



Turun yliopisto  
University of Turku

# EVOLUTIONARY PSYCHOLOGY FOR CONSUMERS

Awareness of ultimate explanations as a self-reflective  
tool for consumer empowerment

Samuel Piha



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# ABSTRACT

## *Evolutionary psychology for consumers: Awareness of ultimate explanations as a self-reflective tool for consumer empowerment*

Evolutionary psychology is becoming a popular approach in consumer research. Evolutionary-based consumer research has, however, typically been undertaken from the managerial rather than from the consumer perspective. The current thesis aims to fill this gap by conceptually integrating evolutionary psychology and transformative consumer research through positive psychology. The objective is to investigate the usefulness of evolutionary psychology, especially the consumer's awareness of ultimate explanations, as a self-reflective tool for consumer self-regulation and empowerment. The thesis consists of an introductory essay and three empirical articles about insect-based food (Article 1), customer toilets (Article 2) and sex toys (Article 3).

First, the thesis lays down the principles of evolutionary-based consumer research, including the ultimate level of explanation and fundamental motives. Answering the first research question (*How can ultimate explanations deepen the understanding of consumers' need fulfilment?*), the thesis builds an analytical framework of ultimate explanations behind the approach and avoidance tendencies towards need fulfilment. Then, after introducing the philosophical positioning of the role of evolutionary psychology as an instrumental method theory, the thesis answers the second research question (*What ultimate explanations are related to the approach and avoidance tendencies concerning [a] buying insect-based food, [b] using customer toilets and [c] buying sex toys?*) by applying this analytical framework to reinterpret the three consumer-related phenomena presented in the empirical articles.

Ultimate reinterpretations suggest that regarding insect-based food (Article 1), the approach tendency is to eat healthily and sustainably, fundamentally motivated by status seeking, and the avoidance tendency is disgust and neophobia, fundamentally motivated by disease avoidance. Regarding customer toilets (Article 2), the approach tendency is to relieve a physiological urgency in a socially appropriate way based on the fundamental motive of affiliation, and the avoidance tendencies are fear and disgust, stemming from the fundamental motives of self-protection and disease avoidance. Finally, regarding sex toys (Article 3), the approach tendency relates to enhancing sexual pleasure, fundamentally motivated

by mate retention and acquisition, and the avoidance tendency is the fear of being sexually exposed based on the fundamental motives of self-protection and affiliation.

Following this ultimate-level reinterpretation, the thesis answers the third research question (*How can ultimate explanations operate as a basis for consumer empowerment?*) by constructing and illustrating the conceptual idea labelled as evolutionarily-informed empowerment. According to this idea, the awareness of the ultimate explanations and fundamental motives behind reactive behaviour (such as the behaviour illustrated in the three empirical phenomena) is argued to be the starting point in a process where consumers can critically deliberate over this reactive behaviour. Supposedly, this deliberation will empower consumers to adopt the habit of making wiser and more rationally-informed consuming decisions not only in these three illustrative cases but also in other consumption-related situations. Although the current doctoral thesis mainly aims at increasing consumers' own understanding of their behaviour, the idea of evolutionarily-informed empowerment may also offer valuable insights for marketing practitioners. Additionally, evolutionarily-informed empowerment is suggested to operate as a useful tool in consumer and marketing education.

While this thesis corroborates the role of ultimate explanations in consumer empowerment, it also acknowledges that evolutionarily-informed empowerment is only one source of consumer empowerment, and even psychological empowerment may take place without the awareness of ultimate explanations. Additionally, the conditions where the idea of evolutionary-informed empowerment is applicable is subject to certain limitations. Specifically, the interfaces between constructs (ultimate explanations, self-awareness, self-regulation and consumer empowerment) may be interfered with by certain factors such as the acceptance and understanding of evolutionary psychology, ego depletion and a consumer's own sense of virtuosity. As the functionality of the framework is only illustrated through reinterpretation, future research is needed in order to deductively test its validity. A key research direction where the framework could also be applied is, for example, consumer behaviour related to mental and sexual health. Despite the limitations and questions that potentially direct future research on the topic, the thesis already contributes to the consumer research literature by taking a consumer perspective on evolutionary-based consumer research. In particular, the current thesis is among the first studies to use evolutionary psychology in understanding transformative consumer research and consumer empowerment.

