



universität
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MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

„The less the better? Examining the influence of
abstaining on well-being in a longitudinal study“

verfasst von / submitted by

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angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of
Master of Science (MSc)

Wien, 2022 / Vienna 2022

Studienkennzahl lt. Studienblatt /
degree programme code as it appears on
the student record sheet:

UA 066 840

Studienrichtung lt. Studienblatt /
degree programme as it appears on
the student record sheet:

Masterstudium Psychologie UG2002

Betreut von / Supervisor:

Univ. Prof. Dr. Arnd Florack

Mitbetreut von / Co-Supervisor:

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The Less the Better?

Examining the Influence of Abstaining on Well-being in a Longitudinal Study

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Acknowledgments

I would like to express my gratitude to my supervisor Univ.-Prof. Dr. Arnd Florack for his expertise, support, and guidance throughout the process. I would also like to thank the student assistants, as well as my fellow students who assisted me in my data collection. I would also like to thank all the participants for taking part in my study and supporting my work.

Lastly, I would like to thank my family and friends for their support throughout my studies, as well as all fellow students I met along the way, with whom I worked together and who shared their knowledge and ideas with me.

Abstract

Private consumption spending is often used as an indicator for welfare of nations and individuals (Sheth et al., 2011). Research on well-being questions that consumption increases long-term happiness and points out potential risks of overconsumption (Easterlin et al., 2010). High consumption goes hand in hand with a high need of natural resources, which is closely tied to climate change and does not necessarily increase happiness (Sheth et al., 2011). Consumption and choice are often associated with high consumer's autonomy, however, consequences of potential costs of consumption, such as feeling overwhelmed and depleted, are often not considered (Iyengar & Lepper, 2000). Thus, the current longitudinal study wants to propose a new framework to study abstinence and well-being. It was investigated whether abstinence of a hedonic product, namely coffee, positively influences subjective well-being. It was also analyzed whether abstaining positively influences autonomy and competence and whether autonomy and competence mediate the relationship between abstinence and well-being. Ninety-five participants took part in the study and participants were split into two groups. The intervention group had to abstain from coffee for one week, the waitlist-control group was allowed to pursue with their regular coffee consumption. Contrary to the hypothesis, it was found that one week of abstinence negatively influenced life satisfaction, but not affective well-being. It was also found that autonomy and competence positively influenced ratings on well-being. No support for the importance of autonomy and competence in the context of abstaining was found. Implications and suggestions for future research are discussed.

Keywords: abstinence, well-being, life satisfaction, affect, hedonic goods, autonomy, competence, self-regulation, ego depletion

The Less the Better? Examining the Influence of Abstaining on Well-being in a Longitudinal Study

Household spending is one of the most common measures of welfare, and it is widely assumed, that the higher the consumption, the higher the expected quality of life (Sheth et al., 2011). North American and Western European households only account for 12% of population worldwide and are still responsible for 60% of private consumption spending (Santor et al., 2020). Besides the positive consequences of consumption, such as economic growth, which is regarded as the key to a prosperous society, previous studies also point out potential risks of overconsumption on a global level, as well as on an individual level (Sheth et al., 2011).

Recent research only shows a weak correlation between a country's Gross Domestic Product (GDP) and reported life-satisfaction. Moreover, for most industrialized countries the curve of life satisfaction seemed to flatten and stayed almost the same for the past 30 years (see Great Britain; Jackson, 2005). These findings are in line with the *happiness-income paradox* and show that life satisfaction increases in the short-term with a rising GDP in developing countries, but over time happiness does not increase with a higher rate of economic growth (Easterlin et al., 2010). Thus, those indicators commonly used to measure the prosperity of a country, such as the GDP, might lack important components of individual well-being (Diener & Seligman, 2004).

On a global level, increased consumption goes hand in hand with a higher use of natural resources and thus is associated with a loss in biodiversity, pollution of water and land, as well as soil erosion, just to name a few (Sheth et al., 2011). To alleviate the consequences of climate change and keep the global average temperature under 2°C the Paris Agreement – among other domains relevant for the environment - targets consumption of goods and services (UN General Assembly, 2015). It states that sustainable lifestyle and

production patterns play an important role in addressing climate change (UN General Assembly, 2015; Welch & Southerton, 2019). Globally, the impact of ever-increasing consumption is complex and in turn influences future generations, who have to face the consequences of climate change, including a variety of health problems, which are already apparent today (Rich et al., 2017; Sheth et al., 2011).

Increasing consumption of goods also results in a growing selection of products, thus leading to an increase in the number of choices that people have to make on a daily basis (Vohs et al., 2014). The exponential increase in consumer product selection is apparent in different supermarkets across Europe, as choice has increased in all product categories over the past decade (European Commission, 2014; Vohs et al., 2014). In Austrian supermarkets for example there are 30 to 272 different coffee products available (Greenpeace, 2021). The same trend can be seen for other areas such as clothes, career options and leisure activities (Vohs et al., 2014). According to the common economic perspective, this multitude of choice should help consumers to choose the option that best suits their needs (André et al., 2018). This *utilitarian perspective*, which sees the consumer as a “rational actor”, who is informed about choices and is attempting to maximize utility and well-being, is widely accepted (Jackson, 2005).

However, research showed that the growing array of options might also overwhelm and deplete consumers (André et al., 2018; Iyengar & Lepper, 2000). These contrasting findings regarding increasing choice point out a paradox of the modern world and poses the following question: Does this large range of choices really make our lives easier, let individuals act more autonomously, and increase well-being?

On the one hand, the sense of individual freedom expands with increasing product choice, which displays an important value of our times and might thus positively influence the satisfaction with life (Iyengar & Lepper, 2000; Reith, 2004). On the other hand, this vast

number of products and information available might overwhelm people, make them more dissatisfied with their choices, decrease their motivation to choose altogether and can tempt people to disregard their actual desire (Iyengar & Lepper, 2000; Reith, 2004). In addition, people tend to overestimate the benefits of choice and tend to underestimate the temporal, cognitive and emotional costs of choosing (André et al., 2018).

The above-mentioned consequences of increased choice and heightened consumption highlight the importance to identify outcomes of reduced consumption and abstinence not only on a global, but also on an individual level (Busseri, 2018). The relevance of this topic is also apparent as there is a growing number of people in the Global North who are experimenting with new ways to interact with the marketplace, to live ecologically sound and increase well-being (Rich et al., 2017).

Thus, the aim of the current research is to shed light on the outcomes of abstinence of a hedonic product, namely coffee, on well-being and identify potential factors that might influence the relationship between abstinence and well-being. To better understand the relationship between abstinence and well-being it is necessary to shed light on the limits of hedonic consumption. Unlimited access to hedonic goods and heightened consumption of hedonic goods is often perceived to increase individual's happiness (Hsee & Tsai, 2018). At the same time, hedonic consumption can have negative consequences on individuals and might not result in lasting happiness (Kasser, 2011). Increased hedonic consumption can result in savoring less of the little things in life, might overwhelm and deplete consumers (Hsee & Tsai, 2018). Thus, the aim of this study was to examine whether abstaining from a hedonic product can positively influence individual's well-being under some circumstances.

To explain the relationship between abstinence and well-being we have to investigate the concept of self-control and examine which role self-control has in the context of hedonic consumption and abstaining. Self-control is a driving force to reach long-term goals and to

make good consumption decisions (Baumeister et al., 2008). Looking at self-control and regulatory resources needed for decision making thus takes on an important role in understanding how both, heightened consumption and abstinence can influence well-being (Baumeister et al., 2008; Baumeister & Nadal, 2017).

On the one hand, abstaining uses many self-regulatory resources and can be very exhausting (Baumeister & Nadal, 2017). On the other hand, it might save self-regulatory resources in the long run because when abstaining less resources for consumption decisions are needed, which might result in heightened well-being (Baumeister et al., 2008). This highlights that self-control plays a fundamental role in the context of consuming, as well as the context of abstaining (Baumeister et al., 2008; Baumeister & Nadal, 2017). Additionally, abstaining might have a positive influence on psychological needs, such as autonomy and competence because one is feeling efficient during the act of abstaining (Kasser et al., 2014)

The satisfaction of autonomy and competence has shown to play an essential role in individual well-being and materialistic values (Deci & Ryan, 2008; Kasser et al., 2014). Even though abstinence is draining in the beginning, choosing to engage in abstinence of a hedonic product might activate ownership of one's choice and might result in a true sense of autonomy (Muraven et al., 2008). Feeling autonomous when engaging in abstinence and positively attributing the behavior to the self has shown to positively influence well-being (André et al., 2018; Moller et al., 2006).

Similar might be true for competence. Abstaining needs a lot of self-regulation resources (Baumeister & Nadal, 2017). Attributing the behavior and outcome to one's own action might positively influence ratings on perceived competence for those who abstain (André et al., 2018). Perceived competence while abstaining from coffee might lead to higher self-esteem and thus, positively influence well-being (Kasser et al., 2014).

Thus, competence and autonomy might be important to explain the relationship between abstinence and well-being. In this study, I propose that autonomy and competence positively mediate the relationship between abstinence and well-being and might serve as an explanation why certain activities lead to improved subjective well-being (Cantarero et al., 2021; Chen et al., 2015; Diener et al., 2018; Martela & Sheldon, 2019). Because there are also downsides of hedonic consumption, that are often not considered, people who engage in restricted coffee consumption are expected to score higher on individual well-being than people who continue with their habitual consumption.

The main purpose of the study is to examine whether abstaining of hedonic goods can positively influence well-being and to investigate whether perceived autonomy and competence mediate the relationship between abstinence and well-being. Thus, I aim to fill the gap in the current literature through proposing a model that includes abstinence of a habitually used hedonic product, namely coffee, and autonomy and competence in a longitudinal study.

The Influence of Abstinence on Well-Being

“Open a Coke, open happiness”, Coca Cola advertised in their global campaign in 2009 (Coca-Cola Company, 2009). Consumers are constantly confronted with a wide range of products and advertisements that suggest that the purchase of a certain product will make them happier (Dittmar et al., 2014). However, there is growing literature that challenges the common view that happiness mostly depends on the magnitude of external stimuli and that more consumption is always better (Boyce et al., 2010; Diener et al., 2010; Kasser et al., 2014; Muiños et al., 2015; Rich et al., 2017).

This new stream of literature argues that people who consume less do not sacrifice on their well-being and that people who report the importance of wealth, money and possessions also report lower life-satisfaction and fewer experiences of pleasant emotions compared to

people who put less importance on wealth, money, and possessions (Hsee & Tsai, 2018; Kasser, 2011; Rich et al., 2017). That less consumption does not necessarily produce reduced well-being is also apparent in research on thrifty behaviors.

Frugal behavior and “*voluntary simplicity*” (*VS*), which is a lifestyle centered around material simplicity, showed to positively influence elements of psychological functioning, such as satisfaction with life (Boujbel & d'Astous, 2012). Even though thrift is often perceived to be exhausting, it often also provides enjoyment and is perceived as a chance to learn about oneself (Diener et al., 2010). Learning new things predicts positive feelings and thus positively influences well-being (Diener et al., 2010). Variety, surprise and novelty seem to be important factors to maintain long-term well-being in the context of hedonic consumption (Sheldon & Lyubomirsky, 2012). Thus, abstaining from hedonic goods over a certain period of time might help to sustain variety and surprise of consumption experiences in the long run.

Additionally, it might be easier to abstain from goods, that are not consumed in a habitual manner. However, abstaining from habitual consumption can also positively influence well-being. This has been shown in the context of social media use, where people who willingly limited or fully abstained from their social media use, reported positive consequences such as reduced stress, enhanced positive affect and increased life-satisfaction (Tromholt, 2016; Turel et al., 2018).

Even though there is various research on well-being, to this date, studies on reduced consumption were mainly conducted in the context of voluntary simplicity and frugal lifestyles (Aidar & Daniels, 2020; Alexander & Ussher, 2012; Kasser, 2011; Rich et al., 2017). Thus, research on abstinence of hedonic goods that are consumed habitually is still lacking. Abstinence of a hedonic product might have special characteristics because of the rewarding nature of the goods. Thus, when analyzing the effect of abstinence of hedonic

goods on well-being, we have to take a closer look on the aspects of hedonic consumption and the potential risks of consuming too much.

Characteristics of Hedonic Consumption

Consumption experiences are often classified into *utilitarian* and *hedonic* consumption (Botti & McGill, 2011). Hedonic experiences are classified to be fun, sensorial, and immediately gratifying, whereas utilitarian consumption is functional, sensible, and useful (Botti & McGill, 2011). Hedonic consumption is more strongly associated with affective responses and is often emotionally driven, compared to utilitarian consumption which is mostly cognitively driven (Botti & McGill, 2011). Hedonic goods are often consumed for immediate gratification and sensory attributes, whereas utilitarian goods are often consumed because of the means it provides to reach a higher-level goal (Botti & McGill, 2011).

At the same time, utilitarian goods can also provide hedonic value to a person, for instance when someone buys a car, which fulfills an utilitarian purpose when it is used to go to work each morning, but also fulfills a hedonic purpose when it is used for a short-term pleasurable experience, like a race (Alba & Williams, 2013). Thus, sometimes it is difficult to differentiate between the hedonic and utilitarian purpose of goods (Alba & Williams, 2013). Which category is assigned to goods, is mostly influenced by the motivation of the person who consumes the product (Botti & McGill, 2011). The most defining feature of hedonic consumption is that it is pleasurable and that it is consumed for the inherent experience itself, such as drinking a cup of coffee because of the taste of it, versus drinking coffee to become an expert in differentiating different brands (Alba & Williams, 2013).

However, because of the high pleasure often associated with hedonic consumption, decisions to consume certain hedonic goods are often more likely to be associated with the feeling of guilt, compared to utilitarian consumption decisions (Botti & McGill, 2011). Thus,

how the consumption of hedonic goods relates to a person's well-being also depends on which goal the person pursues (Botti & McGill, 2011). This can also change over time, for instance when the same hedonic product is consumed regularly, the actual goal of the consumption might not be apparent anymore, because the consumption forms a habit (Alba & Williams, 2013).

To analyze the effect of frequent hedonic consumption on well-being, not only the enjoyment of the activity itself should be considered (Botti & McGill, 2011). Beyond the pleasure an activity brings with it, consumption also goes hand in hand with trying to make the best decision. However, this often brings some obstacles with and needs a lot of self-control resources (Baumeister et al., 2008). Thus, hedonic consumption also involves making demanding purchase choices and the risk of consuming too much, which might negatively influence well-being.

Why Hedonic Consumption Does Not Always Increase Well-Being

Increasing consumption goes hand in hand with an expanding number of choices and desires that are encountered every day and research shows that about 40% of desires are actively resisted (Hofman et al., 2012). Making frequent consumption choices can be depleting because a lot of self-control is needed (Baumeister et al., 2008). The potential negative consequences of too much choice pose the questions whether having increased consumption choices is making us more autonomous and happier. The possibility of choice is twofold (Vohs et al., 2014).

On the one hand people have a strong motive to have the feeling of having choices and an illusion of control (Vohs et al., 2014). On the other hand, people feel stressed about decision making in every aspect of their lives and research has shown that too much choice can negatively influence satisfaction and deplete self-control resources (Iyengar & Lepper, 2000; Vohs et al., 2014).

Self-regulation is essential to resist desires, to achieve long-term goals and counteract usual impulses, which is particularly important when making purchase decisions (Baumeister & Heatherton, 1996). Self-regulation can be defined as a controlled top-down process that is essential to solve goal conflicts and self-regulation and self-control both refer to altering one's responses such as thoughts, emotions and impulses and replaces it with another (Baumeister, 2002; Hofman et al., 2012). Making choices in hedonic consumption often involves many different goals, such as making the best purchase decision, saving money and being healthy at the same time (Hofman et al., 2012). Thus, making consumption decisions in accordance with one's own goals can be very demanding and may have a great need of self-control (Hofman et al., 2012).

With increasing choices in our daily lives', consumers feel overwhelmed with the presented amount of information and studies show, that multiple choices are depleting, even when there is the autonomy to choose (Iyengar & Lepper, 2000; Scheibehenne et al., 2010). One study showed that people were less satisfied with their purchase when they were presented with 24 compared to six options (Iyengar & Lepper, 2000). These findings are in line with the *choice overload hypothesis* which states that these vast amounts of options also lead to adverse consequences, such as unwillingness to choose altogether, as well as dissatisfaction with the chosen option (André et al., 2018; Scheibehenne et al., 2010). Because of the depletion of self-regulatory resources through excessive choices in their daily lives, people might be less able to use their full mental capacity and thus less reasoning is available for decision making (Baumeister et al., 2008).

