possessed it cannot be convicted.

Although this legislation has taken place, several legal variations of the drug still exist at the market. As described in earlier section producers of Spice consistently change, modify and replace illegal active ingredients with legal components, which have as of yet not become classified as illegal substances (Madras, 2012). The fact that the active components constantly change also makes it difficult to test if a person is under the influence of Spice in urine samples (Madras, 2012). According to Madras (2012) there are tests for urine samples at the market which can detect older variations of Spice. However, this is not helpful because of the new generation of Spice that outcompete the old. Therefore it is not possible to detect all of the variations of chemical compounds, which exists at the market (Madras, 2012). As mentioned above technology for detecting new generations of Spice in urine are lacking (Madras, 2012). This implies that the work with Spice users is even harder. The fact that it is hard to test if a person is under the influence of Spice does also affect professionals at the hospital e.g. if individuals comes to the emergency room with an overdose it is hard to locate what substance the individual has in the system and therefore difficult to treat the symptoms. This is due to that urine sample of Spice can show negative though it is positive because technology for detection is lacking (Madras, 2012).

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6 Läkemedelsverkets föreskrifter (LVFS 2011:10) om förteckningar över narkotika samt Läkemedelsverkets föreskrifter (LVFS 2005:6) om upphävande av Läkemedelsverkets föreskrifter och allmänna råd (LVFS 1996:6) om kontroll av vissa kemiska ämnen som kan användas vid olaglig tillverkning av narkotika

7 Läkemedelsverkets föreskrifter (LVFS 2006:2) om upphävande av Läkemedelsverkets föreskrifter (LVFS 2005:7) om undantag från kravet på tillstånd enligt lagen (1999:42) om förbud mot vissa hälsofarliga varor
Soussan and Kjellgren (2014) clarify this misunderstanding by explaining that even if a drug or substance are legal to consume, or labeled as “legal highs” it does not automatically imply that it is harmless, though this is the interpretation a lot of youths do (ibid.). The difficulties concerning Spice is that it, compared to traditional drugs is hard to classify as illegal due to the exchange and manipulation of active substances in it. This implies that “legal” Spice is existent both in Sweden and international (Soussan and Kjellgren, 2014). Madras (2012) claims that even though some types of Spice are legal these can be, not only harmful but also more harmful than illegal Spice or other types of drugs like cannabis, ecstasy or amphetamine. The fact that some types of Spice are legal also entails that these cannot be seen in urine samples. Synthetic cannabinoids (e.g. JWH-018, JWH-073 or CP-47,497) have been discovered as the psychoactive component” in branding as e.g. Spice (Soussan and Kjellgren, 2014).
The effects of synthetic cannabis on humans are still to a large extent unexplored and no clinical research has been done on the long-term effects from Spice on the human body (Seely et al., 2012). Although some studies concerning Spice have been conducted, the majority only includes a limited amount of synthetic cannabis available on the market. An overview of these studies will be presented below.

Studies on effect and symptoms

Every-Palmer (2011) conducted an explorative study with the intention to explore the relationship between the active synthetic cannabinoid called JWH-018 and psychoses. JWH-018 is one of the first synthetic cannabinoid used in Spice (ibid.). Every-Palmer has explored the relationship between JWH-018 and psychotic symptoms and also to some extent researched the effects of JWH-018 on a psychiatric population. Semi-structured interviews where the focus on knowledge, own use and also how they thought the use of synthetic cannabis had affected individuals around them were central in the study. The interviews were conducted with 15 individuals who where residents in a forensic inpatient unit or waiting for placement in such a setting. All of the individuals who participated in the study suffered from serious mental illness. The result showed that all 15 of the participants were familiar with JWH-018 through a product called Aroma and 86% of them reported that they had tried it (Every-Palmer, 2011). The participants in the study emphasized the positive effects with the product by crediting its potent psycho activity, legality, availability, that it was not possible to detect from urine sample and emphasized that as a main reason for them to start using synthetic cannabis instead of herbal cannabis (ibid.). According to Every-Palmer (2011) most of the participants in the study reported that they belied that the product aroma was “safe” and “natural” to use. Anxiety and psychotic symptoms were common after use and 69% was experiencing symptoms consistent with psychotic relapse after smoking JWH-018 (ibid.). Three of the participants reported that their tolerance level was affected so that during the time they used the product they had to increase their intake for reaching the same feeling. Every-Palmer (2011) states that it seems likely that JWH-018 can precipitate psychoses in
vulnerable individuals and those individuals with risk factors for psychoses should be counseled against using synthetic cannabis.

Even though the study above concludes that the synthetic cannabinoids can precipitate psychoses in vulnerable individuals, it does not cover individuals overall experience from it. Bearing in mind that this thesis are conducted in Sweden and that the focus are at young adults and their physical, emotional and social experience of Spice, the study above does not present any information concerning these issues.

Due to synthetic cannabinoids rapidly emergence in different Spice products and that no human experiments have been conducted about what effects it could imply; Vandrey et al. (2011) conducted an anonymous internet-based survey. The participants in this survey where above 18 and the inclusion measures where that the participants at least once had tried Spice products. The survey questions focused on; “Reason for use”, “Beliefs about the content and safety” and “Ratings of direct and chronic effects”. Vandrey et al. (2011) states that the main reasons for use among the participants were curiosity, relaxation and a general appreciation for the effect of Spice. The result also showed that 30% of the participants stated that their main reason for using Spice was that they could reach intoxication without any legal sanctions by avoiding detection of the drug in urine sample (ibid.). In terms of how the participants considered Spice to be harmful or not, most of them considered that Spice were generally safe for human use. Some considered that there were a risk but believed that the risks and viewed the severity of potential harm to be low (Vandrey et al., 2011). On questions in the survey related to effects, 85% reported that the effects from Spice were similar to herbal cannabis. Most of the participants reported that their experience of Spice in general had been positive. Within this group of participants, 40% even so reported unwanted and negative effects such as headaches, anxiety, coughing, anger and sleep disturbance (ibid.). According to Vandrey et al. (2011) the quantity of Spice smoked did not have an effect on the level of negative experiences reported by the participants.
Studies conducted by observing a Swedish internet forum

Kjellgren et al. (2013) conducted a study in Sweden with the aim to explore how individuals experienced the intoxication from Spice. Kjellgren et al. studied a large internet forum in Sweden called flaskback.org. On Flashbacks internal search engine the search word trip report + Spice and intoxication report + Spice were used. Out of the identified posts, 40 were selected. The selected posts were the ones where Spice had been the only drug for use. The conducted study were based on the 40 reports posted from participants, where 37 of them where males and 3 of them females. The participants’ age were ranged between 15-26 years of age, however only about half of them had stated their age. Kjellgren et al. identified 7 themes about how Spice was regarded; “Spice as a social ritual”, “Social secretiveness”, “Intoxication remarks”, “Well being and elation”, “Altered perception of reality”, “Fears and coping” and “Unpleasant physical effects”. The result show that individuals participating in the study tend to smoke in their peer group as a social activity. For some the experience seemed to be a matter of, and symbol of, a special and non-ordinary experience. According to Kjellgren et al. (2013) it was due to the sense of belonging important to share the intoxication experience with peers. The participants had experienced the intoxication as powerful with both negative and positive effects. The positive effects concerned changes of perception in both time and mind. The changes in perception did also affect their perception of the body and this in particular tended not to be one positive effect. Kjellgren et al. (2013) states that this effect produced laugh among the participants and were described as an interesting and thrilling feeling. The changes of perception of the body, certainly the arms and legs tended to be related in general to euphoric and pleasant feelings (ibid.). In the study by Kjellgren et al. it is argues that the unpleasant and negative experiences from Spice were related to both the participants’ psychological and physiological well-being. The physiological negative effects mentioned in the main result were; vomiting, heart palpitation, headache and muscle pain, coughing, hunger and thirst (Kjellgren et al., 2013). The psychological negative effects do also tend to be the feeling of “losing the reality” (ibid.). According to Kjellgren et al. (2013) the participants described this feeling as overwhelming and that it often triggered panic attacks. Some participant also reported an imminent fear of death and due to that the negative
side effects were at times were unbearable. The negative side effects as well as the intoxication from synthetic cannabis were reported to be more powerful than herbal cannabis.

Soussan and Kjellgren (2014) conducted a study, which aimed to investigate individuals’ experiences about negative side effects caused by Spice. The data collection took place at the large internet forum, flashback.org. In total 254 anonymous users at the online discussion forum participated in the study. The result was in this study presented through 617 coded elements of data about what negative side effects the 254 users had experienced from when they had used Spice. These elements were later on translated and fitted into three themes; "Adverse reactions during acute intoxication", "Hangover the day after intoxication", "Dependency and withdrawal after long term use". As well as previous study the participants reported fear and anxiety as well as abnormal rapid heartbeat. Soussan and Kjellgren (2014) claims that the reported negative side effects from intoxication from Spice in this study agree well with reported case studies on the subject. The withdrawal symptoms were described as shaking, sweating and even insomnia in some cases (ibid.). A long-term use of Spice did according to Soussan and Kjellgren (2014) result in that the participants ended up in a strong dependence on the drug and became powerless to resist it. Many of the participants experienced restlessness, slight shakings and an urge for more drugs when being without for too long. The short- and long term memory were also negatively affected after a long-term use of Spice.