**Keywords:** Evolutionary psychology; Transformative consumer research (TCR); Consumer perspective; Consumer empowerment; Positive psychology; Instrumentalism; Ultimate explanations, Self-awareness; Self-regulation; Fundamental motives

# TIIVISTELMÄ

*Evoluutiopsykologiaa kuluttajille: Tietoisuus ultimaattisista selityksistä kuluttajan voimaantumisen itsereflektiivisenä välineenä*

Evoluutiopsykologian suosio kuluttajatutkimuksessa on kasvussa. Evoluutiopsykologisessa kuluttajatutkimuksessa on kuitenkin yleensä painotettu manageriaalista näkökulmaa kuluttajanäkökulman sijasta. Käsillä oleva tutkielma pyrkii täyttämään tämän tutkimuksellisen aukon yhdistämällä käsitteellisesti evoluutiopsykologian ja transformatiivisen kuluttajatutkimuksen traditioita. Yhtymäkohta traditioiden välille ammennetaan positiivisesta psykologiasta. Tutkielman päämääränä on selvittää, miten evoluutiopsykologia, erityisesti kuluttajan tietoisuus käyttäytymisensä ultimaattisista selityksistä, voi edistää kuluttajan itsesäätelyä ja voimaantumista. Tutkielma koostuu johdantoosesta ja kolmesta empiirisestä artikkelista, jotka käsittelevät hyönteisruokaa (Artikkeli 1), asiakaskäymälöitä (Artikkeli 2) ja seksivälineitä (Artikkeli 3).

Tutkielmassa esitellään aluksi evoluutiopsykologisen kuluttajatutkimuksen perusteet, kuten ultimaattinen selitystaso ja fundamentaaliset motiivit. Ensimmäiseen tutkimuskysymykseen (*Miten ultimaattiset selitykset voivat syventää ymmärrystä kuluttajan tarpeentyydytyksestä?*) vastaten tutkielmassa rakennetaan analyttinen viitekehys, jonka avulla pyritään tunnistamaan ultimaattisia selityksiä lähestymis- ja välttämistäipumuksille tarpeentyydytystä kohtaan. Viitekehysten rakentamisen jälkeen esitellään evoluutiopsykologian filosofinen asema instrumentaalisenä metoditeorianä. Toinen tutkimuskysymys (*Mitä ultimaattisia selityksiä voidaan tunnistaa lähestymis- ja välttämistäipumuksille koskien [a] hyönteisruuan ostamista, [b] asiakaskäymälöiden käyttämistä ja [c] seksivälineiden ostamista?*) soveltaa ensimmäisen tutkimuskysymyksen pohjalta rakennettua analyttistä viitekehystä artikkeleissa esitettyjen ilmiöiden ultimaattisessa uudelleentulkinnassa.

Uudelleentulkintojen mukaan hyönteisruuan (Artikkeli 1) osalta lähestymistäipumus on kuluttajan tarve syödä terveellisesti ja kestävästi, mikä perustuu statuksen tavoittelun fundamentaaliseen motiiviin. Hyönteisruokaan liittyvä välttämistäipumus on puolestaan inho ja siihen liittyvä neofobia, jotka pohjautuvat tautien välttelemisen fundamentaaliseen motiiviin. Asiakaskäymälöiden (Artikkeli 2) osalta lähestymistäipumus on välittömän ruumiillisen tarpeen tyydyttäminen sosiaalisesti hyväksyttävällä tavalla, mikä perustuu sosiaalisen yhteenkuulu-

vuuden fundamentaaliseen motiiviin. Asiakaskäymälöihin liittyvät välttämistaitapumukset ovat pelko ja inho, jotka pohjautuvat itsesuojelun ja tautien välttelemisen fundamentaalisiin motiiveihin. Seksivälineiden (Artikkeli 3) osalta lähestymistaitapumous on tarve parantaa seksuaalista mielihyvää, ja se perustuu parinvallinnan ja lisääntymisen fundamentaalisiin motiiveihin. Ilmiöön liittyvä välttämistaitapumous on pelko seksuaalisesta paljastumisesta, joka pohjautuu itsesuojelun ja sosiaalisen yhteenkuuluvuuden fundamentaalisiin motiiveihin.