Another reason why more options do not necessarily make people happier is that people often have wrong ideas about the relationship between a product and happiness (Hsee & Tsai, 2018). Whether more options are better, also depends on the number of options and

the characteristics of the choice set, the mode of evaluation people are in, the level of involvement and experience (Hsee & Tsai, 2018; Scheibehenne et al., 2010).

In addition to the depletion of self-regulation resources that comes with heightened consumption choices, hedonic adaptation might be another reason why pleasurable things might not improve our well-being in the long-term (Quoidbach & Dunn, 2012). According to the principle of *hedonic adaptation* with increasing consumption over a longer period of time, tolerance for this stimulus increases (Sheldon & Lyubomirsky, 2012). Thus, consuming hedonic goods regularly can lead to the stimulus being perceived differently, or less satisfying than with prior consumption (Alba & Williams, 2013). After some time, consumption of that product might have the sole purpose to ease a certain desire and thus might not represent autonomous action.

Thus, through ever increasing consumption people have less resources available for decision making, resulting in bad choices on an individual and societal level. Abstaining from hedonic goods might help to reduce choice overload, that is often apparent in consumption decisions. Abstaining for a specific time might also help to savor hedonic stimuli, to increase the feeling of autonomy and competence, and thus positively influences well-being. As shown in previous research, interrupting, and temporarily giving up a pleasurable stimulus can increase positive affect and anticipated pleasure, depending on how vivid the imagined consumption is (Hsee & Tsai, 2018).

Potential Consequences of Too Much Choice: Ego Depletion

One major hindrance in exerting self-control and reaching long-term happiness through consumption is *ego depletion* (Baumeister et al., 2008). Ego depletion is a state of fatigue and refers to a temporary process, where fewer volitional resources are available and the capacity to engage in volitional action is limited, thus resisting short-term impulses, and pursuing long-term goals is more difficult during ego depletion (Baumeister et al., 2000;

Baumeister & Nadal, 2017; Moller et al., 2006). Ego depletion has been found in the context of consumption, showing that impaired self-control leads to more impulsive buying that is likely to be regretted later, that depleted people are more likely to yield to temptation and to think less intelligently (Baumeister, 2002).

During ego depletion available resources need to be preserved, which leads top-down processes to be weak and automatic processes to take over, which also increases the chance to engage in habitual behavior (Baumeister & Vonasch, 2015). Compared to attention, which gains full capacity again after the mental overload, self-control needs more time to get back to strength (Baumeister et al., 2008). Thus, ego depletion occurs most likely when multiple decisions must be made, which is usually the case in our day-to-day life (Baumeister et al., 2008). Ego depletion is often caused by stress or other demands, which might lead to a loss of impulse control and thus make it difficult to delay gratification when experiencing emotional distress (Baumeister & Nadal, 2017). Whereas ego depletion is likely to occur when multiple consumption decisions are being made, it might also make it hard to build new habits and abstain from hedonic consumption (Baumeister & Nadal, 2017).

The Two Sides of Self-Control

For both, consuming and abstaining, self-regulatory resources are needed. Deciding between different products can be exhausting and depletes resources. Thus, abstinence of hedonic goods might help to save self-regulatory resources through reduced decision making, might increase perceived competence and autonomy, and thus positively influence well-being. At the same time, deciding not to consume also brings some obstacles and the positive effects of reduced consumption on well-being are not conclusive, as it has also been found that under some circumstances abstaining from consumption can elicit anxiety and stress (Nowlis et al., 2004; Vally & D'Souza, 2019).

Not only making multiple decisions needs self-control, but also breaking hedonic habits needs many self-regulatory resources in the beginning (Baumeister & Nadal, 2017). *Motivation* and *volition* are essential for abstinence and reduced consumption (Baumeister & Nadal, 2017). Motivation can be defined as the tendency or drive toward a specific behavior, whereas volition is crucial to control a behavior in accordance with conscious choice (Baumeister & Nadal, 2017). If a person wants to reduce hedonic consumption, the person might be motivated toward consuming like they are used to and might use their volitional capacity to control the behavior to not indulge (Baumeister & Nadal, 2017). This can make it challenging to get used to the new abstinence behavior (Baumeister & Nadal, 2017).

Stopping consumption of hedonic good, like coffee, might be also challenging because people have to deal with hedonic losses, such as forgoing pleasure (Baumeister & Nadal, 2017). Compared to utilitarian consumption, hedonic consumption is mostly followed by pleasure rewards which in terms reinforce the action and thus leads to the formation of a habit (Baumeister & Nadal, 2017). When frequently engaging in coffee consumption the urge to act upon a certain motivation becomes stronger (Baumeister & Nadal, 2017). Thus, when we look at hedonic consumption in terms of reinforced pleasure, self-control plays a major role when this habit should be broken (Baumeister & Nadal, 2017).

Even though breaking habits, such as frequent hedonic consumption, needs many self-regulatory resources, research showed that exercise also plays a role, and that self-regulation can be increased by regular exercise (Baumeister, 2002). Even if resisting can be draining, it can be practiced and might be associated with a high feeling of autonomy, such as that people who recollected an action of resisting temptation reported higher free will (Baumeister, 2002; Baumeister & Heatherton, 1996). This refers to the notion that self-control strength resembles a muscle, which can be easily exhausted in the short-term, but might gain strength, when being practiced, in the long-term (Baumeister et al., 2000; Muraven & Baumeister, 2000).

Additionally, rest and sleep are important factors that play a major role in regularly restoring self-control (Baumeister et al., 2000). This points out that despite the draining effects of abstinence, there is potential to succeed in the long-term and positively influence well-being.

The high amount of self-regulation resources needed to change habits and to make decisions, highlights that choosing not to consume is an active decision, and thus might be one of the highest possible ways to feel autonomy (Baumeister & Nadal, 2017). When we broaden the understanding of choice in context of consumption, autonomy does not only mean to choose from several products, but also means to have the choice not to choose (Dhar, 1997). After engaging in a particular consumption behavior for a while, it is very challenging to change the default behavior pattern and make deliberate choice occur (Baumeister & Nadal, 2017).

Thus, abstaining from hedonic consumption represents an active choice that makes people feel autonomous. When deciding not to presume with their habitual consumption, people feel in control of one's choices, which helps to attribute positive outcomes to the self, heightens the feeling of competence and as a result influences positive affect, which is crucial for physical and psychological health (André et al., 2018; Deci & Ryan, 2000). Feeling in control and experiencing competence might thus play a major role in increasing well-being when abstaining and autonomy and competence might mediate the relationship between abstinence and well-being.

The Role of Basic Psychological Needs in Well-Being

According to motivational research in various countries, autonomy, competence, and relatedness are defined as *basic psychological needs* (BPN), because they are essential for an individual's well-being, effective functioning and psychological health across gender, age, and country (Deci & Ryan, 2008; Vansteenkiste et al., 2020). At the same time, the frustration of those needs has shown to be associated with ill-being, such as negative affect

and with difficulties to accurately allocate resources in work and relationships (Vansteenkiste et al., 2020). Thus, the basic psychological needs theory (BPNT) incorporates both, the satisfaction and frustration of needs, namely autonomy, competence, and relatedness, and thus goes beyond the absence of need fulfillment and views need frustration and need fulfillment as two independent experiences (Vansteenkiste et al., 2020).

The frustration and fulfillment of BPN influences individual's well-being (Chen et al., 2015). When BPN are fulfilled, individual's well-being is positively influenced, whereas the frustration of BPN negatively influences well-being (Chen et al., 2015). This mediating role of need satisfaction has been shown in simplifying behaviors and materialism, as well as in the assessment of well-being during the Covid-19 pandemic (Cantarero et al., 2021; Chen et al., 2015; Diener et al., 2018). Prior research showed the importance of BPN in the relationship between materialistic values and well-being in a longitudinal study (Kasser et al., 2014). It was shown that decreasing well-being that came along with increasing materialistic value orientation can be explained by decreasing satisfaction of BPN (Kasser et al., 2014).

BPN, particularly autonomy and competence also play a vital role in successful self-regulation, which is very important when it comes to consumption choices, achieving long-term goals and correct choices that have been made in the past (André et al., 2018). Frustration of those BPN makes it harder to regulate the self and to achieve long-term goals, as that need frustration can lead to a strong desire to compensate for frustrated needs and in turn leads to engagement in stimuli that should be abstained from, such as eating sweets when being on a diet (Vansteenkiste et al., 2020). The energy depleting effect of unsatisfied needs makes it hard to have enough resources for the controlled top-down process (Vansteenkiste et al., 2020).

In contrast, experiencing a fit between the beliefs, goals and action has shown to result in feelings of pride, closure, and vitality and actions that lead to need satisfaction can enhance

energy for self-regulation (André et al., 2018; Deci & Ryan, 2008). This vast research points out the importance to consider autonomy and competence as potential mediators positively influencing the relationship between abstinence and well-being (Chen et al., 2015).

Autonomy and Competence

Autonomy, as one of the three BPN, is defined as the experience of freely deciding what action to take and feeling in control of one's choices (André et al., 2018; Moller et al., 2006). According to the self-determination theory (SDT), a theory of motivation, which broadly distinguishes between autonomous, intrinsic motivation on the one hand, and controlled, extrinsic motivation on the other hand, someone acts autonomously when their action is determined by the self, because they gain enjoyment, challenge, and interest from it, or because they feel like the action is worth to pursue because it fits to their own values (Deci & Ryan, 2008; Kasser et al., 2014).

Experiencing the self as autonomous when taking actions, often leads to a positive attribution of the outcome to the self and thus positively influences well-being, such as positive affect (André et al., 2018; Moller et al., 2006). Even though choice in consumption is often associated with high autonomy, resisting consumption, and feeling in control of one's own willpower can also be seen as highly autonomous behavior (André et al., 2018). Studies on voluntary simplifiers for instance showed, that those who downshifted involuntarily reported more negative and fewer positive experiences than those who downshifted voluntarily, pointing out the importance of perceived autonomy in the context of well-being (Kasser, 2011).

Additionally, the feeling of *competence* has shown to play an important role in well-being, such as general psychological health and positively influences outcome of tasks (Williams et al., 2009). Competence is defined as feeling effective when performing a task and coping with challenges (van der Kaap-Deeder et al., 2017). Early research also showed

that gaining positive feedback for an action the person feels responsible for, enhances the feeling of competence and in turn influenced the integration of a task (Deci & Ryan, 2000).

In contrast, negative feedback showed to diminish intrinsic motivation (Deci & Ryan, 2000). Former research shows that the satisfaction of the need for competence is most often found in association with thrifty behaviors and people engaging in thrifty behaviors also report higher self-esteem (Kasser et al., 2014; Oleson, 2004). Thus, both the need for autonomy as well as the need for competence seems to be of utmost importance when making choices in consumption.

Contribution to Research

To my knowledge, hardly any research has been conducted investigating abstinence of hedonic goods and restricted consumption in the context of BPN and well-being. Most research on consuming less, dealt mainly with frugality and voluntary simplicity, which is conceptually different and mostly focus on the sustainable use of resources (Muiños et al., 2015; Santor et al., 2020). However, there are still contrasting findings regarding under what circumstances frugal behavior positively influences well-being (Kasser et al., 2014).

Even though a vast stream of literature points out the importance of basic psychological needs in the context of well-being (e.g., Chen et al., 2015; Vansteenkiste et al., 2020), very few studies in the context of frugal behavior take BPN into account. BPN might play a major role, whether people feel well when abstaining from hedonic goods (Muiños et al., 2015; van der Kaap-Deeder et al., 2017). Additionally, the present study adds to the stream of literature of longitudinal well-being studies, which are scarce, especially in the field of abstinence (Lyubomirsky et al., 2005).

Research Question

As consuming less has shown to have a positive influence on well-being under certain conditions, the present study pursues the question whether abstaining from a hedonic product,

which is consumed regularly, can have a positive impact on well-being, and whether perceived autonomy and competence positively mediate the relationship between abstinence and well-being (Alexander & Ussher, 2012; Kasser et al., 2014).

Hypotheses

Individuals who engage in frugal behavior have shown to score higher on well-being, report increased life satisfaction, as well as increased empowerment and agency (Muiños et al., 2015). Research also showed that doing something new can positively influence well-being (Diener et al., 2010). Therefore, I assumed that people who engage in restricted coffee consumption would score higher on individual well-being than people who continued with their habitual consumption behavior.

To assess well-being of participants in the current study, the concept of subjective well-being was used. Subjective well-being mostly includes three aspects: high *life satisfaction*, high *positive affect*, and low *negative affect* (Diener et al., 1999; Lyubomirsky et al., 2005; Martela & Sheldon, 2019). The *cognitive component* of well-being describes the general satisfaction with life and is relatively stable across life (Diener et al., 1999; Lyubomirsky et al., 2005; Martela & Sheldon, 2019).

Affective well-being, which includes positive and negative affect is closely connected to cognitive well-being but is less stable and can vary more frequently (Diener et al., 1999; Lyubomirsky et al., 2005; Martela & Sheldon, 2019). Thus, for the current study it was important to assess both, the cognitive, and the affective component of well-being and I assumed that affective well-being and life satisfaction would increase when abstaining from coffee.

H1: Individuals who abstain from coffee score higher on well-being than individuals who do not abstain from coffee.

Need satisfaction and frustration have shown to play an essential role in individual well-being and showed to be important in association with materialistic values (Deci & Ryan, 2008; Kasser et al., 2014). When practicing abstinence, autonomy as being self-directed plays a major role (Muraven et al., 2008). Choosing to engage in coffee abstinence might activate ownership of one's choice (Muraven et al., 2008). Not being trapped in the hedonic treadmill of consumption might result in a true sense of autonomy. Thus, it is hypothesized that the group that abstains from coffee will report increased ratings of autonomy.

H2: Individuals who abstain from coffee report higher perceived autonomy than individuals who do not abstain from coffee.

Various studies showed the mediation effect of autonomy and competence on well-being and showed that BPN might serve as mediators and help to explain why certain activities lead to increased or decreased subjective well-being (Cantarero et al., 2021; Chen et al., 2015; Diener et al., 2018; Martela & Sheldon, 2019). When experiencing the feeling of autonomy while abstaining people showed to be more likely to attribute the successful abstinence to the self and thus experience higher well-being (André et al., 2018; Moller et al., 2006). Feeling high autonomy while abstaining helps to save self-regulatory resources, and thus might make it possible to perceive abstinence more positively, than when feeling externally controlled (Muraven et al., 2008). Therefore, I assumed that feeling autonomous while abstaining would positively influence ratings on well-being.

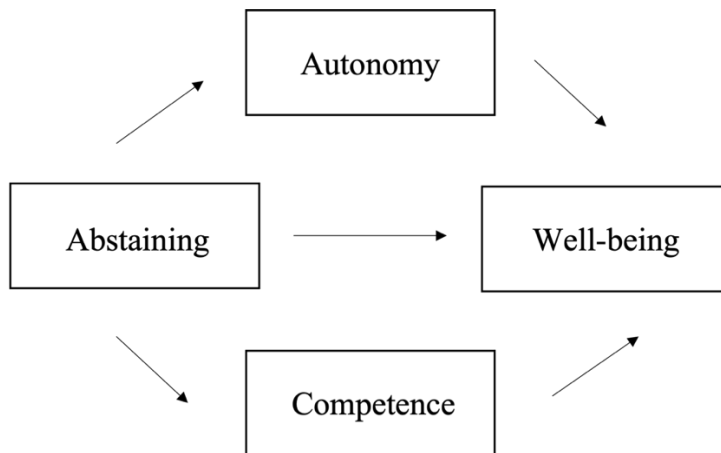
H3: Autonomy positively mediates the relationship between abstinence and well-being.

Abstaining from a hedonic product needs a lot of self-control (Baumeister & Nadal, 2017). Putting effort in an action, such as abstaining, makes people feel responsible for their outcome and they might feel effective in their actions while abstaining (André et al., 2018). This might have a positive influence on perceived competence ratings for those who abstain (André et al., 2018). It has also been shown that people who engage in frugal behaviors report higher self-esteem (Kasser et al., 2014). Thus, I assumed that the challenge to abstain from coffee would positively influence perceived competence.