**Case studies**

Negative experiences associated with the use of Spice products have also been observed in other studies. These are primary case studies conducted in treatment centers or in hospitals. Schneir et al. (2011) conducted a case study focusing on 2 female patients who applies in the emergency department. The two women stated that they recreationally used Spice products by smoking them daily. Approximately 90 minutes after smoking this time which relates to the case study the both females was brought to the emergency room after call 911. The reasons were that after smoking the women started to feel disoriented (Schneir et al., 2011). One of the patients reported feeling anxious and experienced heart palpitations but when she arrived at the emergency room she stated that her symptoms were resolving (ibid.). The other woman, who were the younger of them, stated that she felt psychotic but with no further
information given (Schneir et al., 2011). Her primary complaint was that she felt anxious (ibid.) Relevant research about acute toxicity related to consumption of the active ingredient in Spice products; synthetic cannabis are available in some extent. Hermanns-Clausen et al. (2012) conducted a study with clinical laboratory findings related directly to the consumption of synthetic cannabis. The aim of this study was to characterize the acute intoxication experienced by individuals applying for emergency treatment after consumption of synthetic cannabis. The patients were selected from a database in accordance with some inclusion criteria. Individuals who had documented hospitalization, clinical report and documentation verifying the uptake of synthetic cannabis during the examination was included in the study. According to Hermanns-Clausen et al., (2012) the most common effects reported were; vomiting, tachycardia, agitation, hallucinations, and hypertension. Several cases of myoclonus, chest pain, seizures and acute psychoses were also observed (ibid.). According to Hermanns-Clause et al. (2012) several of the findings are as well typical symptoms associated with the use of herbal cannabis in high doses. The symptoms in this study which appeared to be characteristics of intoxication from particularly synthetic cannabis were; agitation, seizures, hypertension and vomiting (ibid.)
Theoretical framework

Ecological systems theory

One of the two theories that are applied in this thesis is Urie Bronfenbrenner’s ecological system theory. Bronfenbrenner’s ecological system theory consists of “five environmental systems, which interacts and shape development and behavior” (Parrish, 2010, p. 205).

“Ecological model include an evolving body of theory and research concerned with the process and conditions that govern the lifelong course of human development in the actual environments in which human beings live (Bronfenbrenner, 1994).”

According to Parrish (2010), one could explain the systems of the theory metaphorically as the different layers of a ‘Russian doll’. These systems aim to explain the individual through the interaction in the environment around him or her. Different components of the system are examined to understand the direct and indirect effects in the life of the individual; The Micro (family and friends): Meso (school, work or other settings directly relating to the individual): Exo (school boards, job policies) and the Macro system (the influences of national and global setting). The ecological systems theory seeks to interpret and understand the origin of a certain behavior by examining influential factors around the individual. Parrish (2010, p.205) states: “All of these systems function interactively to influence a person’s development and behavior across the lifespan”. According to this theory, the relation between development, environment and behavior are therefore connected within the same system and perceptions of reality. In this thesis, the theory will be used to view the individuals use of Spice out of prominent factors in his or hers individual system.

Labeling theory

Ecological systems theory aims to provide an understanding for the individual function in relation to various parts of a system (Parrish, 2010). Labeling theory refers to an individual’s self-identity and behavior as determined or influenced by social norms (Giddens, 2013). These are then used to describe or classify behavior as deviant or non-deviant. Non-deviant behavior refers to following current social norms, whereas deviant behavior is seen as breaching those (Giddens, 2013).
The concept of deviant behaviors, theorists describe as a product of processes of interaction between deviant individuals and non-deviant individuals (Giddens, 2013). Becker (as referred to in Giddens, 2013) explains the deviant behavior as something dependent on the context. Becker means that a deviant behavior alone does not imply that the individual automatically will be “labeled”. The process of labeling is dependent on several factors, such as the time and setting where the behavior is displayed (Giddens, 2013). A holistic view of behavior and the particular circumstances for individuals is therefore an important notion for labeling theory (Ibid.).

Labeling of individuals does not just affect how some are perceived by others; it also affects the individuals’ self-identity (Giddens, 2013). Lemert (as referred to in Giddens, 2013) developed a model which helps to understand how a deviant behavior can coexist with an individual’s self-identity. A primary and secondary deviance is described to explain this phenomenon. Everyone commits acts of primary deviance, but rarely connect this to their self-identity (Giddens, 2013). Secondary deviance, however, refers to when primary deviance becomes viewed by the individual as normal behavior (such as through repeatedly committing acts of criminality) (ibid.). Secondary deviance behavior is generally considered abnormal, for which reason the individuals that displays secondary deviance behavior become labeled. This label reinforces the actions of the individual to be carried out accordingly to the expected deviant behavior. Others perception of the individual’s behavior in this way creates an internalization-process of deviant behavior by the individual (e.g. continually commit crimes). This then becomes a central part of self-identity. Giddens, 2013) states that the labeled person or groups status can overshadow other status indicators, which could lead to a continuous deviant behavior. Being in prison or other controlling institutions in the society that exists to prevent deviant behavior instead could instead increase it (Giddens, 2013).

Labeling theory is applied in this thesis because it can describe and create an understanding for the situation of the informants. Labeling theory seeks to analyze how they view themselves and how they perceive that others view them as Spice users. Exploring the informants’ sense of self-identity seeks to be one way of providing richer analysis of data in this sense.
Method

Research design
The explorative approach in this thesis was made due to that the purpose was not to test a hypothesis, but to take on a curious angle of discovering, capturing, analyzing and interpreting data. This thesis was conducted with a qualitative research approach. Semi-structured interviews were used to collect data and an interview guide was used with outlines of topics. Within these topics, some major questions were posed as guidelines in the interview-guide. Kvale & Brinkman (2009) states that semi-structured interviews provide both authors and informants the possibility to communicate more freely, without deterring from the research topics. Social constructivism perspective was used throughout this thesis. Social constructivism is one of several ways of studying and viewing social problems (Giddens, 2013). The meaning of a phenomenon is, according to this view, created through social interactions (ibid.). In this thesis the perspective of social constructivism was used to understand the meaning of Spice use as a social problem as well as to understand if, how and in what way, Spice could be defined as a social challenge for the informants in this thesis.

Procedure

Choice of previous literature and scientific articles
“Google scholar”, “Discovery” and “MedPub” were used to collect literature and develop knowledge about background and previous research on the topic. In order to find relevant articles and studies the used search words were; “Spice”, “synthetic cannabinoid”, “designer drugs”, “Research chemicals”, “herbal blends” and “Spice legislation”. The encountered difficulties were to find explorative studies based on individual experiences.
Selection of interviewees

For the selection process, strategic sampling was used. A contact person within a youth care center, were found through a personal contact at The Regional Development Council of Gävleborg (FoU Välfärd Gävleborg). Further, the snowball-method for sampling was used for finding informants, since the contacts of the treatment center for youth were limited. An email with information about the study was sent to the contact person at the treatment center (see appendix 1), which was forwarded to clients with former experience of Spice. The contact person was also involved in the process of sampling, as some suggestions for informants were made, based on the appropriateness for participating in this study. The inclusion criteria were that the informant had to be over eighteen years old and had used Spice more than once. These criterions were presented to the contact person. The contact person then forwarded communication details for those who had shown an interest to participate, to the researchers. Gender was taken into consideration in the search for informants, and an even number of women and men were interviewed.

Research process and data collection

Five semi-structured interviews were conducted with totally six participants in total (three men and three women). The interviews were focused and formulated in accordance to certain topics of an interview guide (see appendix 2). The interviews lasted between 45-60 minutes. Four face-to-face interviews were conducted, where one of the interviews had two informants present. The face-to-face interviews took place in one of the authors’ home since it provided a comfortable and inviting environment. One interview took place over the phone. After the interview all informants accepted to be contacted again for additional information or clarifications. In the end of every interview the guide was given a glance to ensure that every aspect had been covered. Each interview was recorded and then transcribed to facilitate the handling of the results. These were then read separately and further on discussed to start the procedure of analysis. Patton (2001) discusses as well the importance of staying focused as a researcher during the interviews but how this also impairs the process towards high-quality
Tools of analysis

What model to use for analyzing the collected data is highly dependent of the aim and the topic of the investigation (Kvale & Brinkman, 2009). As the topic of this thesis was to investigate what knowledge and experience individuals had of a specific subject, the result could be understood differently depending on the individuals’ upbringing, culture or social context. The process of analyzing were made to keep a relativistic view. Kvale and Brinkman (2009) states that, in opposite to positivism where there are limited ways of analyzing data, a relativistic view can shed light over several perspectives and ways of looking at a phenomena, in this case; the use of Spice. The result was processed and read separately by the two authors. An analyst triangulation can in this way be argued to have been made, as two perspectives were combined and compared to reveal differences in the interpretation of data (Patton, 2001). The result was presented and simultaneously analyzed with earlier research, as well as discussed in relation to Ecological system theory and Labeling theory.

Credibility

Validity and reliability

For this thesis, validity and reliability were considered throughout the entire research process, in the collection of data, as well as during the analytical process.

According to Kvale and Brinkman (2009) validity is “the strength and soundness of a statement” (p. 327). To strengthen the validity of a study, the research area that is under study should answer the research questions to the extent possible (Kvale & Brinkman, 2009). Validity is therefore to measure what you are intended to measure in a study. Reliability
concerns the trustworthiness of a study (ibid.). Kvale and Brinkman also emphasize reflexive objectivity with regard to these concepts. Objectiveness thus leads to the reflection upon production of knowledge. A professional standard can in this way be acquired and the researchers obtain the possibility to return to the area of data collection for additional scopes of knowledge (ibid.). Seven stages of procedure were used throughout this thesis: thematizing, designing, interviewing, transcribing, analyzing, validating and reporting, Kvale and Brinkman (2009) states that these stages aim to strengthen and enhance the validity. The researcher’s personal qualities concerning moral and ethical reasoning is highly influential when it comes to questioning, checking and theorizing throughout the research process. To enhance validation these qualities should be present in each of these different stages (Kvale & Brinkmann, 2009).