Ultimaattisten uudelleentulkintojen jälkeen tutkielmassa vastataan kolmanteen tutkimuskysymykseen (*Miten ultimaattiset selitykset toimivat perustana kuluttajan voimaantumiselle?*) rakentamalla ja artikkelien uudelleentulkintojen kautta havainnollistamalla käsitteellistä ajatusta evolutiivisesta voimaantumisesta. Tietoisuus ultimaattisista selityksistä ja fundamentaalisista motiiveista reaktiivisen käyttäytymisen (esim. käyttäytymisen, joita kolmessa empiirisessä tutkimuksessa havainnollistetaan) taustalla nähdään lähtöpisteenä prosessille, jossa kuluttajat voivat kriittisesti arvioida tämän reaktiivisen käyttäytymisen perusteita. Kriittisen arvioinnin oletetaan voimaannuttavan kuluttajia siten, että he kykenevät tekemään viisaampia ja rationaalisesti perustellumpia kulutuspäätöksiä myös muiden kuin kolmen havainnollistetun kuluttamisilmiön osalta. Vaikka käsillä olevan tutkimuksen pääasiallinen painopiste on kuluttajien oman ymmärryksen kasvatamisessa, ajatus kuluttajien evolutiivisesta voimaantumisesta voi tarjota arvokkaita näkökulmia myös markkinoinnin ammattilaisille. Lisäksi evolutiivinen voimaantuminen voi olla hyödyksi kuluttajakasvatuksen ja markkinoinnin opetuksen työkaluna.

Tutkielman rajoitteena todetaan, että evolutiivinen voimaantuminen on vain yksi kuluttajan voimaantumisen lähde ja psykologistakin voimaantumista voi tapahtua ilman tietoisuutta ultimaattisista selityksistä. Tutkielman toinen keskeinen rajoite liittyy olosuhteisiin, joissa käsitteellinen ajatus evolutiivisesta voimaantumisesta on sovellettavissa. Erityisesti viitekehysten käsitteiden (ultimaattiset selitykset, itsetietoisuus, itsesäätely ja kuluttajan voimaantuminen) rajapinnat ovat alttiita häiriötekijöille, joita ovat esimerkiksi evoluutiopsykologisen näkemyksen hyväksyminen ja ymmärrys, egon heikkeneminen ja kuluttajan oma kokemus hyveellisyydestä. Koska tutkielmassa evolutiivista voimaantumista vain havainnollistetaan uudelleentulkintojen kautta, tulevaisuudessa on tärkeää testata ajatuksen validiutta myös deduktiivisesti. Merkittävä tutkimussuunta, jossa viitekehystä voidaan hyödyntää, on esimerkiksi mielenterveyteen ja seksuaaliterveyteen liittyvä kuluttajakäyttäytyminen. Huolimatta rajoitteista, jotka saattavat tulevaisuudessa ohjata aihepiiriä koskevaa tutkimusta, käsillä oleva tutkielma täydentää jo nykyisellään kirjallisuutta tarjoamalla kuluttajanäkökulman evoluutiopsykologiseen kuluttajatutkimukseen. Tutkielma onkin yksi ensimmäisistä tutkimuksista, jotka hyödyntävät evoluutiopsykologiaa transformatiivisen kuluttajatutkimuksen ja kuluttajan voimaantumisen ymmärtämiseen.

**Avainsanat:** Evoluutiopsykologia; Transformatiivinen kuluttajatutkimus (TCR); Kuluttajanäkökulma; Kuluttajan voimaantuminen; Positiivinen psykologia; Instrumentalismi; Ultimaattiset selitykset; Itsetietoisuus; Itsesäätely; Fundamentaaliset motiivit





## FOREWORD

“Why do you want to write a doctoral thesis?”, someone asked me in the summer of 2014. I surely had some personal goals. But maybe now I can at least pretend to have been idealistic. So forgive me for quoting Leonardo da Vinci: “Avoid studies of which the result dies with the worker.” For me, science has always been the forum to do such things, to give back a fraction of what I have received. Sounds like a cliché, but what could be a more beautiful way to rationalise why I dedicated the years of my early adulthood to this mission?