H4: Individuals who abstain from coffee report higher perceived competence than individuals who do not abstain from coffee.

Various research points out the positive influence of competence on well-being, namely positive affect and life satisfaction (Vansteenkiste & Ryan, 2013). Perceived competence might bring a feeling of mastery with it, might lead to higher self-esteem, and thus, positively influence well-being (Vansteenkiste et al., 2020). Through applying their skills, people might feel effective in what they are doing, which might have a positive impact on well-being. The proposed research model is shown in Figure 1.

H5: Competence positively mediates the relationship between abstinence and well-being.

Figure 1*Hypothesized Path Model***Study Overview**

The main interest of the current study was to determine the influence of abstinence of hedonic goods on well-being and examine whether autonomy and competence positively mediate the relationship between abstinence and well-being. As already outlined above, coffee can be classified as a hedonic product, which is often used in a ritualistic manner. To add knowledge about the impact of abstaining from hedonic goods, which are consumed daily, on well-being, abstinence of coffee consumption over one week was used as an intervention in the current study. Additionally, coffee abstinence in the current study also included decaffeinated coffee, as the focus was on the habit of consuming coffee.

For that reason, the study worked with two participant groups: an intervention group, that received the intervention in the first week, and a waitlist-control group, that received no intervention in the first week. The participants in the intervention group had to abstain from a hedonic product, coffee, for one week, while the waitlist-control group presumed with their habitual coffee consumption. Both groups had to report their well-being before, during and after the intervention. In order to ensure that both groups were motivated to abstain, the conditions shifted after one week and the waitlist-control group had to abstain from coffee for

one week, and the intervention group ended their period of abstinence and presumed with their habitual coffee consumption. The group, that abstained from coffee the first week is referred to as intervention group throughout the study, the group, that did not abstain the first week is referred to as waitlist-control group throughout the study.

Method

Participants

The participants consisted of 95 psychology students who were enrolled at the University of Vienna. Participants were recruited using the “Laboratory Administration for Behavioral Sciences (LABS)” research pool of the Faculty of Psychology, University of Vienna. Participants were free to sign up for the present study within the LABS research pool and gained 6 LABS credits for their participation in the study. Participants were between 18 and 55 years old ($M_{age} = 22.52$, $SD_{age} = 4.99$) and included 70 females and 25 males. As the study was conducted using a student sample, the sample consisted predominantly of highly educated individuals, 82.1% reported finishing high school as their highest level of education, and 16.8% reported that they had an academic degree. 92.7% of the sample were Austrian or German citizens, 6.3% reported being citizens of other European countries, 1.1% were citizens of non-European countries.

Drinking at least one cup of coffee per day was a prerequisite to take part in the study. Regular coffee consumption was necessary to analyze the effect of coffee abstinence on well-being. Most of the participants, 47.4% indicated to drink two cups of coffee per day, 25.3% indicated to drink one cup of coffee per day, 16.8% indicated to drink three cups of coffee per day and 10.5% indicated to drink more than three cups of coffee per day.

Twenty participants had to be excluded from analysis due to various reasons, such as staying in the same group for two weeks and not switching to the other condition as instructed (four participants), not completing the final survey for week one (three

participants), not participating in week two of the study, thus not experiencing both study conditions (five participants), not acting on the instruction of their allocated group (eight participants; e.g., being allocating to the group who should continue drinking coffee on a daily basis but abstaining from coffee instead). The final sample consisted of 75 participants, 39 in the intervention group and 36 in the waitlist-control group (56 female; $M_{age} = 22.75$, $SD_{age} = 5.51$). A repeated measurement mixed ANOVA with 75 participants would be sensitive to effects of Cohen's $f = .21$ with 80% power ($\alpha = .05$).

Design

The study employed a 2 (abstinence vs. no abstinence) x 2 (time 1, time 2) design. *Group allocation* (abstinence vs. no abstinence) was a between-subject factor and *time* was a within-subject factor. Participants were randomly assigned to either the intervention (abstinence) or the waitlist-control (no abstinence) group. *Group allocation* was considered as a predictor. The interesting outcome variable was individual's *subjective well-being* (life satisfaction and affect balance), which was measured at two different points in time. Perceived *autonomy* and perceived *competence* served as mediating variables. It was controlled for caffeine withdrawal symptoms.

Procedure

After signing up for the study via LABS, participants had to choose a timeslot for the study instruction and the baseline-survey, which took place at the University of Vienna. The subsequent questionnaires were administered online, using *Unipark* (Questback GmbH, 2019). Participants could choose between various group timeslots on two days and each timeslot took 45 minutes. The whole intervention study took 15 days, whereas only the first eight days were used for the main analysis of the present study. Participants were split into two groups, an intervention group, and a waitlist-control group, who did not abstain the first week, but were in the intervention condition the second week.

At the first point of data collection (T0) participants got a short presentation, where they were informed about the duration and procedure of the study, the group allocation and got information about the daily questionnaires. After explaining the organizational part of the study, they received the link for the baseline-survey (see Appendix A). Before the start of the online survey, participants were provided with an information and consent form (see Appendix A). The informed consent form included purpose and procedure of the study and the voluntariness of the participation.

After agreeing to the participation of the study, participants were asked to create a respondent code, consisting of letters of their last name, name, and birthday date of their mother, which was used to anonymously match the data of different points in time at the end of the study. They were also asked a control question “*What was the name of your first pet*”, to match the data more easily in case of typos in the respondent code.

Next, participants were randomly allocated to either intervention or waitlist-control group by the survey tool. Depending on to which of the two groups participants were assigned to, they received specific information about how the first week of the study is being organized. Participants in the intervention group were informed, that they are not allowed to drink coffee for seven days, starting on Saturday. Participants in the waitlist-control group were informed, that they can continue with their usual coffee consumption and that they should write down, how many cups of coffee they drink per day. Both groups were informed that the conditions are going to switch after one week and that they will receive further information in the following questionnaires.

Following, participants were asked some demographic information and how much cups of coffee they consume regularly. They were then asked about their well-being, specifically about their affective state and life satisfaction. Next, participants were asked about the satisfaction and frustration of their basic psychological needs within the last seven

days. On the last page of the survey, they again received some information regarding the upcoming online surveys, their compensation for the participation and they were provided with an email address to contact the researcher. There were no time restrictions for the questionnaires.

Two days after the baseline survey, the intervention started, and the intervention group had to abstain from coffee for a week. Each day of the following seven days, starting on Saturday, participants in each group received a link to a daily questionnaire (see Appendix B). The link to the online questionnaire was sent to participants every day at 5.30 pm via E-Mail and the LABS system was used to contact participants.

The daily questionnaires took approximately five minutes and participants had to report their affective well-being of the last 24 hours. On the last day of the first study week (T1) participants again received an E-Mail with a link to an online survey. In addition to their well-being, in this questionnaire participants were also asked questions about their life satisfaction and their psychological need satisfaction (see Appendix C).

Participants were also asked to report caffeine withdrawal symptoms they perceived during the last seven days. At the end of the questionnaire, participants got instructions about the second week of the study. Participants in the intervention group (abstaining from coffee in week 1), were informed that for the next week, they can consume coffee as they wish. The waitlist-control group (consuming coffee) was informed, that they must abstain from coffee for the next seven days, starting the next day.

Even though for the present study only results from week one were used for the analysis, I decided to switch conditions and resume the study for another week. This seemed to be important to gain a sample where participants were interested in abstaining from coffee and to avoid large drop-outs due to group allocation. Thus, the study resumed for another week, without daily questionnaires. At the end of week two (T2), participants again received

the same questionnaire as after week one. Additionally, participants were debriefed and were thanked for their participation in the study.

Materials

The study was conducted in German and items were assessed using a 5-point-Likert scale, ranging from 1 to 5.

Affective Well-Being. Participants' affective well-being was measured using a German version of the 12-item Scale of Positive and Negative Experience (SPANE; Diener et al., 2009/2015). SPANE is a scale widely used in the field of well-being and assesses the frequency of positive and negative affect (PA;NA; Busseri, 2018). Participants were asked to refer to how they were feeling in the last 24 hours. Participants could indicate their feelings on a 5-point-Likert scale, ranging from *very rarely* or *never* to *very often* or *always* and included positive feelings such as, *happy*, and *pleasant*, and negative feelings, such as *afraid* and *angry*.

Scores were summed to compute separate scores for positive feelings (SPANE-P) and negative feelings (SPANE-N). Scores ranged from 6 to 30, with higher numbers representing higher positive or negative emotions. The overall affect balance score (SPANE-B), calculated through subtracting the negative feelings score from the positive feelings score, was used for the main analysis. The overall affect balance score (SPANE-B) ranged from -24 (unhappiest) to 24 (happiest). Affect balance scores in this sample ($M = 8.45$, $SD = 5.86$) ranged from -16 to +24. In the present study internal consistency was good, with Cronbach's $\alpha = .91$, $.82$ for the positive and negative affect scores, respectively.

Satisfaction With Life. The German version of the Satisfaction with Life Scale (SWLS) was used to measure current subjective well-being (Janke & Glöckner-Rist, 2014). Life Satisfaction was measured using 5 items, such as "*In most ways my life is close to my ideal*". Participants had to indicate their agreement using a 5-point-Likert scale, ranging from

strongly disagree to *strongly agree*. Higher scores were indicative of a life that is deemed to be more satisfying and scores in the sample ($M = 3.59$, $SD = 0.71$) ranged from 1 to 5 (Vally & D'Souza, 2019). Internal consistency for the study was good, with Cronbach's $\alpha = .75$.

Autonomy and Competence. The two mediators, perceived autonomy and competence of participants were assessed using the German version of the Basic Psychological Need Satisfaction and Frustration Scale (BPNSNF; Chen et al., 2015; Heissel et al., 2018). Items were adapted slightly to assess daily autonomy and competence satisfaction and frustration. Scores for the satisfaction of BPN were used for the main analysis and scores for the frustration of BPN were used for additional explorative analyses.

Autonomy and competence satisfaction and frustration were assessed using 16 items, such as: "*I feel a sense of choice and freedom in the things I undertake*" as an example for autonomy satisfaction and "*I feel like a failure because of the mistakes I make*" for competence frustration. Participants were asked to think about their last seven days when answering the items and participants had to indicate their level of agreement with the statements on a 5-point-Likert scale, ranging from *not true at all* to *completely true*. Internal consistency for the 8-item-scale on autonomy and competence satisfaction and the 8-item scale on autonomy and competence frustration was good, with Cronbach's $\alpha = .84$ and $\alpha = .89$ respectively. Scores for autonomy satisfaction in this sample ($M = 3.27$, $SD = 0.79$) ranged from 1.25 to 5, for autonomy frustration ($M = 2.87$, $SD = 0.98$) from 1 to 5, for competence satisfaction ($M = 3.38$, $SD = 0.86$) from 1.25 to 5 and for competence frustration ($M = 2.52$, $SD = 1.11$) from 1 to 5.

Coffee Abstinence. Participants were asked each day to indicate whether they managed to abstain from coffee. This information was used to verify whether participants stuck to the right group allocation, as well as for additional explorative analyses.

Caffeine Withdrawal Symptoms. The Caffeine Withdrawal Symptom Questionnaire (CWSQ) was administered in order to assess potential caffeine withdrawal symptoms and the information was used for additional explorative analyses (Juliano et al., 2012). The scale consisted of 23 items and participants had to indicate their agreement on a 5-point-Likert-scale ranging from *not at all* to *extremely* and had an internal consistency of $\alpha = .68$. The following seven factors were assessed *fatigue/drowsiness*, *low alertness/difficulty concentrating*, *mood disturbances*, *low sociability/motivation to work*, *nausea/upset stomach*, *flu-like feelings*, and *headache* (Juliano et al., 2012).

Data Analysis

To test H1, I conducted a 2 x 2 mixed ANOVA (Analysis of Variance) separately for *affective well-being* and *life satisfaction* as dependent variables, whereas *group allocation* (abstinence vs. no abstinence) was used as a between factor and *time* as a within factor.

To test H2 and H4, I also conducted a 2 x 2 mixed ANOVA for *autonomy* and *competence* as dependent variables, whereas *group allocation* (abstinence vs. no abstinence) was used as a between factor and *time* as a within factor.

To test H3 and H5, as well as the overall model depicted in Figure 1, I conducted a mediation analysis, whereby *autonomy* and *competence* were used as mediators, and *group allocation* (abstinence vs. no abstinence) was used as a predictor. The outcome variable was *well-being* and was assessed through affective state and life satisfaction. Analyses were conducted using SPSS software (version 27.0) and Andrew Hayes' PROCESS software.

Additional explorative analyses were conducted, where daily affective well-being measures were included, as well as caffeine withdrawal symptoms and results of the second week of the study, where the waitlist-control group experienced the abstinence condition.

Results

Descriptive Statistics

Seventy-five people were included in the analyses. From those 39 who were in the abstinence group, 36 managed to abstain from coffee for a week, and three people did not manage to abstain for the full length of seven days, instead one person reported that they abstained for five days and two people reported that they abstained for six days. 84% reported that they compensated their coffee consumption with other stimulating substances like green tea, or energy drinks. Additionally, the abstinence group was asked to report how difficult it was for them to abstain from coffee, descriptive statistics are presented in Figure 2. Means, standard deviations and correlations for the assessed variables are shown in Table 1. Means, standard deviations and differences between the intervention and the waitlist-control group for the assessed variables are reported in Table 2.

Figure 2

Frequencies for Difficulty of Abstaining

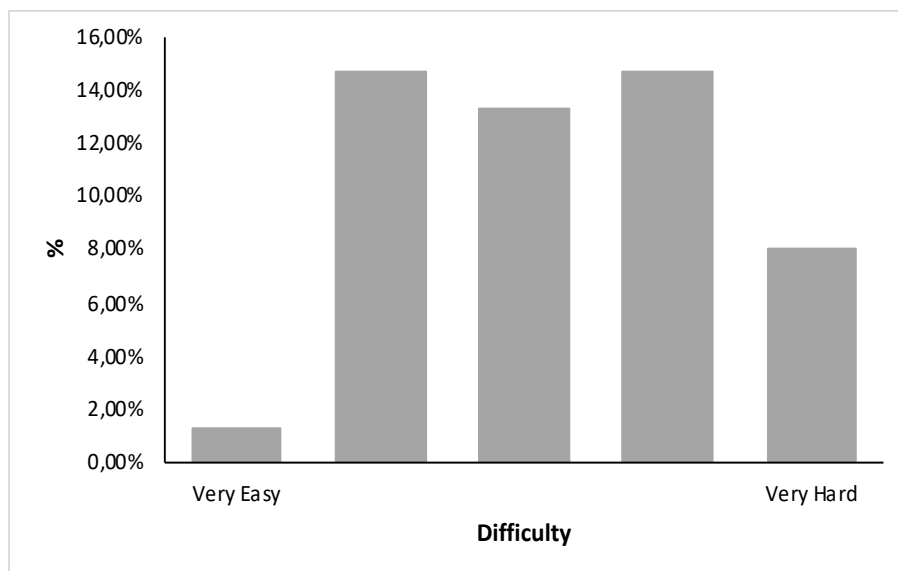


Table 1*Means, Standard Deviations and Correlations Among Variables*

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Cups of coffee	3.13	.95	—				
2. Affect Balance	7.26	7.00	-.18	—			
3. Life Satisfaction	3.59	.71	-.28*	.57**	—		
4. Competence	3.38	.79	-.17	.65**	.55**	—	
5. Autonomy	3.27	.71	-.22	.62**	.63**	.54**	—
6. CWS	2.43	1.30	-.34**	-.48**	-.34**	-.48**	-.49**

Note. $N = 75$. Competence refers to competence satisfaction, autonomy refers to autonomy satisfaction. CWS refers to caffeine withdrawal symptoms.

* $p < .05$. ** $p < .01$.

Table 2*Differences Between Intervention Group and Waitlist-Control Group on Assessed Variables*

	Intervention Group		Waitlist-Control Group		<i>t</i> (73)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Cups of Coffee	3.03	.78	3.25	1.11	-1.02	.310	-.95
Affect Balance	5.76	5.70	8.89	8.00	-1.97	.052	-6.87
Life Satisfaction	3.47	.70	3.73	.71	-1.60	.116	-.70
Competence	3.28	.75	3.49	.83	-1.12	.268	-.79
Autonomy	3.15	.63	3.40	.77	-1.58	.119	-.70
CWS	2.60	.46	2.26	.56	2.85	.006	.52

Note. $N = 75$. Intervention group refers to the group that abstained from coffee in the first week, waitlist-control group refers to the group that presumed with their coffee consumption in the first week. CWS refers to caffeine withdrawal symptoms.