Avoiding leading questions and steer clear from subjectiveness have been a way for enhancing credibility in this thesis. Any interference in the informants’ answers has aimed to stay of a minimum. The reliability and validity of this thesis is also enhanced by using quotations by the informants in the result section. It should be noted however, that the interviews were conducted in Swedish and have been translated when transcribed. The quotations may therefore lack some nuances from the original language.

**Ethical considerations**

When conducting research there are several ethical research principles that need to be considered. Patton (2001, p. 405) states; “The purpose of a research interview is first and foremost to gather data, not change people” The sensitivity for the individual’s overall well-being should be taken into consideration. It should, however, not limit the researcher from going into depth of data that may be sensitive for the informant to approach.

The Swedish Research Council (Vetenskapsrådet, 2002) states two main ethical principles; research requirement and individual research requirement. The main themes of these principals regard to improve and deepen methods that still protect the individual when it comes to physical or mental harm, humiliation or violations. Anticipated contribution in knowledge versus negative risks and consequences for participants is always weighed against
each other (ibid.). Kvale and Brinkmann (2009) discuss conducting research with regard to the advantage for the society, versus the participant’s integrity. A balance between the two is necessary in this sense, as it may be an ethical dilemma in some cases.

**Research requirements of the Swedish Research Council**

**Information**

Information regards the right to information for the participants about the study and its purpose. In this thesis an email with information about the study was sent to the contact person at the treatment center, which was forwarded to potential informants with former experience of using Spice. The informants were also given a brief introduction before the interview about the research, its purpose and why they could contribute.

**Informed consent**

Informed consent support the individuals’ right to decide over his or her participation. To reach this ethical requirement the participants were given the information about the voluntary participation in this thesis and the possibility to withdraw from the interview at any stage of the research process.

**Confidentiality**

The informants were protected by rights of confidentiality. This refers to the protection of personal information and integrity. The informants were assured that they would not be exposed by any factors of recognition in the research, or other aspects that could be connected to them personally.

**Dissemination**

Dissemination concerns how information collected in research are to be used only in the purpose of research. This information was shared with the participants, as well as information about that recorded interviews should be deleted when the research was finished.
Result/Analysis

The aim of this thesis was to capture individuals’ stories and experience concerning their use of Spice. After processing the interview material, it has come across as inaccurate to present the result through themes related directly to the three research questions. This since it would have limited the possibility to create a nuanced understanding for the extensiveness in which the informants’ attitudes, ideas and experiences, tend to change and develop over time. The research questions of this thesis aimed to provide an insight in individuals physical, psychosocial, and social experiences relating to their use of Spice, as well as how the informants reasoned and argued concerning their use of Spice. In order to capture the essence of this it was concluded that a superior way of presenting the result was to incorporate the influence and let the research questions pervade throughout the whole result section. The three research questions will be covered in the overarching themes: “Debut”, “Use” and “Discontinue”. These themes were created in line with the questions formulated in the interview guide. Sub-themes were formed in relation to the overarching themes in order to make the participants asserting as descriptive as possible, but also to raise recurrent subjects mentioned in the interviews. After each theme a brief conclusion will be given with the intention to correspond more clearly and accurately with the three research questions.

The interviews were conducted with totally 6 individuals, three women and three men between 20-30 years of age. All of the individuals claim that they today have quit smoking Spice. Due to confidentiality and anonymity of the informants, detailed information about them and their personal life will not be given. The informants’ gender and age are presented together with a letter which further on will be used as reference when quoting in the text.

A. Man 30 years old
B. Woman 23 years old
C. Woman 24 years old
D. Woman 21 years old
E. Man 21 years old
F. Man 22 years old
The result will be presented by three overarching themes covering several sub-themes. The first theme “Debut” will include: “Low and Faulty knowledge concerning Spice”, “Intoxication”, “Peer-pressure and persuasion”, “Repressing unwanted feelings” and later on “The legal Spice”. The second theme “Use” are divided into four different subthemes: “Family and friends”, “Tolerance level”, “Anxiety and anti-social behavior”, “Cognitive difficulties: shuttering and memory loss”. The final theme named “Discontinue” will include two sub themes: “Difficult withdrawal symptoms” and “Self-confidence and emotions”.

The first theme: “Debut”

This theme will include descriptions of what the informant’s claim they knew about Spice before they got in contact with it. It will also cover their personal ideas about Spice the first time they used it, as well as how they reasoned and argued concerning Spice use before and during the first time they tried. The theme covers five different sub-themes, which has arisen within the interview material. These sub-themes aims to provide a nuanced picture of the informant’s different experience of Spice and how they reasoned at the time Spice came into their life. The sub-themes read as follows: “Low and faulty knowledge concerning Spice”, “Intoxication”, “Peer-pressure and persuasion”, “Repressing unwanted feelings” and finally “The legal Spice”.

Low and faulty knowledge concerning Spice

When the informants were asked to tell about what they knew about Spice before they got in contact with it the first time, it turned out that their levels of pre-knowledge were different. Earlier research has shown that the knowledge first time users have about Spice and its effects could be considered as low. Every-Palmer (2011) states that a common feature among first time users of Spice is the idea of it to be safe and natural to use. Most of the informants in this thesis shared this view. Some had been told by friends that Spice was exactly like cannabis while others did not know much about it at all.

Some of the informants did not care about what Spice really was so they were not even eager to find out. The informants overall claimed that the level of information they possesses today are substantially higher than the information they had when they started to use Spice. Some
informants tell that they have received professional help to quit Spice and have through that today substantially more information about it. Others have become increasingly interested in finding out more about Spice themselves and therefore possess a higher level of knowledge today compared to what they had the first time they tried Spice. Some informants’ stated that they wish that they had had more information and knowledge about Spice before they tried because they did not have a clue about how it could affect them. Informant F reasoned:

*I have started to read now on the internet, I have read about people who has quitted and how they have felt during the time, what problems they have and stuff like that, I guess it was then I started to open my eyes and understand how dangerous it really is.*

Several of the informants expressed that they had very little or no knowledge at all before they tried Spice the first time. Furthermore, the informants today, after quitting, consider that the little information they had before they tried was completely faulty given the experiences they have related to Spice. Informant E stated:

*I didn’t know a shit! Someone told me it was the same as the weed but synthetic, apparently it wasn’t so.*

When the informants were asked to talk about the first time they tried Spice, some of them had experience of smoking Spice in earlier years without ending up in dependence to it. These informants had smoked Spice a few times in the years of 2007 and 2008. The experience among them who came in contact with the “old” Spice differs from what they have experienced from the Spice existent today. This regards both the potency of Spice and how it is prepared. The informants claim that when Spice was ordered from the Internet in earlier years it arrived as an herbal mix which was ready to be smoked when it arrived. The informants claim that this today has changed. Informant B stated:

*It is a complete other thing! Today when you order Spice it comes as a powder…then you mix it yourself with tobacco…and with acetone of course in order to make it stick.*

The potency of today’s Spice was a common feature that according to the informants has changed and in recent years become more potent. The informants also claimed that the effects they had experienced when smoking Spice some years ago also were more common with herbal cannabis than today’s Spice. When the informants explained this in terms of how the rush felt and how they experienced the difference between the “old” Spice and the “new”, the
informants stated that the rush was more humble in earlier years compared with the rush Spice gave them this time. Informant C stated:

*When Spice came several years ago I tried some times when I was around sixteen or seventeen but it is absolutely not the same Spice as today.*

**Intoxication**

When the informants were asked to describe how the intoxication could feel from Spice, many of them gave descriptive explanations and also made comparisons with natural cannabis, which could be considered obvious, given that they have used natural cannabis in the past. Vandrey et al. (2011) states that the intoxication from Spice is quite similar to herbal cannabis. According to their study most of the participants reported that they had experienced a rush similar to the one from herbal cannabis and that their general opinion was positive to the effects of Spice. However as much as 40 percent of the individuals who reported the intoxication to be positive also reported unwanted and negative effects (Vandrey et al., 2011). In this thesis all the informants experienced the Spice intoxication as more powerful than the one from herbal cannabis. Effects that are mentioned in relation to a “positive” intoxication are: vivid brain activity and a sense of being stronger as well as having a better self-confidence and being invincible. Informant B reasons:

*Spice makes you hard, you become unemotional and you get an endurance...I don’t know how to explain it; you become strong and gets the courage to do things.*

The informants’ reasoned about the differences and similarities between herbal cannabis and Spice in a sense that the intensity of the intoxication from natural cannabis in comparisons with Spice was ridiculous. The informants claim that the intoxication from Spice leaves faster but are way more potent and intense than herbal cannabis. Informant C reasons:

*That kick doesn’t give you anything after you have had these very strong kicks.*

Some of the informants felt split when considering what the intoxication from Spice gave them. Though they liked the psychological effects, like the sense of being invincible, they did
not always find the physical rush as pleasant because it involved negative physical experiences such as numbness in the arms and legs, nausea and vomiting. Informant B reasoned:

*I can tell you that...I was in love with Spice! The rush was disgusting but even so I loved it!*

The physical experiences that most of the informants experienced as negative and unpleasant concerned a feeling of numbness in the body. The feeling of numbness has been observed in previous studies and is referred to as changes in perception of time, mind and body. Kjellgren et al. (2013) explain the changes of perception of the body as something individuals mostly appreciate a lot with Spice. Often this state is used for laughter in the peer group and seen as something funny (ibid.). However Kjellgren et al. (2013) argues that even though some individuals perceive this state as thrilling and interesting other considers it to be uncomfortable and scary. Most of the informants experienced the intoxication to be similar as the one from herbal cannabis but with a distinct difference in potency and intensity of the rush. Informant A argued:

*The rush is the same as the one from cannabis, but shorter and more intense.*

Hermanns-Clausen et al. (2012) state that the most common effects reported from individuals who had used products like Spice containing synthetic cannabis were; vomiting, tachycardia, agitation, hallucinations, and hypertension. Several cases of myoclonus, chest pain, seizures and acute psychoses were also observed (ibid.). According to Hermanns-Clause et al. (2012) several of the findings are as well typical symptoms associated with the use of herbal cannabis in high doses. However even if research has shown that herbal cannabis and Spice has a lot in common some distinctive symptoms has been documented in relation to synthetic cannabis, e.g. Spice. Hermanns-Clausen et al. (2012) claims that it appears to be characteristics of intoxication from particularly synthetic cannabis e.g.; Spice, where agitation, seizures, hypertension and vomiting are present (ibid.)
Peer pressure and persuasion

When the informants were asked to tell about how it happened that they started to smoke Spice it appeared in the interviews that peer pressure and persuasion were for some of the underlying reasons to why they started to smoke Spice. The perception of what peer pressure is and how it is defined tended to differ between the informants. Some experienced peer pressure as something presents in their debut due to that their social circle was using Spice. Kjellgren et al. (2013) states that the social environment does play a major role in the use of Spice. The procedure of smoking could be viewed as social activity where it seems important for the individuals who smoke to share the experience of a non-ordinary process (ibid.). However in this thesis this does not tend to be the case in relation to the debut. When the informants shared their reasoning this was not asserted to as a primary reason for starting to use Spice, however this does not exclude the understanding of smoking as a social activity in a continuously and future use. Most of the informant reasoned about their social environment in terms of peer pressure and persuasion. Not only by the reason that their peers tried to pursue them but also that Spice were used in the social circle and therefore the informants felt a desire to have what they had. Others viewed peer-pressure, when they tried Spice the first times, as something more subjective, subjective in that way that one or several individuals tried to convince the informant to try. Informant D whose boyfriend persuaded her and told her that Spice was exactly like cannabis and totally harmless continued to persuade her even after she tried Spice the first time and felt sick from it. Informant D argued:

He continued to convince me and said stuff like it was just because you were drunk the last time. Eventually he succeeded with his persuasion and I tried again. I did not want to feel outside... there is a lot of peer pressure. I guess I was easy to manipulate...

In difference from informant D who talked about the peer-pressure in terms of feeling outside, having a sense of being manipulated and also was talked into trying the first time, informant C seems to emphasize the closeness to Spice through the peer-group and a desire to escape her feelings and thoughts. Informant C explained that she had friends who were smoking cannabis. She lived together with a person who smoked Spice and it was around her all the time. During this time she went through an emotional chaos due to personal problems
and she gives a picture of that it was a mix of some kind of peer pressure and the fact that she had her friends around her who smoked all the time. Informant C explained it like this:

*It became some kind of peer pressure...they were around me so close...all the time. Even in my own home. I saw them and thought that it would feel good to be as stoned as them. If you don't want to think and feel you are fishing for everything that makes you stops doing just that.*

The informant described her emotional instability as a vulnerable situation for her to be in. Together with the closeness to Spice she stated that this was two important factors which contributed to that she first started to smoke.

**Repressing unwanted feelings**

It was observed by the authors that several of the informants claimed that Spice helped them to overcome their emotional instability by repressing their unwanted feelings. Most of them claimed that this was one of the main reasons for them to continue to use. It has not been possible to find any earlier research on the area that point into the same direction. However this could be substantial to assimilate this understanding. Two of the informants have given a quite similar view on what Spice brought to their emotional life. Even though it is similar and do fit in under the same sub theme some differences do also exist. Both informants revealed that they were having personal problems at that time and due to that experienced a terrible well-being during the time they got in contact and with Spice the first time. Both were related to relationships and heartbreak but in different ways. The informants claim that Spice helped them to overcome the emotional instability and sadness they experienced at that time. Informant C explained it like this:

*You become so numb, you don’t feel anything and you don’t think anything...I did not have one single feeling in my body. I wasn’t angry or sad...all feelings I normally should have felt in a situation like this just disappeared when I smoked.*
The most prominent in this story is that Spice took away the unpleasant feelings that Informant C normally should have felt and also did feel before she started to smoke Spice. Informant B had a similar explanation on how it affected her feelings:

\[\text{Spice made me emotionally cold so I could just let go of everything... I didn’t care about anything and it felt good for me to be able to be so emotional cold... Spice helped me to move on...}\]

Due to this the informants claimed that it made it easier to continuing using Spice than quitting it. They knew that if they would quit they would have to handle the emotional instability they were in. How they acted in order to overcome this emotional state was dependent on their desire to escape their feelings. Even though their statements are very similar, informant B reason about how she felt after she has smoked Spice differs from informant C. They share the experience that Spice erased the heavy feelings they had and by that helped them to let go and move on with their life. When continuing the interview with informant B, she added to her sentence:

\[\text{I wasn’t sad that he had left. I became more cocky and got more attitude... it felt like I was ruling the world.}\]

Looking more closely it is possible to see that how they reason in terms of their first impression of Spice is that it helped them through their difficulties. Informant B says that it was the cockiness and the feeling of being “bigger” together with the fact that she escaped the hard feelings she had that helped her through the emotional crises while informant C emphasize that what helped her was that it took away her feelings. Furthermore some informants stated that the sense of being invincible e.g. ruling the world and also gaining more attitude resulted in that they became more aggressive and experienced as well as difficulties with controlling their aggressiveness. According to Soussan and Kjellgren (2014) intense mood swings between feelings of depression and aggression has been reported as symptoms from Spice use.
The “legal” Spice

When the informants were asked to tell about what reasons that possible could have underpin that they started to smoke Spice many different reasons were brought up. Some concerned that some informants in the past had experienced anxiety when they smoked herbal cannabis. The anxiety was related to the risk of being revealed due to positive urine sample. When they heard from friends that recent versions of Spice were not detectable through urine sample they choose to completely replace herbal cannabis with Spice. Informant A stated:

*I started to smoke Spice instead of smoking cannabis because I was convicted for driving under intoxication of cannabis. I was told that I should leave urine-samples and due to that I couldn’t smoke anything with THC in it. I came to think about Spice, which works almost the same except that you get a different rush.*

This reason has also been highlighted in other studies concerning Spice use. Vandrey et al. (2011) conducted a survey study where one of the most common reasons for the participants to smoke Spice was due to that could experience and enjoy the intoxication without any worries that it could be displayed at a urine sample. Furthermore most of the informants had been told by the peer-group that Spice was equal with herbal cannabis. This reasoning concerning Spice tended to be a common feature among the informants. Another common feature was that the informants had heard that it wasn’t illegal to use. The continuing legal status of Spice products are as explained in the background section, related to that components in the chemical settings continuously are changing, which result in that the legal system have difficulties keeping up with legislation. Informant D stated in the interview:

*I knew basically nothing about Spice, the only thing I knew was that it was legal to smoke...that’s what they had said to me...I don’t think they knew very much either the ones who told me...*

According to Every-Palmer (2011) the legal status of Spice products is one of the main reasons for starting to smoke Spice instead of herbal cannabis. In this thesis the informant’s experience of negative effects tended to fade in comparison with the idea of getting caught using herbal cannabis. Informant A reasoned that even though he had
felt negative consequences from Spice he would choose Spice before smoking herbal cannabis again due to the fear of legal measurements. Informant A argued:

*I have decided to never smoke THC again…I don’t have the power to go walk around and worry and feel the anxiety for getting caught.*

This reasoning relates to the informants state of well-being. The anxiousness and emotional turbulence that evokes related to potential legal measurement when smoking herbal cannabis tended to be more frightening than the risk of using Spice.

**Conclusion**

The way the informants reasoned and argued concerning their use of Spice in relation to their debut differs. Some reasoned in terms of that it was due to their emotional instability that they started and also continued to use Spice because it helped them to control unwanted and undesired feelings. Other stated that they did replace herbal cannabis with Spice in order to avoid legal measurement. Even though Spice had given undesired effects these tended to fade in comparison with the fear of getting caught. The informants argued that the overall level of knowledge they had when they first tried Spice was low and that the little knowledge they had were completely faulty. Several of the informants had heard that it was not illegal and therefore equated that with Spice being harmless.

The informants describe their social relationship with the peer group as an important factor when they started to use Spice. The emphasize lies on the peer-group of various reason. Some informants experienced that they were convinced and persuaded to try the first time while the reasons for continuing mostly focused on keeping the involvement and belongingness in the peer-group. Other informants stated that the main reason for that they started to use Spice was that it was daily existent in their social environment. A combination between having access to Spice and see how it relaxed other in the peer group and at the same time experience unwanted feelings some argues was the main reason for starting.

The informants described the intoxication from Spice to be more powerful than herbal cannabis, which all of them stated that they had tried earlier. Several of the informants compared Spice with herbal cannabis when it comes to the feeling of intoxication but all of
them stated that the rush was more intense and powerful than the one from herbal cannabis. The informants also stated that the rush from Spice tended to last shorter than the one from herbal cannabis. The physical and psychological effects that the informants had experienced as positive in relation to a “normal” rush from Spice were: enhanced self confidence, a sense of being stronger and invincible as well as a vivid brain activity. Some had also experienced unpleasant and negative effects such as nausea and a sense of numbness to arms and legs. However, important to note is that all the informants who had an experience of smoking Spice some years ago claimed that Spice back then were more similar to herbal cannabis that the Spice existent today are.

Theme two: "The use of Spice"

Theme two aims to give a deeper insight in how the informants describe their use of the drug. This theme is also intended to provide a wider understanding for the negative social, physical and psychological effects, reported by the informants. The informants’ way of reasoning and arguing concerning their own use are also included in this theme. During the process of analyzing the result four different sub themes has occurred: “Family and Friends”, “Tolerance level”, “Anxiety and Paranoia” and last “Cognitive Difficulties: Stuttering and Memory loss”.