As this is an instrumentalist study, a citation from Mark Twain’s dialogical essay *What is human* fits well here. An old man absolves his companion, a young man, by saying that the latter is not responsible for his own statements. “You have done nothing. You are an instrument – a speaking-trumpet. Speaking-trumpets are not responsible for what is said through them.” I both agree and disagree. Agree, because I feel that as a scholar, I’m only a medium through which thousands of other scholars speak; my job is merely to filter and enrich their voices. Disagree, because I’m responsible for the quality of filtering and enrichment. Indeed, I’d be a medium who isn’t responsible for the wisdom but is responsible for the mistakes. So be it.

Recently, when casually reading Marcus Aurelius’ *Meditations*, I found an excellent quote on fellowship: “When you need encouragement, think of the qualities the people around you have: this one’s energy, that one’s modesty, another’s generosity, and so on. Nothing is as encouraging as when virtues are visibly embodied in the people around us, when we’re practically showered with them.” I can without doubt agree with the stoic emperor. Being inspired by the virtues of my closest ones is what carried me to this point.

So, enough bragging about the books I’ve read! Instead, let me boast about my social capital! My mentors and colleagues have made me rich in it. You all know who my greatest inspirer is. This man is kind, intelligent, and experienced; he is wise in the classical meaning of the word. This man is my supervisor, professor Rami Olkkonen. Your guidance and the positivity you have shown in every occasion, have made you the best supervisor I could ever have dreamed of. Rami, you are the kind of man this mad and hyperactive world needs: a wise man.

I consider myself privileged having had professors Terhi-Anna Wilska and Harri Luomala as my pre-examiners. Since the beginning of my studies, I had heard tales about the energy and experience of professor Wilska. I haven’t had an

opportunity to meet you in person (yet!), but I already got a share of your expertise. Professor Harri Luomala, I had heard many good stories about you too, and they had one common element: professor Luomala knows how to be clear; he knows the secrets of logical argumentation. And I agree. Without your contribution, this thesis would be – well, not a total mess, but still – a lot messier than it is now. I feel honoured to have you as my opponent in the upcoming defence.

My second supervisor, Dr Leila Hurmerinta, has supported me throughout the process, not only as a supervisor but also as a co-author and friend. Leila, you have the most creative mind I've been confronted with in academia. I guess everyone who reads this thesis will recognise your contribution, because it's there, and it's remarkable.

The people at the University of Turku, Turku School of Economics, especially at the Department of Marketing and International Business, have formed an excellent supporting network. There are many I owe a great deal. Professor Aino Halinen-Kaila, you're the heart and soul of our discipline. I cannot even count how many relevant pieces of advice you've given me. Professor Elina Jaakkola, when I'm attending international conferences and mention that I'm from Finland, the first question they typically ask is if I know Elina Jaakkola. I do, and I boast about it!

Dr Petteri Ojala, my academic big brother, you're more than a colleague – you're a friend and fellow sufferer. I'm really sorry that I drank your beers. Otto Rosendahl, my academic twin brother, you know how important you're to me. No words needed. Professor emeritus Timo Toivonen, you've eagerly shared your knowledge and experience over the years in the Hämeenkatu office. *Honor est merendus, non gratuitus!*

My third supervisor, Dr Markus J. Rantala, your knowledge about evolutionary psychology has been a tremendous resource for me. Dr Anu Lähteenmäki-Uutela, the virtue of enthusiasm is embodied in you. I love it. Professor Heli Marjanen, you recruited me. No matter what, my origins are in your guidance. Dr Juulia Räikkönen, if Petteri is my academic big brother, then you're my academic big sister. We made the toilet paper. That was quite an experience.

Many other people have somehow contributed to this thesis, so the following list is long but incomprehensive. Thank you, Dr Nina Aarras, Irfan Ameer, professor Jaakko Aspara, Larissa Braz Becker, Miia Grénman, Jussi Haapkylä, Dr Ulla Hakala, Jenni Heervä, Dr Niina Junttila, Elina Järvinen, Dr Valterti Kaartemo, Henri Kemppe, Dr Kerttu Kettunen, Dr Anna-Maija Kohijoki, Jaakko Korpele, Dr Zuzana Křečková, professor Kari Lukka, professor Hannu Makkonen, Meri Malmari, Dr Mekhail Mustak, Salla Niskanen, Sini Nordberg-Davies, Dr Tobias Otterbring, Katerina Panina, Dr Terhi Pohjanheimo, Juha Riihimäki, Dr Helena Rusanen, professor Pekka Räsänen, Dr Anna Salonen, Ville Salonen, Dr Bir-

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This thesis was mainly written during my research visit to Wilfrid Laurier University, Canada, in the autumn of 2017. I want to thank my host Dr Tripat Gill and my fellow researcher, Shirish Panchal, as well as professor Nicole Covello, who made the visit possible and supported me in all ways. All three of you – and all Laurier people – created an extraordinarily inspiring atmosphere.