The Influence of Abstaining on Well-Being

To examine the influence of abstinence on well-being, measures of affect balance and life satisfaction of two points in time, before the intervention (T0) and at the end of the intervention (T1) were used. I expected an interaction between time and group at T1, but not

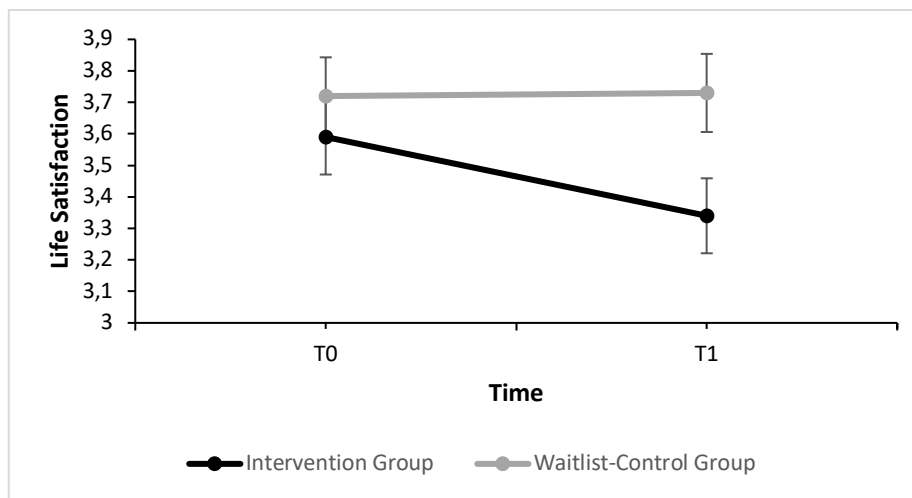
at T0. More precisely I expected the intervention group and the waitlist-control group to differ in their well-being, assessed separately for affect balance and life satisfaction, after one week, but not before the intervention. In particular, the group that abstained should have higher mean scores in life satisfaction and affect balance after one week of abstinence, than the group who did not abstain. To test H1, I conducted a 2 x 2 mixed ANOVA separately for *affective well-being* and *life satisfaction* as dependent variables, whereas *group allocation* (abstinence, vs. no abstinence) was used as a between factor and *time* as a within factor.

No significant main effect of intervention on affective well-being, $F(1,73) = 3.891$, $p = .052$, $\eta^2 = .051$, or on life satisfaction, $F(1,73) = 2.531$, $p = .116$, $\eta^2 = .034$, averaged over time was found. However, a significant interaction between time and group (abstinence vs. no abstinence) for life satisfaction, $F(1,73) = 5.544$, $p = .021$, $\eta^2 = .071$, but not for affect balance, $F(1,73) = .371$, $p = .544$, $\eta^2 = .005$, was found. In line with my expectations, the interaction between time and group was not significant at T0, showing no difference in life satisfaction between the groups before the intervention started, $t(73) = .742$, $p = .461$, $d = 0.03$.

However, contrary to my expectations that individuals who abstain would score higher on well-being than individuals who did not abstain, I found that life satisfaction scores in the intervention group ($M = 3.34$, $SD = .73$) compared to the waitlist-control group ($M = 3.73$, $SD = .76$) were significantly lower at T1, $t(73) = 2.26$, $p = .027$, $d = 0.52$. No interaction between group and time was found for affect balance. However, there was a significant main effect of time on affect balance across conditions, $F(73,1) = 17.26$, $p < .001$, indicating that affect balance scores increased significantly for both groups over time, from $M = 4.10$ ($SD = 7.50$) to $M = 7.41$ ($SD = 6.90$) for the intervention group, and from $M = 6.67$ ($SD = 8.89$) to $M = 11.11$ ($SD = 8.56$) for the waitlist-control group. Means of life satisfaction and affect balance are presented in Figure 3 and Figure 4.

Figure 3

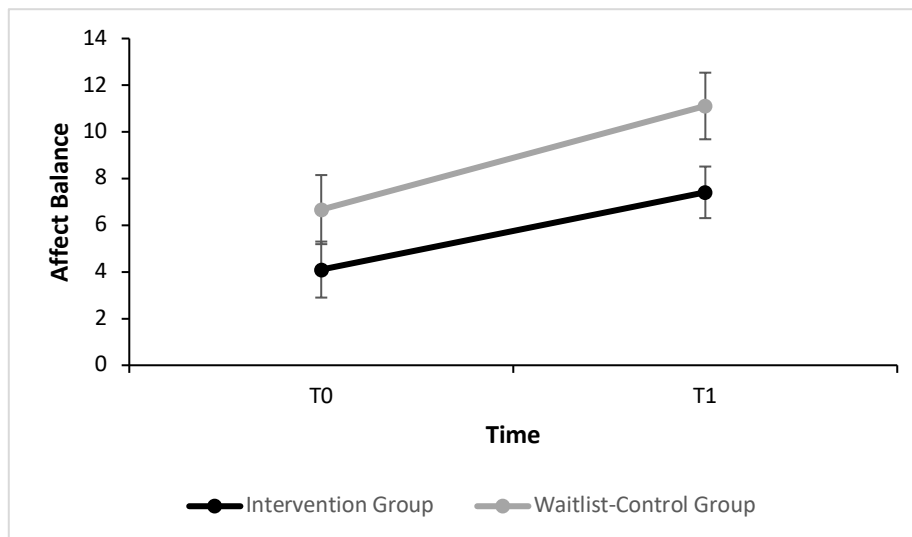
Mean Life Satisfaction Scores Over Time for Different Groups



Note. Mean life satisfaction scores at T0 and after seven days (T1) are presented for the intervention and waitlist-control group. Error bars represent the standard error (SE). Higher scores are indicating a higher satisfaction with life.

Figure 4

Mean Affect Balance Scores Over Time for Different Groups

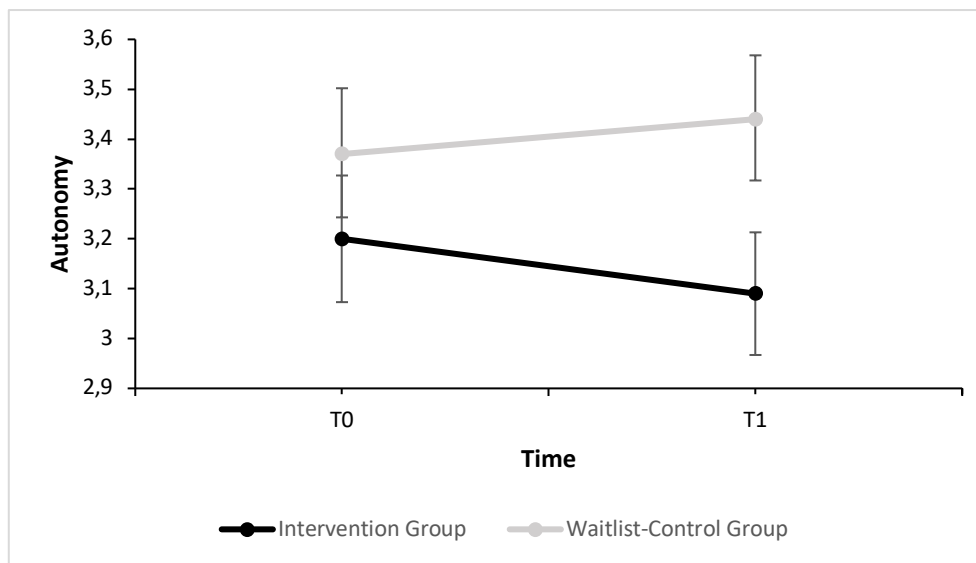


Note. Mean affect balance scores at T0 and after seven days (T1) are presented for the intervention and the waitlist-control group. Error bars represent the standard error (SE). Higher scores are indicating high positive and low negative feelings.

Effects of Abstaining on Autonomy and Competence

Next, I examined the effect of autonomy and competence on well-being. I expected, that abstaining positively influences perceived autonomy (H2). More precisely, the group that abstained should score higher on autonomy after one week of abstinence, than before, compared to the waitlist-control group who should have no significant change in autonomy ratings from T0 to T1. To test whether abstaining positively influenced autonomy for the intervention group (H2), a 2 x 2 mixed ANOVA was conducted, where *time* served as within factor, *group allocation* (abstinence vs. no abstinence) as a between factor and *autonomy* as a dependent variable. I expected a significant interaction between time and group at T1, but not at T0.

Contrary to the hypothesis I found no significant interaction between time and group, $F(1,73) = 1.175, p = .282$. As expected, the interaction between time and group was not significant at T0, showing no difference in autonomy between the groups at the baseline level, $t(73) = .926, p = .358$. However, contrary to my hypothesis that individuals who abstain would score higher on autonomy than individuals who do not abstain, the intervention group and the waitlist-control group did not significantly differ in their autonomy ratings at T1, $t(73) = 1.92, p = .059$. Thus, Hypothesis 2 was not supported, as abstaining for a week did not positively influence autonomy ratings. Mean scores of autonomy satisfaction at the two time points are shown in Figure 5. Additionally, no main effect of time across all conditions was found, $F(1,73) = 1.044, p = .835$, and no main effect of intervention over time was found, $F(1,73) = 2.484, p = .119$.

Figure 5*Mean Autonomy Scores Over Time for Different Groups*

Note. Mean competence scores at T0 and after seven days (T1) are presented for the intervention and the waitlist-control group. Error bars represent the standard error (SE).

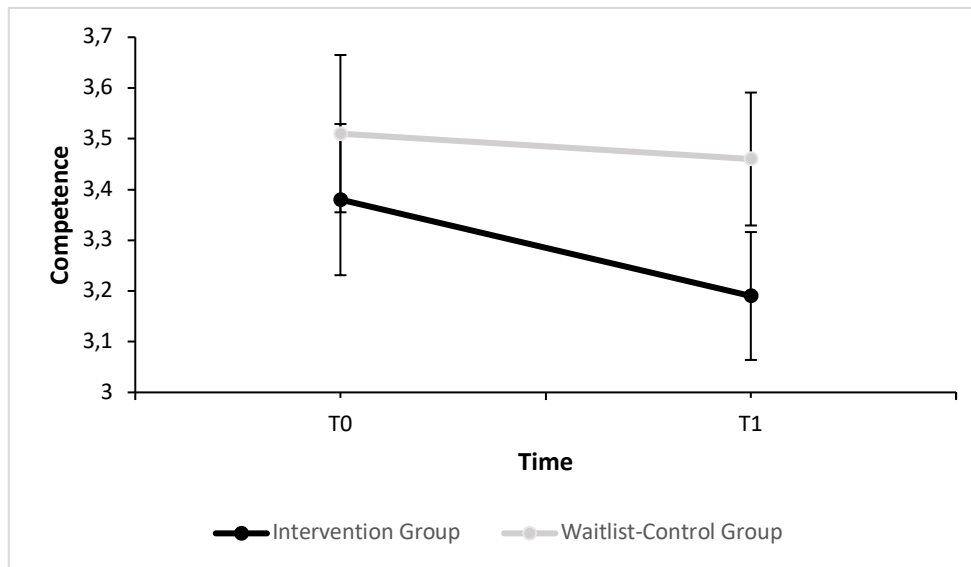
To test whether abstaining positively influenced competence in the group who abstained (H4) another 2 x 2 mixed ANOVA was conducted, where *time* served as within factor, *group allocation* (abstinence vs. no abstinence) as a between factor and *competence* as a dependent variable. I expected a significant interaction between time and group at T1, but not at T0. More precisely, the intervention group should score higher on competence than the waitlist-control group after the intervention, but not before the intervention.

Contrary to the hypothesis I found no significant interaction between time and group, $F(1,73) = 1.767, p = .384$. As expected there was no difference in competence ratings at T0, $t(73) = .632, p = .529$. However, contrary to my hypothesis that people who abstained for a week would score higher on competence than individuals who did not abstain, the intervention and the waitlist-control group did not significantly differ in their competence ratings at T1, $t(73) = 1.499, p = .138$. Contrary the assumption it can be observed, as depicted in Figure 6, that the mean scores of competence satisfaction slightly decreased for both

groups over time. Additionally, no main effect of time on competence across all conditions was found, $F(1,73) = 2.520, p = .117$ and no main effect of intervention over time was found, $F(1,73) = 1.244, p = .268$.

Figure 6

Mean Competence Scores Over Time for Different Groups



Note. Mean competence scores at T0 and after seven days (T1) are presented for the intervention and the waitlist-control group. Error bars represent the standard error (SE).

Mediation Analyses

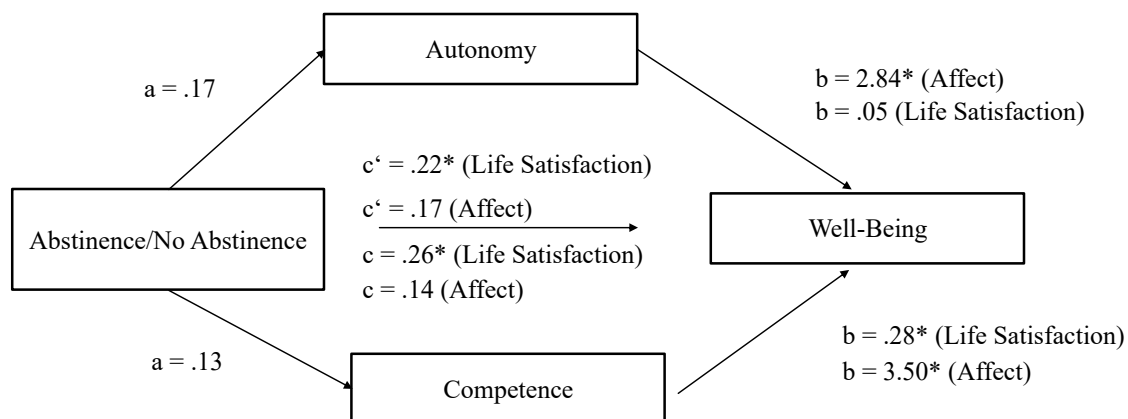
To test the overall model as depicted in Figure 1 and to examine whether autonomy (H3) and competence (H5) mediate the relationship between abstinence and well-being a mediation analysis was performed using the PROCESS macro by Hayes (2018). *Autonomy* and *competence* were used as mediators, and *group allocation* (abstinence vs. no abstinence) was used as a predictor. The outcome variable was *well-being* which was assessed through *affect balance* and *life satisfaction*. The analysis was run separately for life satisfaction and affect as a dependent variable. I expected that the direct path between abstinence and well-being would be positively mediated by perceived autonomy and competence.

Unstandardized path coefficients for the research model are shown in Figure 7. I found that the relationship between abstinence and life satisfaction was not significantly mediated by autonomy, indirect effect $ab = 0.083$, 95%-CI $[-0.048, 0.037]$ or competence, indirect effect $ab = 0.038$, 95%-CI $[-0.042, 0.148]$. For affect balance the analysis also showed that the relationship between abstinence and affect balance was not significantly mediated by competence, indirect effect $ab = 0.478$, 95%-CI $[-0.914, 1.5920]$, or autonomy, indirect effect $ab = 0.490$, 95%-CI $[-0.471, 1.621]$. Thus, Hypothesis 3 and Hypothesis 4 were not supported.

However, as already shown in prior research (e.g., Martela & Sheldon, 2019), competence did significantly predict life satisfaction, $B = 0.2775$, $p < 0.05$. I also found that autonomy and competence did significantly predict affect balance, $B = 3.492$, $p < .05$ and $B = 2.848$, $p < .05$, respectively.