Withdrawal from Family and Friends

When the informants were asked to tell about how their relations to family and friends looked like during the time they used Spice they reasoned about it in different ways. Several of the informants reasoned about how they along with the use of Spice also became more and more withdrawn from their families. Some of the informants did also withdraw from work or school. The informants’ withdrawn behavior towards their friends and family fundamentally seems to be of the same nature but how they reasoned about it tended to differ. Some informants tended to reason about their withdrawal from their family in terms of their guilty conscious. Though some informants became withdrawn from their family due to shame and guilt conscious other did not just have the mental power to meet them. Rather than spending time with family and friends some of the informants closed the door behind them and choose
to be alone. Other informants exclusively tended to only spend their time with the peer-group. One reason for that seems to be that the informants after a while lost the desire to spend time with other people due to the social pressure and that their family questioned the way they lived their lives. Informant E reasoned:

> Spice made me so tired, I didn’t have any power at all to meet my family for weeks and sometimes months passed by.

The lost desire to spend time with other people has been observed in earlier research. According to Soussan and Kjellgren (2014) experiences of feeling tired, uninspired and dull after intoxication from Spice are usual. Difficulties in engaging with other people in social settings such as school and a low motivation are also common (ibid.). Other than low motivation some informants argued that along with that their dependence to Spice increased their eagerness to keep as much Spice for themselves also increased. When the informants choose not to socialite with friends they did not have to share the Spice with someone. The desire to keep Spice for themselves tended to grow bigger than the desire to be social. Informant D argued:

> In the beginning I smoked because it gave me a feeling of belonging...later on I started to lie to be alone or to smoke with just one person more...the longer the time went the more selfish I became.

Spice has for one of the informants resulted in that he has not done the things he wished he had done. It has also affected his life because even everyday things like paying bills and other things he knew he had to do did not happen. He also reason about him being changed in terms of his own behavior. Informant A argues like this:

> The problem is that you procrastinate things and become a bit anti-social...you don’t become so chatty so to speak therefore you lock yourself in a bit.

Some informants had guilty conscious for neglecting their family. The guilty conscious tended to be most related to that they avoided contact and turned down telephone calls. Some
did also make excuses in order to avoid their family. Informant B had this explanation for her feeling guilt towards the family:

*My younger sister is three years old now... back then she was two. They don’t have a great memory at that age and I noticed that she became cautious towards me... my mum said she did not really recognize me anymore.*

Informant B claims that this did not make her want to quit Spice as one can believe. It could be described as a vicious circle where no matter what she chose she ended up feeling guilt towards her family. If she chose to meet her family she felt guilty because she knew that they understood that she smoked. And if she chose to not meet them she ended up with a sense of guilt for that. Informant B continued:

*The worst thing was that it wasn’t positive for me to hear, back then when I smoked that was only negative in my mind, it only made me feel more guilty and I smoked even more...*

As mentioned above some informants were withdrawn for periods and tried to “put on a face” and act normal when they met their family. Informant F describes it like this:

*I guess I thought it was normal to live a normal life and smoke so I tried to keep up the appearance.*

That the informants tried to put on a face in order to act normal in front of the family are relatively common in the interviews. For some of them it worked for quite a long time but eventually almost everyone talked to their families about their problems.

**Quickly increased tolerance level**

The most prominent experience among the informants was that they quickly had to increase the dose of Spice powder when they mixed it with tobacco, in order to reach the same level of intoxication. Every-Palmer (2011) argues that a long-term use of Spice entails that individuals need to increase the dose of intake in order to reach the same intoxication and same feelings associated with it. In this thesis for most informants the increase of intake was
not only associated with reaching the same feeling it was also related to an urge for more drugs. Informant F argues:

> It was fun for a few weeks, than it became a craving…after that it wasn’t fun it was only a pain in the ass.

However the tolerance level did not only depend on how long they had smoked Spice, it was also dependent on how often they smoked. Informants who claimed that they in relation to the debut immediately started to smoke several times a day drastically needed to increase their intake after a very short time of use. Informants who smoked less tended to experience that the tolerance level stayed almost the same during the time they used Spice. One informant who stated that he smoked sporadically sometimes at evenings and at weekends has the experience of that his Spice use did not affect him so much in that sense. He did not experience a drastic urge to increase his intake as other informants. Further, he also claims that he smoked Spice approximately 2,5 years before he started to sense negative consequences. Informant A states:

> I don’t know what people talk about…psychoses and stuff. I have not experienced it…it is not until now I have starting to feel that the Spice is messing with my brain.

However most of the informants experienced that they quickly had to increase the dose of Spice powder when they mixed it with tobacco, in order to reach the same level of intoxication. Several informants describe that towards the end they did not chase the rush anymore. The overall goal with smoking Spice was to keep the body working normally. This has been a common way of reasoning among several of the informants who claimed to smoke large quantities as well as more often. Informant E stated:

> After a while I started to feel sick when I didn’t smoke… I started to sweat…I became dizzy and felt sick to my stomach. This resulted in that I eventually had to smoke all days at least once per hour in order for my body to function normally.

Followed by a similar assertion from informant B:
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Exactly when it starts to tone out you get really anxious and you have to have more and more... eventually when you smoke you don’t even feel it... for some time when I had smoked a lot I did not even feel a rush but I have to have it in my body in order for it to function normally.

Some informants experienced that their bodies failed without adding Spice it resulted in that several of the informants was affected in their everyday-life if they did not smoke. Eventually, after a time they started to make up plans to make their life function as normal as possible. They reason about it in terms of that they were forced to do this in order to avoid feeling sick from the abstinence. Informant C who felt that Spice eventually ruled her world stated:

I had to plan all my life... okay if I smoke now 40 minutes before I go to the store... cause in 20 minutes it won’t be possible for other to see it on my eyes. Then I also have time to go back from the store without starting to feel sick... puh! It was so hard!

This is not the only way Spice ruled some of the informants' world, some other elements of planning in order to avoid feeling sick were also persistent. Some of the informants stated that they even had to smoke at night or else they would wake up feeling dizzy, having headache, and be sick to their stomach. In order to avoid this some of the informants told that they had to prepare joints before they went to bed. Informant D explained:

I always had some joints ready beside the bed, two or three of them, which I had prepared the night before. After a while it was not even possible to sleep more than an hour without waking up and feeling miserable, that I took a few puffs on the joint and it was back to normal again.

Those words, “back to normal again” were often used when the informants wanted to explain the feeling that they got after being without Spice too long followed by that they have smoked again. That the informants had to prepare joints before they went to bed are as well as “back to normal” a shared experience. Followed by a similar assertion from informant C:

When you don’t have it in you... I had to... before I went to bed I had to roll like five joints because I would wake up soaking wet from sweat. I had to smoke in order to go back to sleep again.
Some of the different physical symptoms that are mentioned by the informants when being without Spice are: dizziness, nausea, sweating, vomiting and stomach pain. One of the informants also tells about throwing up blood a few times in the end before she quit.

**Feelings of Anxiety and Paranoia**

Several of the informants experienced that they became more and more anxious the longer they had smoked. The terms that they reason about this anxiousness is that they became paranoid. Their anxiousness touched both upon concern and worries about their physical state as well as their mental state. Informant D argued:

> I thought I had deadly deceases like cancer all the time! I was really paranoid...I still am today but I often apply for medical care because I think something is wrong with me.

The anxiousness sprung from worries about their physical state tends to be due to worries about their physical ailments and for some of the informants this implied panic-attacks. According to Schneir et al. (2011) symptoms of anxiety, paranoia and psychotic nature are related to consumption of Synthetic cannabis e.g.; Spice. Hermanns-Clausen et al. (2012) argues that even hallucinations are possible to have during intoxication from the above-mentioned substances. In this thesis one informant had a feeling of being followed and argued that she also heard someone talking to her though she knew she were alone. She herself refers to this state as being paranoid. Several times this informant had experienced a feeling of being followed, which culminated in that she during the time she used Spice sometimes were questioning her own sanity. Even though she knew she were alone the impending feeling of being watched was there. Informant B stated:

> I was always looking over my shoulder, it felt like someone was behind me all the time, I saw shadows everywhere.

The anxiousness, which according to some of the informants arose from Spice concerned as mentioned both psychological and physiological parts. About their mental state, some reasoned as mentioned that they had lost their perception of reality. According to Kjellgren et al. (2013) several individuals have reported that they experience that they are “losing the reality” during intoxication. These feeling are often described as overwhelming and a trigger
for panic attacks (ibid.). However though some experience this feeling to be “too much” some tent to appreciate it and see it as entertaining (Kjellgren et al., 2013).

Cognitive difficulties: Stuttering and memory loss

Several of the informants participating in this thesis argued that they in different ways did experience cognitive failures and difficulties in various ways. For some of the informants the experienced cognitive difficulties even culminated in that they eventually took the initiative to stop smoking Spice. The cognitive difficulties which are experienced by the informants concerns their memory and also to some extent physical functions. According to Soussan and Kjellgren (2014) psychological side effects from Spice use are concentration difficulties and impaired short-term memory. This state has been referred to as an imminent feeling of being retarded and fragmented (ibid.). In this theses it is manifested by that the informants argues that Spice made it difficult to remember every-day things as well as trouble with remembering what are being said in conversations. Informant A, who claimed to smoke Spice only sometimes at evenings and weekends started after two years to experience this phenomenon. He argued:

It’s not bullshit what people says, I lose myself in conversations all the time, so when I speak with someone I can suddenly become blank and the subject we a second ago discussed went completely gone.

Other informants described that Spice not only affected their memory and attendance in the way described above. For some, normal tasks as remembering appointments or send in an important paper to the government became harder and harder to remember. To compensate for their bad memory some strategic planning in their life became necessary. Informant B argued:

Towards the end it had gone so bad that I had to have post-its with everything I should do in order to remember.