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Finally, my friends and family. Dr Juhana Torkki, your spiritual counselling during our long walks around the Turku Cathedral has been the key to my personal enlightenment. My cousins, Jyrki and Lauri Eerola, our friendship has been a long road so far, and together, we're gonna finish the circle. My mother, Dr Kaija Eerola, and my father Dr Juhana Piha, from the very beginning you have encouraged me to wonder, ask, and think. My brothers, Mikael and Jousia Piha, and my sister Minerva Piha and her family, Tapio, Joonatan, and Sonja Pietinsalo, you have always supported me. My grandmother Katarina Piha, you will probably be among the first people reading this thesis from cover to cover. My late grandfather, professor emeritus Kalevi Piha, your memory gives me strength every day. I wish I could talk with you again.

What is the hardest thing in life? The choice. Making a choice always involves deciding what is good and bad, what is right and wrong. I often find myself in trouble doing it by myself. But one has rescued me from it. I have the one who helps me to do the right things, make the right choices, and shows me what is good and what is not. Elina, my chosen one, I have you, you have me – and together, we have Akseli. You are my ultimate explanation.

*I dedicate this book to all my teachers,  
of whom my son is the most important one.*

On 26<sup>th</sup> September 2018, right beside the Turku Cathedral, with the bells ringing

*Samuel Piha*



# TABLE OF CONTENTS

ABSTRACT

TIIVISTELMÄ

FOREWORD

1	INTRODUCTION.....	15
1.1	The consumer perspective on evolutionary psychology .....	15
1.2	Research purpose and strategy .....	20
1.3	Outline of the thesis.....	23
2	EVOLUTIONARY-BASED CONSUMER RESEARCH.....	25
2.1	Evolutionary psychology and ultimate explanations.....	25
2.2	Fundamental motives.....	26
2.3	Approach and avoidance tendencies .....	29
3	METHODOLOGY AND ARTICLES.....	34
3.1	Evolutionary psychology as an instrumentalist method theory.....	34
3.2	Background, authors and methods of the articles.....	37
4	ULTIMATE REINTERPRETATION .....	43
4.1	Article 1: Insect-based food.....	43
4.2	Article 2: Customer toilets.....	47
4.3	Article 3: Sex toys .....	51
5	ON EVOLUTIONARILY-INFORMED EMPOWERMENT .....	56
5.1	The psychology of empowerment .....	56
5.2	Articles as illustrative examples.....	62
6	CONCLUSIONS.....	69
6.1	Implications for practitioners .....	69
6.2	Limitations and future research .....	71
6.3	Final statement on the theoretical contribution .....	75
	REFERENCES .....	76
	APPENDIX: INTERVIEWEES IN ARTICLE 3 .....	97
	ORIGINAL ARTICLES .....	99

## LIST OF FIGURES

Figure 1	Positioning of the thesis .....	23
Figure 2	Fundamental motives .....	28
Figure 3	Ultimate explanations for approach and avoidance tendencies towards need fulfilment in sensitive situations .....	33
Figure 4	Ultimate explanations for approach and avoidance tendencies towards buying insect-based food .....	44
Figure 5	Ultimate explanations for approach and avoidance tendencies towards using customer toilets .....	48
Figure 6	Ultimate explanations for approach and avoidance tendencies towards buying sex toys .....	52
Figure 7	The process of evolutionarily-informed empowerment .....	60
Figure 8	The consumer's mind as an elephant and a rider .....	61
Figure 9	Illustration of evolutionarily-informed empowerment in insect-based food, customer toilets and sex toys .....	63
Figure 10	The continuum of psychological empowerment .....	68

## LIST OF TABLES

Table 1	Summary of the original empirical articles .....	39
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## LIST OF ORIGINAL ARTICLES