Figure 7

Mediation Model With Unstandardized Path Coefficients



Note. $*p < .05$. $**p < .001$

Explorative Analyses

Since the analyses above used a composite score of affect balance, I ran additional calculations to look at positive and negative affect scores separately. Mean scores of positive and negative affect scores are shown in Figure 8 and Figure 9. An increase in positive affect

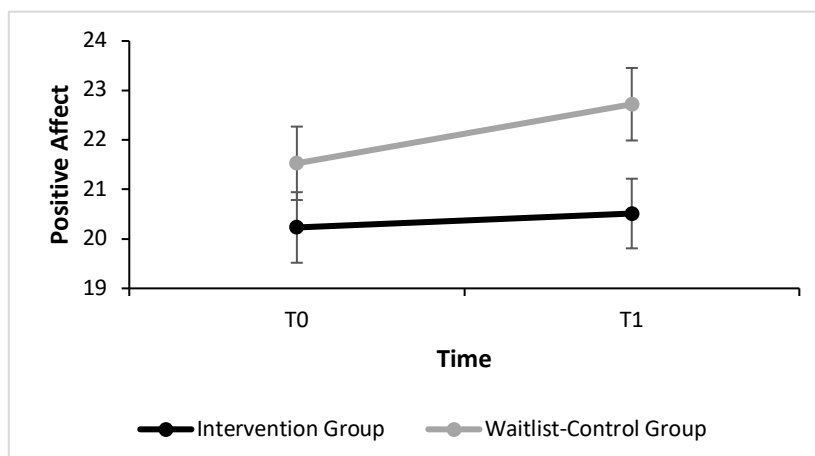
and a decrease in negative affect over time can be seen for both groups. To examine the influence of abstinence on positive and negative affect for both groups I conducted a 2 x 2 mixed ANOVA separately for *positive* and *negative affect* as dependent variables, whereas *group allocation* served as a between factor and *time* as a within factor.

Analysis showed that there was no significant interaction between time and group for positive affect $F(1,73) = 0.822, p = .368, \eta^2 = .011$ and for negative affect, $F(1,73) = 0.045, p = .833, \eta^2 = .001$. However, a main effect of time on negative affect across groups was found, $F(1,73) = 35.091, p < .001$, indicating that negative affect decreased significantly for both groups over time from $M = 4.55$ ($SD = 0.52$) at T0 to $M = 4.16$ ($SD = .48$) at T1. No main effect of time on positive affect across groups was found, $F(1,73) = 2.153, p = .147$. There was also no main effect of the intervention on positive affect over time $F(1,73) = 3.880, p = .053$. Looking at T0 there was no significant difference between the intervention and the waitlist-control group for positive affect, $t(73) = 1.261, p = .211$.

For the main analysis just two time points of affect balance were used. However, to shed light on how affect balance in both groups changed over time, Figure 10, shows the affect balance scores for all eight time points at which participants indicated their affective well-being.

Figure 8

Mean Positive Affect Scores Over Time for Different Groups

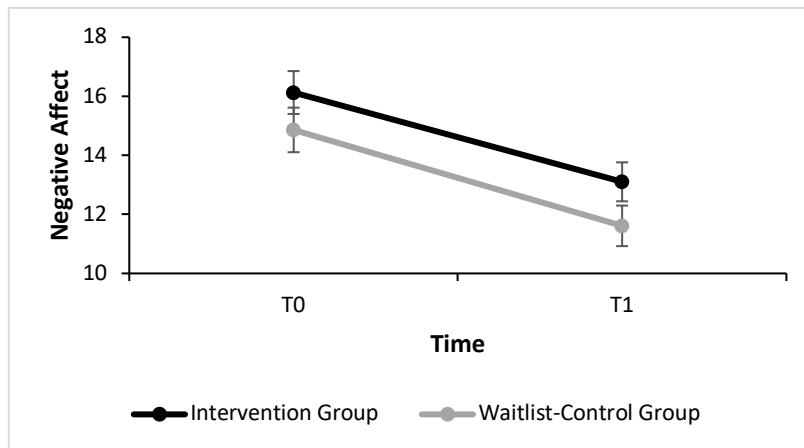


Note. Mean positive affect scores at baseline (T0) and after seven days (T1) are presented for the intervention and the waitlist-control group. Error bars represent the standard error (SE).

Higher scores are indicating higher positive affect.

Figure 9

Mean Negative Affect Scores Over Time for Different Groups

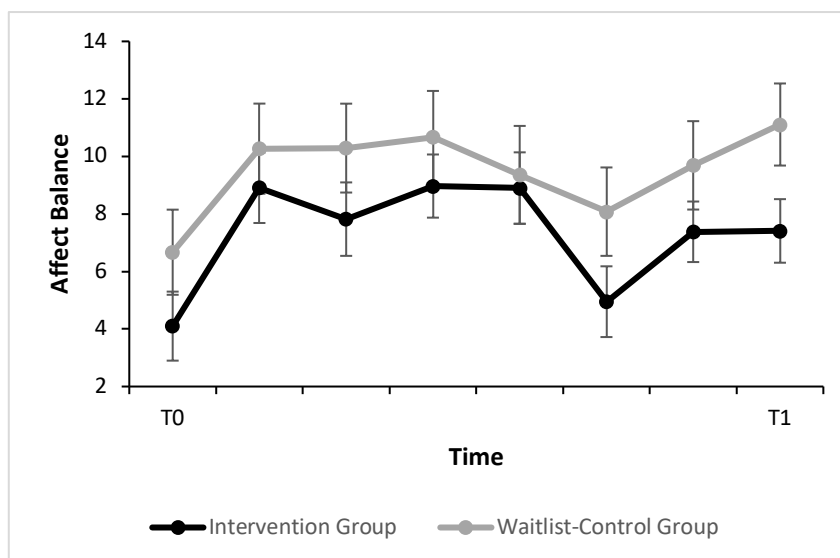


Note. Mean negative affect scores at baseline (T0) and after seven days (T1) are presented for the intervention and the waitlist-control group. Error bars represent the standard error (SE).

Higher scores are indicating higher negative affect.

Figure 10

Mean Affect Balance Scores Over Time



Note. Mean positive affect scores at T0, T1 and between T0 and T1 are presented for the

intervention and the waitlist-control group. Error bars represent the standard error (SE).

Higher scores are indicating high positive and low negative feelings.

Autonomy and Competence Frustration. As outlined above, there was no significant effect of abstinence on autonomy and competence satisfaction. In addition to autonomy and competence satisfaction, autonomy and competence frustration were also assessed in the study but were not used in the main analysis. Thus, I also looked at whether abstaining had an influence on autonomy and competence frustration. A 2 x 2 mixed ANOVA was conducted, where *time* served as a within factor, *group allocation* (abstinence vs. no abstinence) as a between factor and *autonomy frustration* as a dependent variable.

There was no significant main effect of time on autonomy frustration across conditions $F(1,73) = 0.016, p = .90$ and no significant main effect of intervention on autonomy frustration $F(1,73) = 0.148, p = .703$. There was also no significant interaction between group and time for autonomy frustration, $F(1,73) = 0.075, p = .755$, showing that the groups did not significantly differ in their autonomy frustration ratings at T0, $t(73) = 0.244, p = .808$ and at T1, $t(73) = 0.469, p = .640$. However, there was a slight increase in autonomy frustration for the intervention group from $M = 2.90, (SD = 1.04)$ to $M = 2.92 (SD = .93)$ and a slight decrease in autonomy frustration for the waitlist-control group from $M = 2.85 (SD = .96)$ to $M = 2.81 (SD = 1.00)$.

I conducted the same analysis using *competence frustration* as a dependent variable and it was shown that there was no significant main effect of time on competence frustration across conditions $F(1,73) = 0.306, p = .582$ and no significant main effect of intervention on competence frustration $F(1,73) = 0.091, p = .763$. There was also no significant interaction between group and time for competence frustration, $F(1,73) = 0.381, p = .539$, showing that the groups did not significantly differ in their competence frustration ratings at T0, $t(73) = 0.037, p = .971$ and at T1, $t(73) = 0.530, p = .598$. However, there was a slight increase in

competence frustration for the intervention group from $M = 2.55$ ($SD = 1.15$) to $M = 2.56$ ($SD = 1.00$) and a slight decrease in competence frustration for the waitlist-control group from $M = 2.54$ ($SD = 1.13$) to 2.42 ($SD = 1.19$). Thus, abstaining did neither significantly influence autonomy and competence satisfaction, nor autonomy and competence frustration. Next, I looked whether additional variables, such as caffeine withdrawal symptoms and average coffee consumption did moderate ratings on well-being.

Caffeine Withdrawal Symptoms as a Moderator. A moderation analysis using PROCESS macro by Hayes (2018) was run to determine whether caffeine withdrawal symptoms did moderate the effect of intervention (abstinence vs. no abstinence) on well-being. Thus, I analyzed whether the interaction between intervention and withdrawal symptoms influenced well-being at T1. *Group allocation* served as predictor, *affect balance* and *life satisfaction* at T1 served as outcome variables, *caffeine withdrawal symptoms* served as a moderator and *affect balance* and *life satisfaction* at T0 were included as covariates. The analysis was run separately for affect balance and life satisfaction as outcome variables.

Moderation analysis showed that the interaction between the intervention and caffeine withdrawal symptoms was not significant for affect balance, $b = -3.341$, 95% CI $[-9.499, -2.817]$, $t = 1.082$, $p = .283$, indicating that the relationship between intervention and affect balance is not moderated by caffeine withdrawal symptoms. The moderation analysis also showed no significant interaction between the intervention and caffeine withdrawal symptoms for life satisfaction, $b = -0.078$, 95% CI $[-0.502, 0.346]$, $t = 0.367$, $p = .715$, indicating that the relationship between intervention and life satisfaction is not moderated by caffeine withdrawal symptoms.

Caffeine withdrawal symptoms were also included as a covariate in the mixed ANCOVA, where *group allocation* served as an independent variable and *life satisfaction* as a dependent variable, to analyze whether group allocation still has a significant effect on life

satisfaction. Results showed that after including caffeine withdrawal symptoms as a covariate, group allocation did not significantly influence life satisfaction $F(1,72) = 3.598, p = .065$.

Average Coffee Consumption as a Moderator. I also assessed how many cups of coffee participants usually consumed per day. Thus, another moderation analysis was run to determine whether the interaction between average coffee consumption and group allocation (abstinence vs. no abstinence) significantly influences affect balance and life satisfaction at T1. *Group allocation* served as predictor, *affect balance* and *life satisfaction* at T1 served as outcome variables, *average coffee consumption* served as a moderator and *affect balance* and *life satisfaction* at T0 were included as covariates. The analysis was run separately for affect balance and life satisfaction as outcome variables.

Moderation analysis showed that the interaction between the intervention and average coffee consumption was not significant, $b = 0.939$, 95% CI $[-2.709, -4.585]$, $t = 0.513$, $p = .609$, indicating that the relationship between intervention and affect balance is not moderated by average coffee consumption. For life satisfaction the moderation analysis also showed that the interaction between the intervention and average coffee consumption was not significant, $b = 0.052$, 95% CI $[-0.183, -0.288]$, $t = 0.443$, $p = .288$, indicating that the relationship between intervention and life satisfaction is not moderated by average coffee consumption.

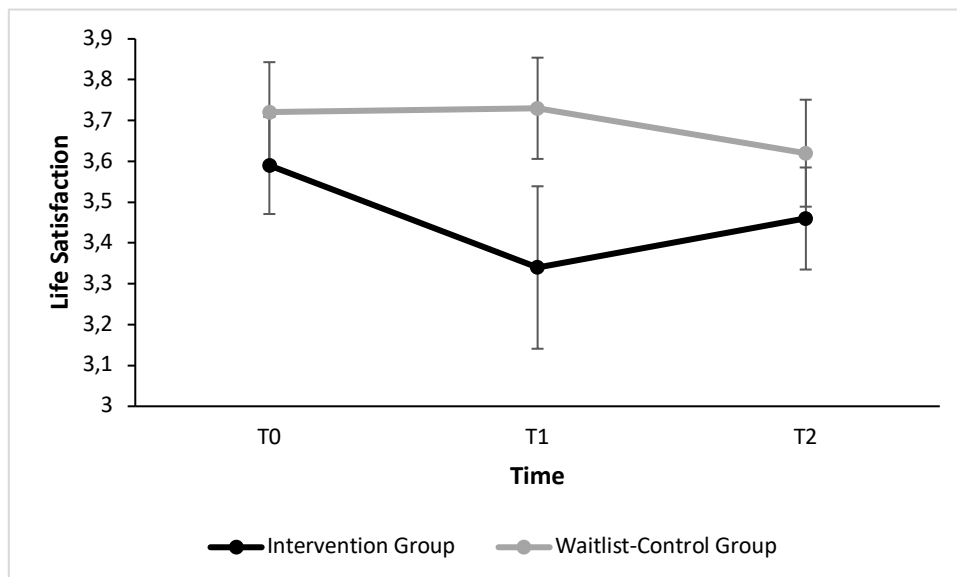
Life Satisfaction and Affect Balance for the Waitlist-Control Group. Additionally, in the second week the waitlist-control group switched in the intervention condition and had to abstain from coffee for a week. The intervention group, who abstained in the first week, did not abstain anymore and presumed with their usual coffee consumption. Thus, I also examined how abstaining influenced life satisfaction and affect balance of the waitlist-control group. I used a mixed 2 x 2 ANOVA to examine how life satisfaction and affect balance scores changed from T1 to T2 for the waitlist-control group being in the intervention

condition. Thus, *affect balance* and *life satisfaction* at T2 were used as dependent variables, whereas *group allocation* (abstinence vs. no abstinence) was used as a between factor and *time* (T1, T2) as a within factor.

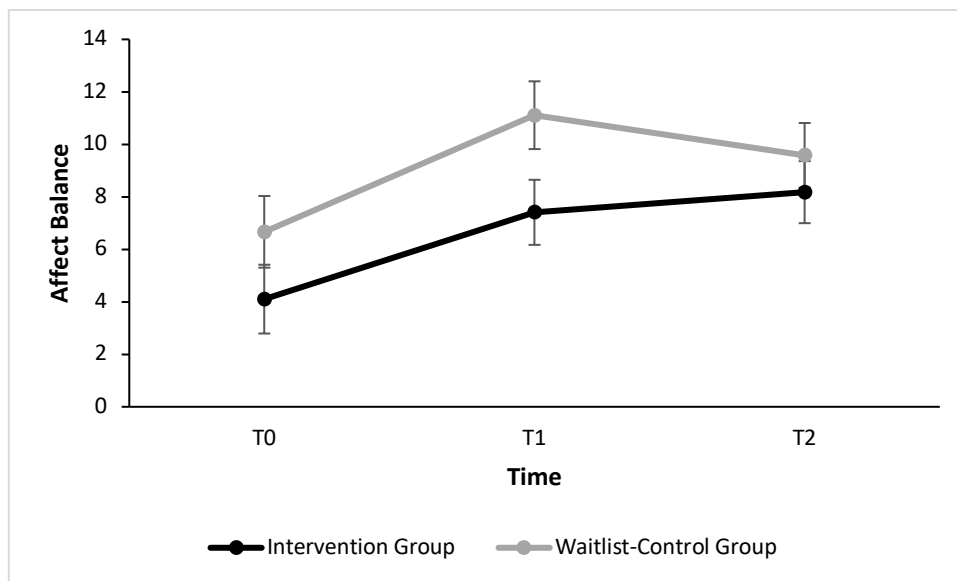
Using life satisfaction as a dependent variable, the results show that there was no significant interaction between time and group for life satisfaction, $F(1,71) = 2.386, p = .127$, and for affect balance, $F(1,71) = 1.095, p = .299$. Comparing the two groups at T2 showed, that they did not significantly differ in their ratings on affect balance, $t(73) = 0.823, p = .413, d = 1.47$, or life satisfaction $t(73) = 0.885, p = .329, d = 0.25$. These results suggest that compared to the intervention group, where a decrease of life satisfaction during the abstinence was shown, this was not true for the waitlist-control group during the abstinence. Changes of means over time are depicted in Figure 11 for life satisfaction and in Figure 12 for affect balance.

Figure 11

Mean Scores of Life Satisfaction for Three Points in Time



Note. Mean life satisfaction scores at baseline (T0), after one week (T1) and after two weeks (T2) are presented for the intervention and the waitlist-control group. Error bars represent the standard error (SE). Higher scores are indicating higher life satisfaction.

Figure 12*Mean Score of Affect Balance for Three Points in Time*

Note. Mean affect balance scores at baseline (T0), after one week (T1) and after two weeks (T2) are presented for the intervention and the waitlist-control group. Error bars represent the standard error (SE). Higher scores are indicating high positive and low negative feelings.