That all of the informants in some way had experienced that Spice effected their brain in some way are apparent and memory loss, forgetfulness, feelings of being absentminded and
just a sense of themselves being in a bubble are argued by the informants. One informant also argued that the Spice use gave her other cognitive difficulties. Informant B stated:

_{I noticed that Spice made me stuttering and made me not remember anything, my memory got so bad though I have been free from Spice for four months now but it sti{112} my body haven’t recovered._

Even though she as well as other had the feeling of being in a bubble and also had difficulties remembering things she claims that the hardest thing today is to accept is that her speech was affected and changed. The informant states that Spice made her stuttering, something she did not do before. However she hopes and believes that this gets better and better and has noticed some improvement since she have quit.

**Conclusion**

As the urge for Spice increased several informants’ experienced extensively more negative, unexpected and undesirable physical, psychological and psychosocial side-effects. A withdrawal from family was common among several of the informants. Some did withdraw due to a lack of power or interest to engage in social activities, other did withdraw due to shame or guilty conscious. The withdrawal from family members, which was due to guilt, did for some result in even more guilt rather than a disposal of it. Some of the informants did also withdraw from work or school. As the desire for Spice grew stronger several informants did rather choose to spend time with the peer group and distanced themselves from their family. Several of the informants reasoned in terms of that Spice eventually became more important to them than their family and friends. Some informants did eventually also withdraw from their peer-group due to that they did not want to share Spice with other but to keep as much as possible for themselves.

Anxiety and paranoia are some recurrent subjects which are being brought up by the informants. Some of the informants experienced that they became more and more anxious the longer they had smoked. The terms that several reasoned about this anxiousness was that they claimed that they became paranoid. Their anxiousness e.g. paranoia touched both upon concern and worries about their physical state as well as their mental state. Feelings of being followed were also brought up by the informants.
The most prominent experience among the informants was that they quickly became physical dependent on Spice and reasoned in terms of that they felt forced to smoke in order to avoid physical difficulties. Being without the drug too long result in several negative effects such as dizziness, nausea, sweating, vomiting and stomach pain. One of the informants also told that she had been throwing up blood in the end before she quit. Concerning the experiences of the rush gave them; several informants were telling that they quickly had to increase the dosage of Spice in order to reach the same physical and psychological “rush”. Eventually, later in the process, the informants reasoned about their smoking in terms of that they were forced to smoke in order to feel “normal”. The informants stated that before the focus had been to reach the same “rush” and claimed that the focus had shifted. Along with them increasing the intake this “rush” stopped coming. What happened was that smoking became a way of acting “normal” and to support the body to function. Several of the informants did smoke around the clock, even in the night. In order to avoid waking up dizzy, having headache, and feel sick to their stomach the informants tells that they had to prepare joints before they went to bed. The informants who smoked less also experienced less negative effects during the time they used Spice. Even so, all informants had experienced negative effects. Several of the informants Stated that Spice gave them several cognitive difficulties such as memory loss, difficulties in remembering, forgetfulness, feelings of being absentminded and just a sense of themselves being in a bubble. Also stuttering was mentioned by one informant as a negative consequence. The informants reasoned that the above mentioned undesirable effects made it impossible to maintain the use of Spice and continuing living their life.

Theme three: “Discontinue”

The overall idea with this theme named “Discontinue” is to provide the reader with the informants’ experiences from the time when they decided to stop smoking Spice. It also aims to give an insight in how the informants reasoned and thought at the time when they decided to quit. Their stories touch upon both the physical and the psychological difficulties it involved as well of descriptions of how they feel today after they have quit. The two sub-themes which have been analyzed within this theme will be presented below and reads as follows: “Difficult withdrawal symptoms” and “Self confidence and emotions”.
Difficult withdrawal symptoms

When the informants were asked how it was to stop smoking Spice it turned out that many of them had experiences of difficult withdrawal symptoms. The informants have described in detail how it was for them to quit and how they felt during the time. Their descriptions concern both their physical as well as their psychological experiences. What appeared from the interview material was that even if all informants had experienced some kind of symptoms accompanied with them discontinuing the use of Spice, they had experienced different symptoms by different levels of intensity. According to Soussan and Kjellgren (2014) shakings, dizziness and sweating has been reported as withdrawal symptoms caused by Spice. Other symptoms that have been observed are intense mood swings between feelings of depression and aggression. (ibid.).

Due to that all informants had experience of smoking herbal cannabis, some of them also had experience from when they quitted that, some comparisons were made. It appeared that the withdrawal symptoms that they had experienced when they quitted herbal cannabis really were not comparable with the one that they have had from Spice. Informant E argued:

*Cannabis was easy for me to quit, it was only to live through that week with sweating and stuff... I didn’t throw up and became as sick as I became when I quit spice.*

However this experience was not shared by all of the informants. Informant A claims that he had not felt the terrible abstinence, but he had heard other talk about it. Soussan and Kjellgren (2014) argue that the intensity and nature of withdrawal symptoms varies a lot. Characteristics of a long-term withdrawal are sweating, shaking, trouble tasting food and insomnia etc. (ibid.). It could be possible that informant A never felt this type of abstinence due to that he did smoked Spice mostly in the evening due to that he works a lot. It may be that his body did not reach the same level of dependence and because of that, never reached the same level of abstinence like other informants who had a lot of spare time and therefore stated that they smoked all day every day. He has not had any unpleasant feelings except from e few times when he had smoked too much. These times he had heavy sweating and
difficulties to sleep. Accept from these few times when he have smoked too much he
describes the intoxications he had as very similar to cannabis accept from the intensity.
According to Soussan and Kjellgren (2014) several individuals who have smoked intense for
several weeks or months experience a powerful dependence and withdrawal can imply
difficulties. Many experience restlessness, unease and an urge for more Spice, others have
more intense difficulties (ibid.) Informants who claimed that they had smoked every day
almost every hour tended to be the ones encountered the most difficult withdrawal when
quitting such as; vomiting, dizziness, difficulties to keep what they ate and drunk, difficulties
to sleep, rapid heartbeat and anxiousness. Some of them referred to as an event that were
extremely challenging for them. Informant B stated:

*I laid in my bed and had such a withdrawal that I just wanted to die... it was the only
ting in my mind, the only feeling I had in my body was that I wanted to die.*

Informant C also claimed to have experienced severe withdrawal symptoms when she chose
to quit Spice. Informant C stated:

*I just laid in bed for three weeks... I couldn’t eat I couldn’t sleep... all I wanted was to
smoke again because I knew it would take away everything.*

Soussan and Kjellgren (2014) state that also basic human functions such as appetite and sleep
disturbance have been reported as withdrawal symptoms. Shakings, dizziness and sweating
has also been reported as withdrawal symptoms caused by Spice, as well as mood swings,
depression and aggression (ibid.). Several informants experienced that their bodies failed
without Spice and experienced that the withdrawal were almost impossible to live through.

**Declined self-confidence and craving for sweets**

It appears that some of the informants struggle with a bad self-confidence due to various
reasons, which they conclude has to do with their usage of Spice. It has been said in the
interviews that for some of the informants Spice created a craving for sweets and they
experienced an urge for fast food. In other words Spice gave them “munchies” which mean
that the body is during or after intoxication craving sugar or food. According to Kjellgren et
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al. (2013) this is a central part in the intoxication. This phenomenon has also been
eXperienced by several of the informants for this thesis. The informants have the experience
that the cravings from Spice were really hard to resist. For these informants it resulted in a
fast weight gain. Due to the effects of Spice such as vomiting these informants also
experienced contradictory difficulties to eat, which resulted in fast weight loss for periods.
Such commuting between gain weight and weight loss has for some resulted in bodily
changes. Informant B stated:

Sometimes when I see myself in the mirror I ask myself what have I done… it is hard… I don’t
want to look at myself because I feel ugly.

Others expresses that they miss the self-confidence Spice gave them in the beginning when
they first started to use. Even though some argued that the self-confidence that Spice gave
them only were an illusion and not real, they tended to miss the feeling anyway. Informant E
stated:

Now when I have quit Spice I feel tricked, all the self-confidence Spice gave me are
completely gone… I often feel worthless and ugly.

It has earlier been explained in the result section that the informants claimed that Spice
affected their emotions during the time they used. Within the sub-theme “repressing
unwanted feelings” the most prominent feature was that Spice took away the unwanted
feelings, which was seen as something positive by the informants. Several argued that it has
also brought negative consequences in other areas afterwards when they have quit Spice.
Feelings of love for family members and joy for everyday things they enjoyed do became
reduced. Informant B argues:

I love them with all my heart but when I smoked Spice I was still happy when I saw them
but I didn’t have the same feelings I normally should have. Before my eyes became filled
with tears when I saw them laughing and playing but now I noticed that I was more
reserved.

Soussan and Kjellgren (2014) state that one of the more severe side effects caused by Spice is
that you become emotionally numb. Also feelings of being apathetic, dissociated and overall
disconnected from life could be experienced by users of Spice (ibid.). Several informant
argued that this is something that still affects them today even thought they have quit Spice. Not only that they still find it hard to reach their feelings but also that many things that they have suppressed while using Spice are coming up to surface now when they have quit.

Informant A reasons:

You don’t feel honest emotions... it took a month after I had quit before I started to feel anything...and there was a lot to feel then because I had locked them in for such a long time.

Conclusion

All informants accept one argued that the withdrawal symptoms from Spice were extremely challenging for them, both physical and psychological and therefore reasoned in terms of that it was not possible for them to continuing using Spice. Symptoms of which the informants associated with the withdrawal event were: vomiting, shakings, nausea, irritation, fast heart beating, sweating, trouble sleeping and an inability to keep what they ate. The informant who had not experienced these types of symptoms in relation to the discontinue of Spice stated that he did not have any unpleasant feelings from Spice except from a few times when he had smoked extensively throughout the whole evening. These times he experienced heavy sweating and difficulties to sleep.