- Article 1** Piha, S., Pohjanheimo, T., Lähteenmäki-Uutela, A., Křečková, Z. & Otterbring T. (2018) The effects of consumer knowledge on willingness to buy insect food: an exploratory cross-regional study in Northern and Central Europe. *Food Quality and Preference*. Vol. 70, 1–10.
- Article 2** Piha, S. & Rääkkönen, J. (2017) When nature calls: the role of customer toilets in retail stores. *Journal of Retailing and Consumer Services*. Vol. 36, 33–38.
- Article 3** Piha, S., Hurmerinta, L., Sandberg, B. & Järvinen, E. (2018) From filthy to healthy and beyond: finding the boundaries of taboo destruction in sex toy buying. *Journal of Marketing Management*. In press.





# 1 INTRODUCTION

*For no man is free who is a slave to his body.*

– Seneca<sup>1</sup>

## 1.1 The consumer perspective on evolutionary psychology

Evolutionary psychology – a psychological discipline that explains human behaviour by utilising the theories and concepts of evolutionary biology – is becoming a more popular and influential approach in consumer research. Since the publication of Saad and Gill’s (2000) pioneering review on the possible applications of evolutionary psychology in the field, the body of literature on evolutionary-based consumer research has been constantly growing. The trend has been apparent in the leading journals of the discipline (i.e. journals with an ABS ranking of 3 to 4, e.g. *Journal of Consumer Research*, *Journal of Consumer Psychology*, *Journal of Marketing Research*, *Psychology & Marketing* and *European Journal of Marketing*; see ABS 2015), which have published both single articles and special issues on the topic. The evolutionary psychological approach has also recently been established as a part of disciplinary handbooks (Norton et al. 2015; Maclaran et al. 2009), underpinning its status as a well-acknowledged theoretical approach in consumer research.

Applying evolutionary psychology in consumer research is a sound example of one of the ordinary logics of consumer research, that is, the theory application approach (e.g. Simonson et al. 2001). This approach means that consumer research often adopts ideas and theories from other disciplines (e.g. psychology) in order to offer explanations and solutions to puzzles occurring in a consumer domain (MacInnis & Folkes 2010). Relating to this applied nature of consumer research, the scientific reports in the field are often expected to incorporate practical implications (Simonson et al. 2001). However, as the existing mainstream consumer research literature has historically been biased towards meeting managerial rather than consumers’ interests (Ozanne et al. 2011; Mick 2008; Bazerman 2001; Holbrook 1985), the practical implications put forward in consumer research also tend to primarily consider the managerial side of B2C interactions.

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<sup>1</sup> Epistulae Morales ad Lucilium (92:33); see Gummere (1962/1917).

The emphasis on managerial relevance is evident in evolutionary-based consumer research. For example, in the aforementioned top journals, most empirical evolutionary-based articles focus on practical implications for managers about how to improve sales and persuade consumers (e.g. Maeng & Aggarwal 2018; Otterbring et al. 2018; Ma & Gal 2016; Puska et al. 2016; Lieven et al. 2015; Hartmann & Apaolaza-Ibáñez 2013; Monga & Gürhan-Ganli 2012; Griskevicius et al. 2010a; Griskevicius et al. 2009). Some articles do not suggest any concrete practical implications for either managers or consumers (Meert et al. 2014; Durante et al. 2011) and some mention the implications for consumers very ambiguously (Durante & Arsena 2015; Durante et al. 2014). Nonetheless, there are also articles that dedicate a few lines to implications for consumers (Gvili et al. 2017; Durante et al. 2015; Wang & Griskevicius 2014), but even in these cases, consumer implications are typically only presented alongside managerial ones and without any particularly thorough consideration of their significance. Additionally, it is indicative that in the journals inviting research that primarily addresses the consumer's point of view and advances the consumer's interest (e.g. *Journal of Consumer Affairs*, *International Journal of Consumer Studies*, *Journal of Research for Consumers* and *Journal of Consumer Policy*), evolutionary-based studies have rarely been published (an exception is Dobson et al. 2010).<sup>2</sup>