Discussion

The purpose of this study was to investigate how abstinence of a hedonic product influences well-being. More precisely the aim was to examine whether coffee abstinence can positively influence two components of subjective well-being: life satisfaction and affective well-being. The goal was to propose a new framework to study abstinence of hedonic goods and well-being through taking basic psychological needs, namely autonomy and competence, into account.

Effects of Abstaining on Well-Being

First, this study aimed to explore whether people who abstain from hedonic goods, namely coffee, for a week score higher on well-being, than people who presume with their regular coffee consumption. Differences in well-being between the group who abstained and the group who did not abstain were indeed observed, even if contradicting the assumed effect.

I found that people who abstained from coffee for a week, scored lower on life satisfaction than people who did not abstain. This finding contradicts the assumption that abstinence of a hedonic product might increase life satisfaction. This assumption was mainly based on research on abstinence and reduced consumption in the field of frugality that showed that engaging in frugal behavior increases life satisfaction and that doing something new positively influences well-being (André et al., 2018; Diener et al., 2010; Muiños et al., 2015). On the contrary, no such difference between groups was found for the scores of affect balance. However, results showed that affective well-being changed more strongly over time for both groups, thus being less robust, compared to the life satisfaction scores.

These differences in ratings between the cognitive component and the affective component of well-being are particularly interesting. The results strongly imply that outcome expectations people have associated with abstinence might influence the ratings on life satisfaction and indicate that people might hold certain prognostic beliefs about abstaining (Wójcicki et al. 2009). This assumption is in line with earlier research on income and well-being that showed a stronger association between income and the evaluative component of well-being than between income and the affective component of well-being (Diener et al., 2010). Life satisfaction seems to be more often influenced by “*peak experiences*”, specific events that have been experienced recently (Newman et al., 2021). When people are thinking about their satisfaction with life, they also seem to rely on lay theories about how specific actions should be or usually are (Newman et al., 2021). Thus, in the present research ratings on life satisfaction might have been dominated by the belief, people generally hold when it comes to abstaining. Whereas affective well-being might cover more precisely how people felt, thus resulting in a gap between the ratings of affect balance and life satisfaction.

These results also strongly imply that the depletion of self-regulation resources, when abstaining from a hedonic product, might be higher than assumed. Abstaining from hedonic

goods that are used daily, might be different in quality, compared to other goods, such as buying less clothes or possessions, previously used in research on abstaining (Kasser, 2011; Kasser et al., 2014). This highlights the importance to consider the quality of different goods in the context of abstinence. Abstaining from a habit might, similar to addiction, produce even more aversive states at the beginning, because the daily coffee consumption might be perceived as a “self-gifting” behavior, a behavior applied to reward oneself (Baumeister & Nadal, 2017; Zhong & Mitchell, 2012).

Especially during times of social isolation due to Covid-19, which was when the study took place, hedonic goods consumed habitually might be an integral part of the daily routine. Social isolation might have already needed many self-regulatory resources and participants might have already abstained from a lot of activities. Thus, additional abstinence might be challenging.

The Role of Autonomy and Competence in Abstaining

Second, I examined whether abstinence positively influences two of the basic psychological needs, autonomy, and competence. Whereas past researchers found the importance of autonomy and competence in the context of materialism and simplifying behavior (e.g., Chen et al., 2015; Diener et al., 2018; Kasser et al., 2014), the present study showed that abstinence did not change the feeling of autonomy and competence in a positive way. It was observed that the autonomy and competence ratings slightly decreased for the people who abstained.

Third, I tested whether autonomy and competence influence the relationship between abstinence and well-being. In contrast to the hypotheses, I did not find that autonomy and competence influence the relationship between abstinence and well-being. One explanation for this finding is that participants might have not perceived their daily abstinence as a goal and did not attach value to abstaining. Their primary goal when participating in the study

might have been to gain credits and not the daily abstinence itself. Thus, the abstinence might not have influenced their competence ratings. They might also have not perceived their abstinence as an active choice. As prior research showed, the positive effect of restricted behavior on competence was mainly true for people who had the financial means to freely decide whether they want to reduce (Deci & Ryan, 2000). Thus, even if they had the choice to drop out from the study, their major goal might have been to gain credits.

Additionally, the process of *internalization* might not have occurred, because participants might not have identified with the action of abstinence. Satisfaction of psychological needs plays an important role in the process of internalization, where people fully take in a certain not genuinely interesting activity (Vansteenkiste et al., 2020). Integrated and internalized regulation refers to the process where actions and behaviors that were not autonomous in the beginning become more autonomous (Deci & Ryan, 2000). Integrated regulation occurs when people combine new experiences with existing values and internalization occurs when something that was originally externally motivated becomes more autonomous and is transformed into something that fits the person's values (Deci & Ryan, 2000). In the current study, this transformation might not have occurred, thus the ratings on autonomy and competence did not increase and abstaining might not have been perceived differently after the period of abstaining. Participants might not have identified with the importance of abstinence and did not integrate the action into their sense of self (Deci & Ryan, 2000).

However, even though I found no support for the importance of autonomy and competence in the context of abstinence, I found that autonomy and competence do positively influence well-being. These results are consistent with an array of research on well-being, that points out the crucial role of autonomy and competence in that context (Deci & Ryan, 2008; Kasser et al., 2014).

Limitations

This study laid a foundation for prospective research on abstinence and well-being. There are also some limitations that could have influenced the outcome of the study and should be addressed by future research.

One limitation of this study is that participants only had to abstain for one week. As already outlined above, abstaining from hedonic goods which are used daily, might, due to the pleasurable nature and the habitual use, pose additional obstacles to participants. Previous research showed that abstaining might drain many self-regulatory resources in the beginning (Baumeister, 2002). One week of abstinence might have been too short to uncover positive effects from abstinence on well-being and the depletion of resources might have been higher than the positive effect being gained from the experience. During a longer period of abstaining participants might have gone beyond the point where breaking the habit takes many self-regulatory resources, might have been able to experience the positive effects of abstaining and a new habit might have been produced (Baumeister & Nadal, 2017).

In addition, the period of assessment might have included atypical days of the year, such as specific life events, that might have influenced individuals' well-being. The assessment period of one week might not have been long enough to balance this out (Newman et al., 2021). Well-being can be influenced by many factors that are hard to control (Newman et al., 2021). Thus, a longer period of assessment could help to gain more reliable results.

Another limitation concerns the assessed variables. Individuals' expectations and goals might have given important information to explain the relationship between abstinence and well-being. However, participants were not asked about their primary motivation, which they pursued through participating in the study. Assessing motivation and outcome

expectations might help to gain more information about how abstinence and well-being interact.

Additionally, other variables that might help to better explain the relationship between abstinence and well-being are further well-being measures, such as personal growth. Well-being is a broad concept, and the current study only covered the concept of subjective well-being. Further approaches to assess well-being, such as the concept of eudaimonic well-being, which is more closely tied to one's values and human flourishing, might have been influenced by abstinence (Carrero et al., 2020).

One last limitation that should be mentioned is the product of abstinence, that was chosen for the current study. In this study coffee abstinence was chosen because it represents hedonic goods, that are used in a habitual manner. However, abstaining from coffee might be particularly challenging because of its addictive nature, as well as the physical symptoms that can occur when abstaining (Juliano et al., 2012). These symptoms might make it even harder to persist and enjoy the process of abstaining. Thus, research using different hedonic goods, that are less addictive might give us additional information about the relationship between abstinence and well-being.

Future Research

Much work remains to be done before a full understanding of which factors play a role in the relationship between abstinence and well-being is established. How the abstinence of goods is framed and presented might play a major role of how participants perceive abstaining. Even though the current study tried to make sure that participants are willing to abstain from the chosen product through implementing a waiting group, getting credits for the participation might have been the driving motivation to take part in the study. Framing abstinence differently and receiving more guidance throughout the process might play an important role in how abstinence is perceived. Thus, future research should examine whether

well-being ratings are different, when abstinence is being portrayed as a challenge, where people could learn new skills, as well as new information about themselves.

Past research on voluntary simplicity also pointed out the important role of the third basic psychological need, *relatedness*. According to the SDT people tend to naturally internalize values of their social groups (Deci & Ryan, 2000). Thus, being part of a group when abstaining and the feeling of relatedness might have an influence on how people feel while abstaining. Future research should also take the need for relatedness into account.

The present study represents a first attempt to address autonomy and competence in the context of abstinence and well-being in a longitudinal study. Further research should extend the current findings by examining additional factors that might be relevant in a framework for researching abstinence, such as personality traits (e.g., self-regulation, ability to delay gratification) and situational factors (e.g., social interaction). In addition, to develop a comprehensive model to research well-being in the context of abstinence, the nature of goods and the motivation of the person who is abstaining should be considered.

Characteristics of the action of abstaining might also play a role, such as fully abstaining from a good, compared to reducing consumption. Zero tolerance beliefs that might occur when fully abstaining, might increase the pressure on the people who abstain and might increase the probability of giving up (Baumeister & Heatherton, 1996). Including these different parts might help to better explain the relationship between abstinence and well-being and might help to create a comprehensive framework to study abstinence.

Lastly, as already outlined above, longer periods of abstinence might be beneficial to analyze how abstinence is being perceived after being used to it. Thus, future research should examine longer periods of abstinence and assess if changes in well-being ratings occur.

Relevance

The present research can be seen as a first step towards integrating the concept of psychological needs, abstinence of hedonic goods and well-being into one model, that to my knowledge, have not been directly linked. I hope that the current research will stimulate further investigation of this important area and work on a model that can be used to study abstinence and well-being. The present research, therefore, contributes to a growing body of evidence suggesting that the expected outcomes linked to abstinence might play an important role in how it affects well-being. The present research also shows that hedonic goods, used habitually, might have specific qualities that differentiate themselves from other goods (e.g., clothes), which can be abstained from.

In addition, the differences between the evaluative and the affective component of well-being point out the important role of expectations and common beliefs, that are associated with abstinence. This should be considered when advertising reduced consumption in our society. Focusing on potential positive effects of abstinence, such as learning new things and gaining new skills, might help to create a new perspective on that process.

It can also be seen that abstaining might need a lot of self-regulation resources. Thus, to promote reduced consumption on a global level policy makers should consider the consequences of ego depletion and share different strategies on how to deal with these challenges. More precisely, sharing the information that abstinence can be particularly hard in the beginning might help people to stick with new behaviors for a longer time and overcome the obstacles associated with it. Active choice might be draining in the beginning, however, long-term benefits, such as a true sense of autonomy should be highlighted. People who are depleted often spend more money and make choices more impulsively (Baumeister, 2002). To make good choices as a society, people should be informed about the draining effects, too much choice can bring with it.

To reclaim choice in consumption, reduce the depleting effect that frequent buying decisions bring with it, and to save natural resources in the long-term, a change of how we interact with different goods is needed. This longitudinal study brings research one step further towards the obtainment of insights concerning abstinence and well-being. To further develop this highly relevant topic future research is needed to develop a framework on how to extensively study well-being in the context of abstinence.

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Appendix A: Materials – Baseline Survey

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Fragebogen

1 Willkommen

Liebe Teilnehmerin, lieber Teilnehmer,

Herzlichen Dank für Ihre Bereitschaft, an der Interventionsstudie zum Thema Kaffeekonsum und Kaffeeverzicht im Rahmen meiner Masterarbeit teilzunehmen. Die Bearbeitungszeit der ersten Umfrage dauert ca. **15 Minuten**.

Die Studie wird vom Institut für Arbeits-, Wirtschafts- und Sozialpsychologie der Universität Wien durchgeführt. Ich beschäftige mich darin mit dem **Thema Kaffeekonsum und Kaffeeverzicht**.

Es ist für mich wichtig, dass Sie alle Fragen beantworten. Wenn Sie sich bei einer Frage nicht ganz sicher sind, kreuzen Sie einfach das Feld an, das am ehesten zutrifft. Es geht um Ihre persönliche Einschätzung, es gibt keine richtigen oder falschen Antworten.

Die Studie dient ausschließlich wissenschaftlichen Zwecken. Alle Informationen, die wir von Ihnen erhalten, werden vertraulich behandelt und anonymisiert ausgewertet, sodass keine Rückschlüsse auf Ihre Person möglich sind. Wenn Sie die Studie nicht fortführen wollen, können Sie sie jederzeit beenden, indem Sie das Fenster schließen. Ihre Daten werden nachfolgend nicht ausgewertet.

Mit dem Klicken des "Weiter"-Buttons bestätigen Sie, die Einleitung gelesen zu haben, und willigen ein, an dieser Studie teilzunehmen.

2 Versuchspersonennummer

Da wir in der Studie mehrere Erhebungszeitpunkte haben, ist es besonders wichtig, dass Sie bei **jeder Erhebung** Ihre **Versuchspersonennummer** angeben. Ihre Versuchspersonennummer setzt sich zusammen aus **8 Zeichen** zum Beispiel: **ER03RI21**. Der Code setzt sich zusammen aus folgenden Bestandteilen:

- ersten beiden Buchstaben des **Nachnamens** z.B.: "ER", bei dem Namen Ertl
- **Geburtsstag** der **Mutter** z.B.: "03", wenn der Geburtsstag beispielsweise am 03. Mai ist
- **ersten beiden Buchstaben** des **Vornamens der Mutter** z.B. "RI", bei dem Namen Rita
- **eigener Geburtsstag** z.B.: "21", wenn der eigene Geburtsstag beispielsweise am 21. Juni ist

Bitte geben Sie im nächsten Feld Ihre **Versuchspersonennummer** ein.

Versuchspersonennummer:

(Format: 00000000 z.B.: ER03RI21 = ersten beiden Buchstaben des **Nachnamens** z.B.: "ER", bei dem Namen Ertl, **Geburtsstag** der **Mutter** z.B.: "03", wenn der Geburtsstag beispielsweise am 03. Mai ist, **ersten beiden Buchstaben** des **Vornamens der Mutter** z.B. "RI", bei dem Namen Rita **eigener Geburtsstag** z.B.: "21", wenn der eigene Geburtsstag beispielsweise am 21. Juni ist)

Wichtig! Sie brauchen diesen Personencode bei den weiteren Umfragen. Um Fehler zu vermeiden, schicken Sie sich z.B. selbst eine Mail/SMS mit dem Code, speichern Sie ihn am Handy ab oder machen Sie einen Screenshot.

Wie hieß Ihr erstes Haustier?

Bitte füllen Sie nun die Kontrollfrage aus. Diese zweite Frage dient nur als Sicherheitsfrage, damit wir bei eventuellen Code-Tippfehlern trotzdem die Daten von den verschiedenen Erhebungszeitpunkt verbinden können.

Bitte geben Sie nun Ihren täglichen Kaffeekonsum an:

Geben Sie bitte die Anzahl von täglich konsumierten Tassen Kaffee an, die Ihrem tatsächlichen Kaffeekonsum am nächsten kommt. Ein Tasse entspricht ca. 25 ml Kaffee = 1 Espresso.

- ☐ weniger als 1 Tasse täglich
- ☐ 1 Tasse täglich
- ☐ 2 Tassen täglich
- ☐ 3 Tassen täglich
- ☐ mehr als 3 Tassen täglich

2.1.1 Endseite_Keine Kaffeetrinker*innen

Vielen Dank für Ihre Teilnahme!

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Die Umfrage ist nun beendet. Voraussetzung für die Studie ist es, dass Sie täglich mindestens eine Tasse Kaffee konsumieren. Trifft diese Bedingung nicht auf Sie zu, können Sie leider nicht bei der Interventionsstudie mitmachen.

Vielen Dank für Ihre Zeit.

**Bei Fragen zur Studie wenden Sie sich bitte an die Versuchsleiterin
(Eva Preininger, a01407729@unet.univie.ac.at).**

3.1 Erklärung Kaffeeverzicht

Noch einmal vielen Dank, dass Sie sich bereit erklärt haben, an der Studie zum Thema Kaffeekonsum teilzunehmen. Die Studie dauert insgesamt 14 Tage. In den ersten sieben Tagen müssen Sie jeden Tag einen kurzen Fragebogen zu Ihrem aktuellen Erleben ausfüllen. Ihre Aufgabe für die nächsten sieben Tage ist es, auf Ihren täglichen Kaffeekonsum (dazu zählt auch entkoffeinierter Kaffee) zu verzichten. Der erste Tag Ihres Verzichts ist der **Samstag, 08.05.2021**. Das bedeutet, dass Sie **bis Freitag 14.05.2021** keinen Kaffee konsumieren dürfen. Ab Samstag, 15.05.2021, dürfen Sie wieder wie gewohnt Kaffee konsumieren.