Several informants stated that they after discontinuing Spice experienced that their self-confidence was negatively affected. Some of these informants reasoned in terms of that Spice had created an imaginary confidence, which disappeared when they quit. Others stated that they experienced that the cravings e.g. “munchies” from Spice had given them bodily changes, which they did not appreciate. Difficulties to eat and a desire for eat extremely resulted in fast weight gain and weight loss consequential ended up in these bodily changes. Some informants experienced as well emotional difficulties after discontinuing Spice. These informants stated that they today experience it hard to reach their feelings and enjoy everyday life as well as their appreciation for their social environment has become reduced.
Spice use in relation to Ecological system theory and Labeling theory

Ecological systems theory

Ecological systems theory is a broad theory and it can give an understanding and explain several phenomena in different contexts, as well as helping the reader to understand how different social systems and environmental components have affected the informant’s lives. This system can provide an overview how the systems components are connected and dependent as well as how they influence each other. Different parts of the system are included to understand the direct and indirect effects in the life of the individual; The Micro (individuals self-sense, family and friends), Meso (school, work or other settings directly relating to the individual), Exo (school boards, job policies) and the Macro system (the influences of national and global setting).

In order to understand the individual’s self sense it is important to acknowledge consequences, which are results from an act or a happening in the individual’s system. Several informants viewed the chemicals they had taken into their body as a negative consequence. This because they had lived through negative effects such as; withdrawn from family, anxiousness and cognitive difficulties. Furthermore, their self-sense were related to insecurity about how the intake of these chemicals possibly would affect them in the future.

In order to avoid legal measures, Spice is constantly under change. This has resulted in that substances never subjected to medical research now are fluid on the global market (Madras, 2012). Since events taking place on the global level indirectly affect the informants this fit well in to this theoretical analysis. The experience among the informants is that Spice has changed during the past years. The potency as well as how Spice is prepared are different today compared with some years ago. Several informants stated that their tolerance level increased faster than with the old Spice. The increased tolerance level did also have influence on the informant’s Meso-level since it affected or limited their possibility to engage in social activities, school and job. They had to plan and control their life around their Spice use in order to avoid feeling sick or managing everyday things such as go to school and work. In
turn this created difficulties and challenges within in the Micro-system. Instead of the informants system controlling or influencing the informant, the informant in this case tried to control their surroundings. This is not something that is possible since this would require the individual to being alone in the world. Several informants saw this as the significantly largest reason to quit since it was an unsustainably way of living.

Another way individuals are influenced from the macro level is that the production of Spice is widespread and distributed through Internet which provides a global access of Spice. Together with other synthetically drugs, Spice become more common on the global market (madras, 2012). Internet and its possibility to share and communicate easily internationally play the major role in distributing these products. In order to maintain Spice’s legal status, the chemical settings in Spice are constantly under change (madras, 2012). This implies that individuals consuming Spice are constantly at high risk. Since it is impossible to know what chemicals Spice consists of and how they will react in the body this could be referred to as “Russian roulette”.

According to Bretteville-Jensen et al. (2013) it is possible that those who are introduced to Spice possess a minimum of knowledge when it comes to what physical and mental impacts it will have on them. The results indicate that the level of knowledge about Spice before using was low among the informants, as well as completely faulty in some cases. Several of the informants describe how they were told by the peer-group that it was comparable to herbal Cannabis, but synthetic. One could interpret this as an influence from the informants Micro-system. Another prominent social influence on the micro level was peer-pressure, whether it was due to persuasion, or a desire to fit in. Several of the informants stated that they distanced themselves from their family, a lot because of shame but also because of a feeling of coherence among the peers who also used Spice. The micro perspective around the individual changed and therefore his or her relationships was affected.

All the different systems around an individual are affecting the individual in many directions and perspectives, unconsciously and consciously. Depending on the individual itself and family/friends (micro), society (meso) and the international/national impacts (macro), the individual learns and interprets behaviors and ‘right’ and ‘wrongs’ and act according to this knowledge. Even though an individual learn ‘right’ and ‘wrong’ there are varying definitions of what this means all over the world and therefore other people can judge and “label” people
that are in their context but not behaving in a normal way or according to norms and rules or in some cases, law. This socio-ecological factor brings us to the next theory, labeling theory.

Labeling theory

Lemert (as referred to in Giddens, 2013) explains how Labeling Theory gives an understanding as to why certain individuals or groups are being “labeled” because of a certain behavior or act. Labeling theory describes why a deviant behavior, such as Spice use, becomes a “labeled” behavior. This behavior is deviant towards what would be a “normal” behavior, according to the majority of people and therefore people and certain groups in our society get “labeled”. This in turn creates the feeling of being an outsider, due to that the user becomes seen as “different” because of his/her Spice use.

The authors will not use labeling theory as a way of making the interviewee feel like an outsider, which could be the first assumption when hearing “labeling theory”. According to Becker (2006) labeling theory is about understanding the gap, in this case the gap that is created between many of the informant’s family and friends relationships. The gap can be related to what Becker (2006) writes about labeling people because of deviant behaviors, which are to be normalized or judged, and how one or the other creates tension between the user and his/her family or friends because of this certain behavior, which in this case is the use of Spice. The result showed that several informants withdrew from family. Some did withdraw due to fear about the family’s respond while other expressed that they felt guilt towards their family members. Guilt is a factor, which affects the self-identity, and therefore the authors relate this to labeling theory. Labeling theory thus, can provide an understanding about the individual’s self-identity in relation to Spice and how the use of Spice affected their identity. Several of the informants experienced feelings of shame, selfishness and anti-social feelings, as a result from their Spice use which could be explained by the process of being labeled as an outsider.

Giddens (2013) states that a secondary deviant behavior can overshadow other indicators within a person’s identity, resulting in that the deviant behavior increases and become strongly connected to the person’s identity. For example that the drug use controls your life in the sense where the drug would be more important than indicators such as school, job, hygiene, socialization etc. When the drug use becomes a secondary deviant behavior the drug
is a part of the identity on a level where school and other indicators have lost their importance. Some of the informants thought they could use the drug parallel with their “normal” life but after a while they realized that the drug defined how they were at that moment and how the drug became prioritized instead and overshadowed their “normal” view of themselves and their life. It did also affect their accomplishments at work or school.

The use of Spice was for some, something they did because of a reason, which they, when looking back, do not regret because it was the way they chose to handle the situation. They overcame the labeling so to say and instead of letting the use of Spice be a deviant behavior they have “normalized” their own use by showing that they were able to get out of the dependency. They can today see the positive things that their use gave them instead of focusing on just the negative. This could be interpreted as that the secondary deviant behavior the user created was something they took advantage of instead of letting it control them and they have all managed to leave this deviant behavior behind today. The people in this study, who once used Spice, are today more or less free from the label because they showed the people who labeled them that secondary deviance is not constant and could go back to a primary, normalized deviant behavior.

Earlier it was mentioned how the individuals who used Spice went from a secondary deviant behavior back to a primary deviant behavior which became normalized. Even though Spice use probably never would be accepted as a normalized behavior, leaving the secondary deviance shows that being labeled does not mean that it is a permanent label. One result showed the result of family relations who helped the user through termination of stop using Spice. This is also something that is connected to labeling theory; a positive outcome of helping is that it creates a reason for people surrounding the individual to see the positive change and give the person a second chance, but also to take the label away and give the individual a fresh start so that they can create a self-identity which others are not to label.
Discussion

First a discussion concerning the outcome of this study will be presented, followed by a discussion concerning the method chosen for conducting this thesis. The discussion section will end with some suggestions for further research.

Discussion - Results

This thesis has brought up the fairly new phenomenon of Spice use, which today is given a lot of space in the media and is seen as a societal problem that effect individuals, in particular youths and young adults. Several significant insights have arisen from this thesis which in turn has provided an extensive understanding for how and by what reasons Spice products are used. This thesis has also provided new insights about that Spice significantly has changed and developed since it first entered the Swedish market. The informant’s experience is that the potency as well as the rush-intensity of Spice has increased during the past years, as well as the negative consequences associated with Spice use.

What is distinctive is that a large quantity of negative effects, symptoms and consequences has been raised in the result section; it is intimidating that substances with these effects are legally unregulated. The shortcomings concerns both national and international legislation which contributes to that individuals, legally can use substances like Spice; those variations of synthetic cannabis that has not yet been classified, and exist without any legal sanctions. There was a hope with this thesis to increase the knowledge of Spice and its effects, and contribute to the low awareness and this unexplored area. Since there is still a lack of research about what negative physical, psychological and psychosocial impact and effects Spice use could cause after a long term use, it is of importance to emphasize that the result of this thesis has shown several negative effects after the informants has discontinued Spice. The lasting difficulties the informant has experienced are imminent negative effects. The self confidence Spice gave them naturally disappeared when they quit, but what has been more difficult is that the self confidence in general have become lower than before they started to use Spice. For some, bodily changes have created a lower self confidence while other experiences increased insecurity in engaging in social activities and contexts. Some informants experienced as well emotional difficulties and do find it hard to enjoy everyday
life, also, their appreciation for their social environment such as family has become reduced. The result also showed that several months after quitting stuttering, forgetfulness and a sense of being absence minded were present by some informants.