Thus, the broad question that remains largely unanswered – despite the growing amount of evolutionary-based consumer research – is how consumers themselves could benefit from this new research stream. In this thesis, I refer to the approach that principally highlights the consumers' interests instead of managerial relevance as the *consumer perspective*. This perspective is collated with the *managerial perspective*, which, respectively, emphasises managerial relevance rather than the consumers' interest. According to Bazerman (2001) and Holbrook (1985), the traditional bias towards the managerial perspective at the cost of the consumer perspective allows consumer researchers to see only half the picture of consumption-related phenomena. Both authors called for a new subfield of consumer research that would “advance knowledge aimed at helping consumers make wiser purchases” and “help society by encouraging citizens to purchase

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<sup>2</sup> The key phrase “evolutionary psychology” was used when searching for evolutionary-based studies from these journals. The four journals were included in the list as each of them explicitly states their consumer orientation in their web pages (24.8.2018). *Journal of Consumer Affairs* publishes research that “focuses on protecting consumers' interest and is addressed from the consumer's point of view”; *International Journal of Consumer Studies* provides a forum for “papers with a focus on how consumers can enhance their security and well being”; *Journal of Research for Consumers* “publishes consumer research that furthers the interests of consumers through information provision and theoretical advancements”; and *Journal of Consumer Policy* “helps to define consumer interests, and discusses ways in which consumer welfare can be fostered”. Other journals with a reputation for advancing the consumers' perspective (such as *Journal of Macromarketing* and *Journal of Public Policy & Marketing*) were, however, excluded from this list, as their overall scope is explicitly broader, covering the entire fields of macromarketing, public policies and social marketing. It is acknowledged, though, that the latter has a history of publishing papers that adopt the evolutionary psychological perspective (e.g. Griskevicius et al. 2012).

products that will improve their own welfare” (Bazerman 2001, p. 499). While Holbrook (1985) provocatively argued that consumer behaviour cannot be understood until the managerial perspective is abandoned, Bazerman (2001) more conventionally suggested that only new research directions are required to allow consumer researchers to conduct research that benefits consumer welfare.

Naturally, the interdependency and mutual interests of managers and consumers are indisputable and widely embraced in marketing philosophy as marketing organisations cannot thrive without customer-orientation (Kotler et al. 2005; Panula 2000; Levitt 1995/1960; Kohli & Jaworski 1990). Today, a prevailing paradigm in marketing takes this philosophy even further: Consumers are becoming more active and armed with new tools, and they “seek to exercise their influence in every part of the business system” and “want to interact with firms and thereby ‘co-create’ value” (Prahalad & Ramaswamy 2004, p. 6). However, although the synthesis of the managerial and consumer perspectives has proved to be fruitful, the analytic distinction between them may still be necessary for advancing a theoretical understanding of their dynamics (cf. Uusitalo 1991; Niiniluoto 1983). Furthermore, the emergence of the synthetic research traditions such as value co-creation itself indicates that there are, indeed, two distinct parties – consumers and marketers – with somewhat different interests. If there were no conflicts of interest, there would arguably be no demand for marketing ideologies that aim to unveil and advocate for the mutual interests of the parties.

One way to clarify the underlying difference between the managerial and consumer perspectives of consumer research is to analyse the fundamental incentive for research efforts. In a generalised manner, managerially-oriented consumer research is eventually motivated by finding ways to increase the economic profits of companies (Kotler et al. 2005). Instead, consumer-oriented consumer research is more interested in increasing satisfaction in terms of needs and wants alongside the well-being of consumers (Kotler et al. 2005), which is not – at least not solely – transferable to economic measures. A recent illustrative example of the differences in the logics between these two perspectives is the marketing of Fitrocks™ Gripbells, which are very simple training accessories made of natural granite stone (Fitrocks.fi). These accessories, which are basically stones with holes drilled in them, are sold in Finnish online stores and grocery stores at a price of €55–60 per single product (e.g. Treenikauppa.fi). Indeed, from a purely managerial perspective, it might sound like a brilliant idea to brand and sell virtually worthless stones with an extremely high profit margin. However, from the consumer perspective, this sort of marketing raises far more multifaceted questions, including concerns related to marketing ethics.