Andere koffeinhaltige Getränke oder andere Getränke mit aufputschender Wirkung (z.B.: Red Bull, Mate) dürfen auch in den sieben Tagen, in denen Sie auf Kaffee verzichten, weiterhin konsumiert werden. Um die Auswirkungen des Kaffeeverzichts zu erheben, müssen Sie **täglich einen kurzen Fragebogen** ausfüllen (dauert weniger als 5 Minuten). Dazu bekommen Sie täglich ein E-Mail mit einer Erinnerung, den Fragebogen auszufüllen. **Damit Sie auch die vollständigen Credits erhalten, ist es wichtig, dass Sie den Fragebogen täglich, zur ca. gleichen Zeit, ausfüllen. Der Fragebogen ist täglich ab 18 Uhr für Sie freigeschaltet.**

4.1 Erklärung kein Kaffeeverzicht

Noch einmal vielen Dank, dass Sie sich bereit erklärt haben, an der Studie zum Thema Kaffeekonsum teilzunehmen. Die Studie dauert insgesamt **14 Tage**. In den ersten sieben Tagen der Studie müssen Sie jeden Tag einen **kurzen Fragebogen zu Ihrem aktuellen Erleben** ausfüllen. Ihre Aufgabe für die nächsten sieben Tage ist es, auf Ihren täglichen Kaffeekonsum zu achten und diesen schriftlich zu dokumentieren. Bitte bereiten Sie sich dafür ein Blatt vor, auf dem Sie jeden Abend dokumentieren, wie viele Tassen Kaffee Sie konsumiert haben. Das Blatt dient lediglich für Sie zur **Selbstreflexion** und muss nicht abgegeben werden.



Der erste Tag zur Dokumentation Ihres Kaffeeverhaltens ist der **Samstag, 08.05.2021**. Bis Freitag, 14.05.2021 können Sie also normal Ihre gewohnte Anzahl an Tassen Kaffee konsumieren. Ab Samstag, 15.05.2021, müssen Sie dann für eine Woche auf Kaffee verzichten. Am Freitag, 21.05.2021 folgt eine abschließender Fragebogen.

Um die Auswirkungen des Kaffeekonsums zu untersuchen, müssen Sie in den ersten 7 Tagen **täglich einen kurzen Fragebogen ausfüllen** (dauert weniger als 5 Minuten). Dazu bekommen Sie täglich ein E-Mail mit einer Erinnerung, den Fragebogen auszufüllen. **Damit Sie auch die vollständigen Credits erhalten, ist es wichtig, dass Sie den Fragebogen täglich, zur ca. gleichen Zeit, ausfüllen. Der Fragebogen ist täglich ab 18 Uhr für Sie freigeschaltet.**

5 Demographie

Wie alt sind Sie?

(Bitte geben Sie ihr Alter in Jahren an)

Welches Geschlecht haben Sie?

- ☐ männlich
- ☐ weiblich
- ☐ divers

Welche Staatsangehörigkeit haben Sie?

- ☐ Österreich
- ☐ Deutsch
- ☐ Schweiz

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- ☐ andere EU
- ☐ andere nicht-EU

6 Demographie2

Sind Sie zurzeit erwerbstätig?

Unter Erwerbstätigkeit wird jede bezahlte bzw. mit einem Einkommen verbundene Tätigkeit verstanden, egal welchen zeitlichen Umfang sie hat. Was aus dieser Liste trifft auf Sie zu?

- ☐ Ich bin Vollzeit-erwerbstätig mit einer wöchentlichen Arbeitszeit von 35 Stunden und mehr
- ☐ Ich bin Teilzeit-erwerbstätig mit einer wöchentlichen Arbeitszeit von 15 bis 34 Stunden
- ☐ Ich bin Teilzeit- oder stundenweise erwerbstätig mit einer wöchentlichen Arbeitszeit unter 15 Stunden
- ☐ Ich bin in Mutterschafts-/Erziehungsurlaub oder in sonstiger Beurlaubung
- ☐ Ich bin zurzeit nicht erwerbstätig

Was ist Ihr höchster Bildungsabschluss?

- ☐ Ich bin ohne Abschluss von der Schule abgegangen
- ☐ Ich habe einen Abschluss einer Pflichtschule (z.B. Mittelschule/Hauptschule oder entsprechende Stufe einer anderen Schulform)
- ☐ Ich habe einen Realschulabschluss oder einen vergleichbaren Abschluss
- ☐ Ich habe einen Abschluss einer Fachschule oder berufsbildenden Schule
- ☐ Ich habe die allgemeine oder fachgebundene Hochschulreife / Abitur / Matura oder die Fachhochschulreife
- ☐ Ich habe einen Universitäts- oder Fachhochschulabschluss (Bachelor)
- ☐ Ich habe einen Universitäts- oder Fachhochschulabschluss (Master, Diplom, Magister, Lizentiat, Staatsexamen)
- ☐ Ich habe einen Universitäts- oder Fachhochschulabschluss (Promotion, Habilitation oder andere)

7 Affekt täglich

Bitte denken Sie nun daran, was Sie in den vergangenen 24 Stunden erlebt und wie Sie sich gefühlt haben. Geben Sie anschließend mithilfe der nachfolgenden Skala an, in welchem Maße Sie die unten angegebenen Gefühle erlebt haben. Die Antwort erfolgt in Form einer **Zahl von 1 bis 5**, wobei die einzelnen Zahlen folgendes bedeuten (1=nie oder selten; 2=selten; 3=gelegentlich; 4=oft; 5=sehr oft oder immer)

In den vergangenen 24 Stunden..

	nie oder sehr selten	selten	gelegentlich	oft	sehr oft oder immer
..hatte ich positive Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich negative Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich gute Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich schlechte Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich angenehme Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich unangenehme Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..habe ich mich glücklich gefühlt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..habe ich mich traurig gefühlt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich Angst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich froh	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich wütend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich zufrieden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8 Life Satisfaction

Im nächsten Teil möchten wir erfassen, wie Sie ihr Leben im Allgemeinen bewerten.

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Es folgen fünf Aussagen, denen Sie zustimmen bzw. die Sie ablehnen können. Bitte benutzen Sie die folgende Skala von 1-5, um Ihre Zustimmung bzw. Ablehnung zu jeder Aussage zum Ausdruck zu bringen. (1=stimme gar nicht zu; 5=stimme voll zu)

	stimme gar nicht zu				stimme voll zu
In den meisten Bereichen entspricht mein Leben meinen Idealvorstellungen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meine Lebensbedingungen sind ausgezeichnet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin mit meinem Leben zufrieden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bisher habe ich die wesentlichen Dinge erreicht, die ich mir für mein Leben wünsche.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wenn ich mein Leben noch einmal leben könnte, würde ich kaum etwas ändern.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9 Basic Psychological Need Satisfaction and Frustration

Im Folgenden Abschnitt befragen wir Sie zu Ihren aktuellen Erfahrungen im Leben. Bitte lesen Sie jede der folgenden Aussagen genau durch. Auf einer Skala von 1 bis 5 können Sie den Grad der Zustimmung für die jeweilige Aussage wählen (1=trifft überhaupt nicht zu; 5=trifft voll und ganz zu). Bitte beziehen Sie sich beim Ausfüllen auf die letzten 7 Tage.

In den letzten 7 Tagen..

	trifft überhaupt nicht zu				trifft voll und ganz zu
..hatte ich die Wahl und fühlte ich mich frei in dem was ich tue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlten sich die meisten Dinge die ich tat so an, als ob ich sie tun muss.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..spürte ich, dass ich den Menschen, die mir etwas bedeuten, auch wichtig bin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich ausgeschlossen aus der Gruppe, zu der ich gehören möchte,	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich davon überzeugt, dass ich Dinge gut kann.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich ernsthafte Zweifel daran, dass ich Dinge gut kann.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich das Gefühl, dass meine Entscheidungen widerspiegeln, was ich wirklich will.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich gezwungen viele Dinge zu tun, die ich mir selbst nicht aussuchen würde.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich mit Menschen verbunden, die sich um mich kümmern und um die ich mich kümmere.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..spürte ich, dass Personen, die mir wichtig sind, sich mir gegenüber kalt und distanziert verhalten haben.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich kompetent in dem was ich tue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich von vielen meiner Leistungen enttäuscht.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10 Basic Psychological Need Satisfaction and Frustration_2

In den letzten 7 Tagen..

	trifft überhaupt nicht zu				trifft voll und ganz zu
..hatte ich das Gefühl, dass meine Entscheidungen ausgedrückt haben, wer ich wirklich bin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich bei zu vielen Dingen unter Druck gesetzt, diese tun zu müssen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich mit Personen, die mir wichtig sind, nah und verbunden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich den Eindruck, dass Menschen mit denen ich meine Zeit verbracht habe mich nicht leiden können.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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..fühlte ich mich kompetent meine Ziele erreichen zu können.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich mir meiner Fähigkeiten nicht sicher.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..sagte mir mein Gefühl, dass ich immer das tat was mich wirklich interessiert.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlten sich meine täglichen Aktivitäten wie eine Reihe von Verpflichtungen an.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..empfand ich ein warmes Gefühl für die Menschen, mit denen ich Zeit verbracht habe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..sagte mir mein Gefühl, dass die Beziehungen, die ich habe, nur oberflächlich sind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich das Gefühl schwierige Aufgaben erfolgreich meistern zu können	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich wie ein*e Versager*in aufgrund der Fehler, die ich machte.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11 Endseite**Vielen Dank für die Teilnahme an der ersten Umfrage!**

Wie geht es nun weiter?

Die erste Erhebung der Studie ist nun beendet. Sie erhalten in den ersten sieben Tagen, in denen Sie an der Studie teilnehmen, jeden Tag einen **Link**, um einen **Fragebogen zu Ihrem aktuellen Wohlbefinden** auszufüllen. Bitte füllen Sie diesen Fragebogen täglich zur ca. **gleichen Zeit** aus. Der Fragebogen ist täglich ab 18 Uhr für Sie freigeschaltet und dauert höchstens 5 Minuten. Nach einer Woche erhalten Sie einen 15-minütigen Fragebogen, darin enthalten ist auch die Instruktion für die zweite Woche der Studie.

!Wichtig: Um auch tatsächlich die Labs-Credits für die Studie zu erhalten ist es wichtig, dass Sie die vollen zwei Wochen an der Studie teilnehmen und die täglichen Umfragen ausfüllen. Nach Abschluss der letzten Umfrage bekommen Sie die für die Studie vorgesehenen Credits. Ihre Teilnahme an der Studie kann nur dann verwertet werden, wenn Sie auch tatsächlich an allen Umfragen teilnehmen.

Falls Sie während der Durchführung der Studie weitere Fragen haben, wenden Sie sich bitte an die Versuchsleiterin (Eva Preininger, a01407729@unet.univie.ac.at).

Appendix B: Materials – Daily Survey

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Fragebogen

1 Willkommen

Liebe Teilnehmerin, lieber Teilnehmer,

herzlichen Dank für die Bereitschaft, an der täglichen Umfrage im Rahmen der Interventionsstudie zum Thema Kaffeeverzicht und Kaffeekonsum teilzunehmen. **Die Umfrage wird ca. 5 Minuten dauern.**

Einige von Ihnen, verzichten bereits diese Woche auf Kaffee und dürfen ab nächster Woche wieder wie gewohnt Kaffee konsumieren. Einige von Ihnen konsumieren diese Woche noch wie gewohnt Kaffee, dokumentieren Ihren Konsum zur eigenen Reflexion und müssen dann nächste Woche auf Kaffee verzichten. **Bitte halten Sie sich an die Instruktion & die Einteilung, wie Sie Ihnen in der ersten Umfrage im Fragebogen mitgeteilt wurde** (d.h. wenn in Ihrer ersten Umfrage stand, dass Sie erst nächste Woche auf Kaffee verzichten, dann halten Sie sich bitte an diese Einteilung & umgekehrt).

Es ist für mich wichtig, dass Sie in der Umfrage **alle Fragen beantworten**. Wenn Sie sich bei einer Frage nicht ganz sicher sind, kreuzen Sie einfach das Feld an, das am ehesten zutrifft. Es geht um Ihre persönliche Einschätzung, es gibt keine richtigen oder falschen Antworten.

Die Studie dient ausschließlich wissenschaftlichen Zwecken. Alle Informationen, die wir von Ihnen erhalten, werden vertraulich behandelt und anonymisiert ausgewertet, sodass keine Rückschlüsse auf Ihre Person möglich sind. Wenn Sie die Studie nicht fortführen wollen, können Sie sie jederzeit beenden, indem Sie das Fenster schließen. Ihre Daten werden nachfolgend nicht ausgewertet.

Mit dem Klicken des "Weiter"-Buttons bestätigen Sie, die Einleitung gelesen zu haben, und willigen ein, an dieser Studie teilzunehmen.

2 Versuchspersonennummer

Da wir in der Studie mehrere Erhebungszeitpunkte haben, ist es besonders wichtig, dass Sie bei **jeder Erhebung Ihre Versuchspersonennummer** angeben. **Der Code muss der gleiche sein wie der, den Sie bei der ersten Umfrage eingegeben haben.** Ihre Versuchspersonennummer setzt sich zusammen aus **8 Zeichen**, zum Beispiel: ER03RI21. Der Code setzt sich zusammen aus folgenden Bestandteilen:

- **ersten beiden Buchstaben des Nachnamens** z.B.: "ER", bei dem Namen Ertl
- **Geburtstag der Mutter** z.B.: "03", wenn der Geburtstag beispielsweise am 03.Mai ist
- **ersten beiden Buchstaben des Vornamens der Mutter** z.B. "RI", bei dem Namen Rita
- **eigener Geburtstag** z.B.: "21", wenn der eigene Geburtstag beispielsweise am 21. Juni ist

Bitte geben Sie im nächsten Feld Ihre Versuchspersonennummer ein.

Versuchspersonennummer:

(Format: 00000000 z.B.: ER03RI21 = **ersten beiden Buchstaben des Nachnamens** z.B.: "ER", bei dem Namen Ertl, **Geburtstag der Mutter** z.B.: "03", wenn der Geburtstag beispielsweise am 03.Mai ist, **ersten beiden Buchstaben des Vornamens der Mutter** z.B. "RI", bei dem Namen Rita, **eigener Geburtstag** z.B.: "21", wenn der eigene Geburtstag beispielsweise am 21. Juni ist)

Wie hieß ihr erstes Haustier?

Bitte füllen Sie nun die Kontrollfrage aus.

3 Erklärung Kaffeeverzicht

Geben Sie nun bitte an, ob Sie heute Kaffee konsumiert haben.

Haben Sie heute Kaffee konsumiert?

- ☐ Ja
- ☐ Nein

Haben Sie heute andere Substanzen mit aufputschender Wirkung konsumiert? (z.B.: schwarzer/grüner Tee, RedBull etc.)

- ☐ Ja
- ☐ Nein

4 Affekt täglich

Bitte denken Sie nun daran, wie Sie sich in den **vergangenen 24 Stunden** gefühlt und was Sie erlebt haben. Geben Sie anschließend mithilfe der

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nachfolgenden Skala an, in welchem Maße Sie die unten angegebenen Gefühle erlebt haben.

In den vergangenen 24 Stunden..

	nie oder sehr selten	selten	gelegentlich	oft	sehr oft oder immer
..hatte ich positive Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich negative Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich gute Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich schlechte Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich angenehme Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich unangenehme Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..habe ich mich glücklich gefühlt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..habe ich mich traurig gefühlt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich Angst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich froh	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich wütend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich zufrieden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5 Endseite

Vielen Dank für die Teilnahme!

Die erste tägliche Umfrage ist nun beendet. Sie erhalten in den nächsten sechs Tagen der Studie jeden Tag einen Link, um einen kurzen Fragebogen auszufüllen. Bitte füllen Sie diesen Fragebogen täglich zur ca. gleichen Zeit aus. Sie können den Fragebogen täglich ab 18 Uhr ausfüllen und bekommen **jeden Tag einen neuen Link zum Fragebogen per Mail zugeschickt.**

Um auch tatsächlich die Credits für die Studie zu erhalten ist es wichtig, dass Sie die vollen zwei Wochen an der Studie teilnehmen und die Umfragen ausfüllen.