The result show that the pre-knowledge the informants had about Spice and its effects before they tried the first time was consistently low, several of them equated Spice with herbal cannabis. The aspect that it is not illegal did for some mean the same as that Spice could not be damaging for their health. The low awareness and faulty knowledge about Spice in the society could from this perspective lead to that youths who has this picture of Spice becomes deceived and cradled in an untruth that Spice is harmless. A low awareness and a belief of that Spice is less harmful than it really is could result in that the misconceptions causes individuals to fall into the use of Spice; a use of Spice who intimidate the individuals beforehand, if they knew what Spice could cause. Hopefully, by raising these misconceptions, this thesis will explain the harm Spice could cause if using. The result showed that several of the informants afterwards regrets that they started to use Spice, because today, they can see that Spice caused them much more harm than they ever could imagine. As the urge for Spice increased, several informants experienced extensively more negative, unexpected and undesirable physical, psychological and psychosocial side effects. Due to abstinence and withdrawal symptoms they reasoned in terms of that they felt forced to smoke, in order to avoid physical difficulties; dizziness, nausea, anxiety, sweating, vomiting and stomach pain. Cognitive difficulties such as memory loss, forgetfulness, and feelings of being absentminded were also talked about as side effects.

The result of this thesis has created an understanding for how individuals who use a drug, from which they receive negative consequences, reason. The reasons for continuing after the first time seem to be multifaceted, but two main factors seems to be crucial in the aspect of continuing using Spice, even if negative effects are experienced. First, the rush from Spice seems to be associated with several positive aspects, physical, psychological and psychosocial effects of the intoxication; such as enhanced self-confidence, vivid brain activity, a sense of being invincible and belongingness in the peer-group tent to overrule the negative ones. These effects are also typical for the use of natural cannabis and the result has shown that the informants overall shared the vision that the intoxication from Spice were similar to the one from herbal cannabis but much more intense and shorter. Even if some effects, e.g. numbness in arms and legs from the rush were associated with negative and
unpleasant feelings, these seemed to be overshadowed by the positive effects. If a drug provides positive and desired effects and very limited consequences it probably could affect the decision to quit. Second, Spice tends to quickly create a strong physical urge and an inability to function normal without an intake of Spice regularly. Several of the informants stated that they had to smoke every hour and some even had to smoke at night.

The result has shown that withdrawal symptoms from Spice tend to be extremely challenging. Symptoms associated directly to the withdrawal event were: vomiting, shakings, nausea, irritation, fast heart beating, sweating, trouble sleeping, inability to eat as well as to keep what they ate. There is a belief that this reality provides an understanding for what role, national drug-prevention strategies and programs for early interventions among the population, plays in the society. Early intervention, where the aim is to intervene before the level where individuals use Spice, only to avoid physical and psychological difficulties, could contribute to lower the harm and negative consequences that this thesis has brought up. Further, early intervention before the physical and psychological condition of an individual needs to be upheld by an intake of Spice, could ease the procedure to quit. Early intervention provides better opportunities for the individual who use Spice as well for professionals in relation to the individual if the withdrawal symptoms is milder.

As stated in the result section some of the informants had experience of smoking Spice 5-6 years ago and stated that the physical urge they experienced in that time were not comparable with what they felt compared with recent Spice. The quickly development of a strong urge for Spice could perhaps partially be explained by how Spice were prepared before and how it is prepared now. Before Spice was bought and sold as a pre-prepared smoke mixture containing Spice-powder e.g. synthetic cannabinoids, tobacco, herbs as well as several unidentified components. As unadulterated Spice powder today easily can be bought on the internet it creates different options when it comes to preparation. Today it is possible to prepare the smoking mixtures as you like. There is no limit of how much of the content that is synthetic cannabinoids or not. The result from this thesis showed that some of the informants even chose to smoke the powder without blending it with tobacco which of natural cause could effect the development of a physical and psychological urge for Spice.
Discussion – Method

In this thesis, semi-structured interviews were used in order to find as unique and self-lived information as possible concerning the use of Spice, an increasingly growing international problem. The authors have found this research method very appropriate to the thesis aim and they feel that they have found relevant information, which answers the thesis research questions. Conducting a qualitative study with semi-structured interviews has given the chance to raise the voice of individuals with experience of using Spice, and their perspective of the effects when using. The discussions have concerned advantages and disadvantages with writing this thesis as a pair. At first worries and concern about potential harm e.g. disturbing each other and interfering when interviewing as a couple existed. Instead this turned out to be extremely positive to participate as a pair. The worries concerning interfering were naturally solved by the own characteristics and ways of complement each other. Since one of us has the characteristics of being progressive and the other more explorative these personal traits came to be an advantage rather than a disadvantage. One could lead the conversation more foreword while the other sometimes maintained the subject longer.

In this study there have not been any problems with collecting detailed information and the participants have shared their stories in a very good way. One concern before the interviews were conducted were that the informants, after have used Spice, would have an overall low well-being and that we as interviewers should end up in a therapeutic situation as well as giving advice to them about their lives. The participants in this study were former users of Spice, which could have given them time to create a distance from their addiction and therefore the interview situation did not become therapeutic in the sense. That the informants were former users and have had the chance to create a distance to their misuse, we believe strengthens this study. Because of the constant change of Spice components and intensity throughout the past years our results may differ from others and could therefore be weakened. Depending on which country the Spice is being used in, as well as where it comes from and which generation of it individuals who are being interviewed has used, this result can differ. The development of synthetic cannabinoids, e.g. Spice, is more rapid than we can imagine and it is, according to our opinion, a global problem, which can not be recognized enough. When considering disadvantages the authors have discussed the face to face contact you have when interviewing and if it creates a situation where the individual might consciously not
mention important factors around a phenomena or say something that they might have heard, think or not know for sure. This could be the case in this study, since the use of Spice might be a sensitive area for individuals who are afraid to be judged or is afraid of falling in to the category of an outsider again. However, it is also an advantage doing face-to-face interviews since body language is an important factor when interpreting language. We did have the opportunity to conduct the interviews with all informants in this way except one. A more desirable situation should have been if all interviews could have been face-to-face.

Further research

During the process of writing this thesis as well during the time the interviews were conducted several thoughts has arisen. Most of the drugs today are illegal and known to be dangerous from a health perspective; so why do individuals use drugs when the society has such a negative perspective and information about it? Studies that create a deeper insight about how individual factors and preconditions such as upbringing could affect the way individuals reason about their use. This would be interesting to read about in the future.

Competence and adequate care, knowledge and faster legislation are all important ingredients in carrying out social work of good quality. More knowledge on the area would imply more competence in treatment and also more adequate care. Enhanced knowledge about Spice and its effects could also contribute to faster legislation and a more rapid development of updated urine samples.

Madras (2012) mentions four areas, which she thinks, should be more considered in the future: international cooperation, national response, prevention and deterrent programs and law enforcement. The authors agree on that these are areas that should be improved and overlooked. Also, further research with a focus on withdrawal symptoms, negative side effects and social functions could contribute with knowledge about creating frameworks in treatment for professionals who work with individuals who have a history of Spice use.

The authors also want to highlight the importance of Evidence Based Practice (EBP). EBP relates to the importance of practicing “evidence based” social work. This is also something
that could be used in further research in this area. To have an EBP approach when developing new methods, carrying out new methods or implement new strategies implies that there must be a consensus in order to strengthen the reliability and validity of the new knowledge. This consensus entails that users’ and professionals’ experiences and ideas are utilized and united with the best available scientific theories and methods. It could be a described as a triangle, where professionals and users and their best available knowledge strive together to enhance quality of the implementation or the new method. The belief with EBP in social work is good, that it could contribute with evidence based knowledge, both in order to enhance quality and validity of the social work practices and strategies in general, but also give knowledge about the best way to implement them. Concerning Spice use and its effects and symptoms on humans universal knowledge, it tend to be hard if not even impossible to obtain due to that substances used in Spice continuously change. An accepted truth about how to treat individuals with intoxication from Spice for example might vary depending of what the active ingredients are. What is suitable treatment for intoxication from Spice concerning one study might be the opposite of another where newly modifications of Spice have occurred.
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Appendices

Appendix 1

Information angående deltagande i en studie om användandet av 'SPICE'

Denna studie syftar till att öka kunskapen om vilka upplevelser och erfarenheter av som finns av 'SPICE'. Vi anser att de som sitter på den bästa och mest värdefulla kunskapen om användandet och effekterna av denna drog är de personerna som har en personlig erfarenhet eller relation till 'SPICE'. Den information som framkommer hoppas vi ska kunna bidra till samhällets kunskapsutveckling inom området. Att delta i denna studie är helt frivilligt och de personer som väljer att delta kan när som helst avbryta sin medverkan.

De personer som väljer att delta kommer att vara anonyma och kommer även att omfattas av konfidentialitet, dvs. inga namn eller andra igenkänningsfaktorer kommer att skrivas ut i den färdiga uppsatsen. Materialet kommer att samlas in genom att enskilda intervjuer.

Intervjuerna kommer till största del att handla om personens egna erfarenheter och upplevelser i relation till 'SPICE'. De personer vi önskar ha med i vår studie är därför personer som har en personlig erfarenhet av att använda 'SPICE'. Intervjuerna kommer att spelas in för att underlätta bearbetning och analys av materialet. Det inspelade materialet kommer endast att användas av de två studenter som utför intervjun och är studerande på högskolan i Gävle (internationella socionomprogrammet).

Tack på förhand

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Appendix 2

**Interview guide**

How does the individual reason and argue concerning their spice use? (Debut, usage and discontinue)

- Can you tell us how you got in contact with Spice?
- What did you know about the drug before you tried Spice for the first time?
- What did you experience the first time?
- Have you tried other drugs?

How does the individual describe his/her social relationships and environment when using Spice?

- Did you use to mix Spice with alcohol or tobacco?
- Did you smoke alone or with others?
- How often did you smoke?
- How much did you smoke?

Which physical and psychosocial experiences do the individual have concerning their Spice use?

- What was good and what was bad when using Spice? Advantages/disadvantages?
- Did your friends and family know you where smoking Spice?
- Do you miss it?
- How was the process when you decided to stop using Spice?