Falls Sie während der Durchführung der Studie weitere Fragen haben, wenden Sie sich bitte an die Versuchsleiterin (Eva Preininger, a01407729@unet.univie.ac.at).

Appendix C: Materials – Survey Day Seven

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Fragebogen

1 Willkommen

Liebe Teilnehmerin, lieber Teilnehmer,

vielen Dank, dass Sie weiterhin bei der Studie zum Thema Kaffeeverzicht teilnehmen.
Die erste Woche der Umfrage ist nach Abschluss dieses Fragebogens beendet. Auf der Endseite der Umfrage finden Sie die Instruktion, wie es in der zweiten Woche weitergeht. Es ist besonders wichtig, dass Sie die heutige Umfrage ausfüllen. Die heutige Umfrage dauert ca. 10-15 Minuten und enthält mehr Fragen, als die anderen täglichen Umfragen.

Es ist für mich wichtig, dass Sie **alle Fragen beantworten**. Wenn Sie sich bei einer Frage nicht ganz sicher sind, kreuzen Sie einfach das Feld an, das am ehesten zutrifft. Es geht um Ihre persönliche Einschätzung, es gibt keine richtigen oder falschen Antworten.

Die Studie dient ausschließlich wissenschaftlichen Zwecken. Alle Informationen, die wir von Ihnen erhalten, werden vertraulich behandelt und **anonymisiert** ausgewertet, sodass keine Rückschlüsse auf Ihre Person möglich sind. Wenn Sie die Studie nicht fortführen wollen, können Sie sie jederzeit beenden, indem Sie das Fenster schließen. Ihre Daten werden nachfolgend nicht ausgewertet.

Mit dem Klicken des "Weiter"-Buttons bestätigen Sie, die Einleitung gelesen zu haben, und willigen ein, an dieser Studie teilzunehmen.

2 Versuchspersonennummer

Da wir in der Studie mehrere Erhebungszeitpunkte haben, ist es besonders wichtig, dass Sie bei **jeder Erhebung Ihre Versuchspersonennummer angeben**. Ihre Versuchspersonennummer setzt sich zusammen aus **8 Zeichen** zum Beispiel: ER03RI21. Der Code setzt sich zusammen aus folgenden Bestandteilen:

- **ersten beiden Buchstaben des Nachnamens** z.B.: "ER", bei dem Namen Ertl
- **Geburtsjahr der Mutter** z.B.: "03", wenn der Geburtstag beispielsweise am 03. Mai ist
- **ersten beiden Buchstaben des Vornamens der Mutter** z.B. "RI", bei dem Namen Rita
- **eigener Geburtstag** z.B.: "21", wenn der eigene Geburtstag beispielsweise am 21. Juni ist

Bitte geben Sie im nächsten Feld Ihre Versuchspersonennummer ein.

Versuchspersonennummer:

(Format: 00000000 z.B.: ER03RI21 = **ersten beiden Buchstaben des Nachnamens** z.B.: "ER", bei dem Namen Ertl, **Geburtsjahr der Mutter** z.B.: "03", wenn der Geburtstag beispielsweise am 03. Mai ist, **ersten beiden Buchstaben des Vornamens der Mutter** z.B. "RI", bei dem Namen Rita, **eigener Geburtstag** z.B.: "21", wenn der eigene Geburtstag beispielsweise am 21. Juni ist)

Wie hieß Ihr erstes Haustier?

Füllen Sie nun bitte die Kontrollfrage aus.

3 Kaffeeverzicht

Haben Sie heute Kaffee konsumiert?

- ☐ Ja
- ☐ Nein

3.1 Verzicht letzte 7 Tage

Mussten Sie die letzten 7 Tage auf Kaffee verzichten?

Bitte kreuzen Sie hier "ja" an, wenn Sie in der ersten Umfrage die Instruktion erhalten haben, in der ersten Woche auf Kaffee zu verzichten. Kreuzen Sie "nein" an, wenn Sie wie gewohnt Kaffee konsumieren konnten.

- ☐ Ja
- ☐ Nein

3.2.1 Experimentalgruppe

Haben Sie es geschafft, die letzten 7 Tage auf Kaffee zu verzichten?

Bitte antworten Sie mit "ja", wenn Sie jeden Tag auf Kaffee verzichtet haben. Der heutige Tag ist der Tag 7. Antworten Sie mit

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"nein", wenn Sie nicht an allen Tagen verzichtet haben.

- ☐ Ja
- ☐ Nein

Schätzen Sie nun bitte ein, wie leicht/schwer Ihnen der Verzicht auf Kaffee gefallen ist.

Geben Sie nun auf der Skala 1 bis 5 an, wie schwer Ihnen der Verzicht gefallen ist.

- ☐ sehr leicht
- ☐ leicht
- ☐ mittel
- ☐ schwer
- ☐ sehr schwer

Geben Sie nun an, an wie vielen der 7 Tagen Sie auch tatsächlich auf Kaffee verzichtet haben.

Tag 1 des Verzichts war Samstag, 08.05.2021, Tag 7 des Verzichts ist heute, Freitag, 14.05.2021

- ☐ ich habe einen Tag auf Kaffee verzichtet
- ☐ ich habe an zwei Tagen auf Kaffee verzichtet
- ☐ ich habe an drei Tagen auf Kaffee verzichtet
- ☐ ich habe an vier Tagen auf Kaffee verzichtet
- ☐ ich habe an fünf Tagen auf Kaffee verzichtet
- ☐ ich habe an sechs Tagen auf Kaffee verzichtet
- ☐ ich habe an allen sieben Tagen auf Kaffee verzichtet

Haben Sie Ihren Kaffeekonsum durch andere aufputschende Substanzen kompensiert? (z.B.: Grünen Tee, Schwartzee, RedBull, Coca Cola etc.)

- ☐ Ja
- ☐ Nein

3.3.1 Kontrollgruppe

Haben Sie die letzten 7 Tage Ihren Kaffeekonsum dokumentiert? Der heutige Tag stellt den 7. Tag dar.

- ☐ Ja
- ☐ Nein

4 Affekt täglich

Bitte denken Sie nun daran, was Sie in den vergangenen 24 Stunden erlebt und wie Sie sich gefühlt haben. Geben Sie anschließend mithilfe der nachfolgenden Skala an, in welchem Maße Sie die unten angegebenen Gefühle erlebt haben. Die Antwort erfolgt in Form einer Zahl von 1 bis 5, wobei die einzelnen Zahlen folgendes bedeuten (1=nie oder selten; 2=selten; 3=gelegentlich; 4=oft; 5=sehr oft oder immer)

In den vergangenen 24 Stunden..

	nie oder sehr selten	selten	gelegentlich	oft	sehr oft oder immer
..hatte ich positive Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich negative Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich gute Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich schlechte Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich angenehme Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich unangenehme Gefühle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..habe ich mich glücklich gefühlt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..habe ich mich traurig gefühlt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich Angst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich froh	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich wütend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich zufrieden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5 Erklärung Erhebung Entzugerscheinungen

Im nächsten Teil des Fragebogens wird erfasst, ob sie **in den vergangenen 7 Tagen** bestimmte **physische** und **psychische** Symptome hatten.

Bitte denken Sie daran, wie Sie sich in den vergangenen 7 Tagen, inklusive dem heutigen Tag, gefühlt haben. Geben Sie anschließend mithilfe der nachfolgenden Skala an, in welchem Maße Sie die unten angegebenen Gefühle erlebt haben. Die Antwort erfolgt in Form einer Zahl von **1 bis 5**, wobei die einzelnen Zahlen folgendes bedeuten (1=nie oder selten; 2=selten; 3=gelegentlich; 4=oft; 5=sehr oft oder immer).

In den vergangenen 7 Tagen..

Bitte beziehen Sie sich auf die letzten sieben Tage, wobei es sich bei Tag 7 um den heutigen Tag handelt.

	nie oder sehr selten	selten	gelegentlich	oft	sehr oft oder immer
..fühlte ich mich müde/schläfrig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich selbstbewusst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..habe ich gegähnt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich wachsam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich erschöpft/ermüdet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich zufrieden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich Schwierigkeiten mich zu konzentrieren	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich reizbar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich ein Gefühl der Schwere in Armen und Beinen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich niedergeschlagen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich grantig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich gedrängt uni- oder arbeitsbezogene Tätigkeiten durchzuführen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6 Erhebung Entzugerscheinungen_2**In den vergangenen 7 Tagen..**

	nie oder sehr selten	selten	gelegentlich	oft	sehr oft oder immer
..hatte ich grippeähnliche Symptome	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich Kopfschmerzen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich redselig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich träge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich einen verstimmt Magen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich einen klaren Kopf	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich den Wunsch unter Leute zu kommen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich energiegeladener	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war mir übel/musste ich mich erbrechen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich Schmerzen oder Steifheit in Muskeln	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich entmutigt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7 Life Satisfaction

Im folgenden Teil des Fragebogens möchten wir gerne erheben, wie Sie ihr Leben im Allgemeinen bewerten.

Es folgen fünf Aussagen, denen Sie zustimmen bzw. die Sie ablehnen können. Bitte benutzen Sie die folgende Skala von 1-5, um Ihre Zustimmung bzw. Ablehnung zu jeder Aussage zum Ausdruck zu bringen. (1=stimme gar nicht zu;

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	stimme gar nicht zu				stimme voll zu
In den meisten Bereichen entspricht mein Leben meinen Idealvorstellungen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meine Lebensbedingungen sind ausgezeichnet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin mit meinem Leben zufrieden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bisher habe ich die wesentlichen Dinge erreicht, die ich mir für mein Leben wünsche.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wenn ich mein Leben noch einmal leben könnte, würde ich kaum etwas ändern.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8 Basic Psychological Need Satisfaction and Frustration

Im Folgenden Abschnitt befragen wir Sie zu Ihren aktuellen Erfahrungen in den letzten sieben Tagen. Bitte lesen Sie jede der folgenden Aussagen genau durch. Auf einer Skala von 1 bis 5 können Sie den Grad der Zustimmung für die jeweilige Aussage wählen (1=trifft überhaupt nicht zu; 5=trifft voll und ganz zu). **Bitte beziehen Sie sich beim Ausfüllen auf die letzten 7 Tage.**

In den letzten 7 Tagen..

	trifft überhaupt nicht zu				trifft voll und ganz zu
..hatte ich die Wahl und fühlte ich mich frei in dem was ich tue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte sich die meisten Dinge die ich tat so an, als ob ich sie tun muss.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..spürte ich, dass ich den Menschen, die mir etwas bedeuten, auch wichtig bin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich ausgeschlossen aus der Gruppe, zu der ich gehören möchte,	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich davon überzeugt, dass ich Dinge gut kann.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich ernsthafte Zweifel daran, dass ich Dinge gut kann.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich das Gefühl, dass meine Entscheidungen widerspiegeln, was ich wirklich will.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich gezwungen viele Dinge zu tun, die ich mir selbst nicht aussuchen würde.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich mit Menschen verbunden, die sich um mich kümmern und um die ich mich kümmere.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..spürte ich, dass Personen, die mir wichtig sind, sich mir gegenüber kalt und distanziert verhalten haben.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich kompetent in dem was ich tue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich von vielen meiner Leistungen enttäuscht.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9 Basic Psychologic Need Satisfaction and Frustration_2**In den letzten 7 Tagen..**

	trifft überhaupt nicht zu				trifft voll und ganz zu
..hatte ich das Gefühl, dass meine Entscheidungen ausgedrückt haben, wer ich wirklich bin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich bei zu vielen Dingen unter Druck gesetzt, diese tun zu müssen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich mit Personen, die mir wichtig sind, nah und verbunden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich den Eindruck, dass Menschen mit denen ich meine Zeit verbracht habe mich nicht leiden können.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich kompetent meine Ziele	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2.7.2021

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erreichen zu können.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..war ich mir meiner Fähigkeiten nicht sicher.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..sagte mir mein Gefühl, dass ich immer das tat was mich wirklich interessiert.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlten sich meine täglichen Aktivitäten wie eine Reihe von Verpflichtungen an.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..empfand ich ein warmes Gefühl für die Menschen, mit denen ich Zeit verbracht habe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..sagte mir mein Gefühl, dass die Beziehungen, die ich habe, nur oberflächlich sind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..hatte ich das Gefühl schwierige Aufgaben erfolgreich meistern zu können	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
..fühlte ich mich wie ein*e Versager*in aufgrund der Fehler, die ich machte.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10 Endseite

Vielen Dank für Ihre Teilnahme.

Die erste Woche der Umfrage ist nun beendet. **Morgen beginnt die zweite Woche der Studie.**

Wenn Sie die letzten sieben Tage auf Kaffee verzichtet haben, dann dürfen Sie **nun wieder wie gewohnt Kaffee konsumieren**. Ihre Aufgabe ist es dann für die nächsten 7 Tage **auf Ihren Kaffee Konsum zu achten** und ihn täglich zu dokumentieren. Die Dokumentation dient lediglich als Reflexion für Sie selbst und muss nicht angegeben werden.

Wenn Sie in der letzten Woche **wie gewohnt Kaffee konsumiert haben**, dann müssen Sie nun **für die nächsten 7 Tage auf Kaffee verzichten**. Bitte konsumieren Sie **ab morgen, 15.05. keinen Kaffee mehr**. Dazu zählt auch entkoffeinierter Kaffee. Andere Getränke mit aufputschender Wirkung (z.B.: RedBull, Cola, Tee) dürfen weiterhin konsumiert werden.

In der zweiten Woche gibt es keine täglichen Umfragen. Sie bekommen aber am letzten Tag der Studie, **am 21.05., erneut einen Link zu einer Umfrage zugeschickt**. Es ist sehr wichtig, dass Sie diese letzte Umfrage ausfüllen.

Falls Sie weitere Fragen haben, wenden Sie sich bitte an die Versuchsleiterin (Eva Preininger, a01407729@unet.univie.ac.at).

Appendix D: Zusammenfassung

Die Höhe von privaten Konsumausgaben wird häufig verwendet, um Angaben über das Wohlbefinden von Nationen und Individuen zu machen (Sheth et al., 2011). Forschungen zum Wohlbefinden stellen jedoch in Frage, ob erhöhter Konsum das Wohlbefinden der Menschen auch langfristig erhöht (Easterlin et al., 2010). Die Folgen von zu viel Konsum sind sowohl auf individueller, als auch auf globaler Ebene sichtbar (Sheth et al., 2011). Steigender Konsum geht mit großem Ressourcenverbrauch einher und ist dadurch auch ein Treiber für den Klimawandel (Sheth et al., 2011). Konsum wird oft als eine wichtige Wahlmöglichkeit gesehen und ist daher häufig mit dem Gefühl von Autonomie verbunden (Iyengar & Lepper, 2000). Gleichzeitig werden in Konsumententscheidungen die Kosten, wie zum Beispiel Überforderung, die mit steigenden Kaufentscheidungen einhergeht, häufig unterschätzt (Iyengar & Lepper, 2000). Die aktuelle Studie schlägt daher einen neuen Ansatz zur Erforschung von Verzicht und Wohlbefinden vor. In einer Längsschnittstudie wurde untersucht, ob der Verzicht eines hedonischen Guts, nämlich Kaffee, das subjektive Wohlbefinden positiv beeinflusst. Dazu wurden die psychologischen Grundbedürfnisse, Autonomie und Kompetenz, in das Modell miteinbezogen und analysiert, ob diese die Verbindung zwischen Verzicht und Wohlbefinden positiv beeinflussen. Fünfundneunzig Teilnehmende wurden in zwei Gruppen geteilt. Die Interventionsgruppe musste eine Woche auf Kaffee verzichten, die Wartegruppe durfte in dieser Woche wie gewohnt Kaffee konsumieren. Ergebnisse zeigen, dass eine Woche Kaffeeverzicht die Lebenszufriedenheit negativ beeinflusst, nicht jedoch das affektive Wohlbefinden. Es gibt keine Hinweise darauf, dass Autonomie und Kompetenz eine Rolle im Verzicht spielen, jedoch konnte ein positiver Effekt von Autonomie und Kompetenz auf das Wohlbefinden gezeigt werden.

Keywords: Verzicht, Wohlbefinden, Lebenszufriedenheit, Affekt, hedonische Güter, Autonomie, Kompetenz, Selbstregulation, Ego depletion