While the lack of a consumer perspective is still evident in the top consumer research and marketing journals (e.g. Ozanne et al. 2011; Mick 2008), some significant steps have been taken after the publication of Bazerman’s (2001) and

Holbrook's (1985) viewpoints. Most notably, the Transformative Consumer Research (hereafter TCR) initiative established by the Association of Consumer Research in 2006 has been one such step (Özçağlar-Toulouse & Burroughs 2014; Davis & Pechmann 2013; Mick et al. 2012; Ozanne 2011; Mick 2008; Mick 2006). TCR aims to encourage research that benefits consumer well-being and welfare (Mick 2006) and has, thus, a very practically-oriented focus on rediscovering the consumer's voice in marketing and consumer research (cf. Özçağlar-Toulouse & Burroughs 2014). In terms of the aforementioned example of Fitrocks™ Gripbells, TCR could ask, for example, whether buying such products is eventually beneficial for consumers and whether consumers are using their full discretion when buying ordinary stones at such a high price.

While evolutionary-based consumer research has so far been dominated by the managerial perspective, a new and promising direction has been set by Stenstorm et al. (2018) and Saad and Stenstorm (2012), who briefly suggest that their research findings – related to the effects of the ovulatory cycle on consumer behaviour and analysed through the evolutionary psychological lens – could have implications for consumer welfare and TCR. According to them, evolutionary-informed findings are of relevance for consumer welfare, as being aware of biological instincts can be a route for improvements in both one's quality of life and in one's ability to make more informed buying decisions. In other words, awareness of these instincts may enhance a consumer's sense of control over his or her life. This process can be understood as a manifestation of empowerment (e.g. Zimmerman 1995).

Empowerment can be considered as an important concept of TCR, as TCR is primarily focused on “empowering consumers to have greater agency in making conscious consumption choices that promote their individual, social, and ecological well-being” (Bahl et al. 2016, p. 199; Mick et al. 2012). On the psychological level, empowerment is the perception of self-determination and critical awareness of one's internal state, as well as the ability of consumers to exert self-control over the reactive tendencies of their minds (e.g. Bahl et al. 2016; Thøgersen 2005; Zimmerman 1995). For example, if consumers learn that the ovulatory cycle exerts specific biological effects on their behaviour and that evolutionary psychology can make sense of these effects, as Stenstorm et al. (2018) and Saad and Stenstorm (2012) suggest, then these consumers may critically reflect on and alter their behaviour and they would consequently be empowered. Besides the implications suggested in Stenstorm et al.'s (2018) and Saad and Stenstorm's (2012) studies, evolutionary psychology has not, to the best of my knowledge, been used either in the domain of consumer empowerment or in TCR, although some studies have indeed applied evolutionary psychology to solve consumption-related social problems, inform social marketing and promote

sustainable consumption (Brooks & Wilson 2015; Michaelidou & Moraes 2014; Tybur & Griskevicius 2013; Griskevicius et al. 2012).

Nevertheless, evolutionary psychology has been used to inform positive psychology, that is, the psychological discipline focusing on positive aspects and quality of life (King et al. 2018; Linley et al. 2006; Buss 2000; Seligman & Czikszentmihalyi 2000), which is very close to the central ideas of TCR (Pechmann 2015; Mick 2006). In fact, the TCR initiative was originally intended to be called Positive Consumer Research, following the discipline of positive psychology (Mick 2006). Positive psychology focuses on *mental health* rather than on *mental illness* (cf. Kaleva & Valkonen 2013; Keyes 2007). Thus, it is primarily interested in optimal human functioning (or flourishing), the individual's potential, "positive" aspects of behaviour and improvements in quality of life (e.g. Linley et al. 2006; Seligman & Czikszentmihalyi 2000), which are all associated with mental health (Keyes 2007). Originally, positive psychology was inspired by the observation that mainstream psychological science after the Second World War had focused on mental illness and disorders, psychopathology and "negative" aspects of the human mind (Linley et al. 2006). In this sense, the history of positive psychology is analogical to TCR, as both have emerged to provide a formerly lacking perspective to their main disciplines; a perspective that focuses on a good life, happiness and well-being.

A central contribution of evolutionary psychology to positive psychology can be summarised via the notion that by becoming aware of evolutionary explanations for one's own behaviour, an individual may reflect on this instinctual behaviour and acquire the ability to control it (Buss 2000). As Czikszentmihalyi (1994) put it: "Having a self-reflective consciousness allows us to write our own programs for action, and make decisions for which no genetic instructions existed before" (p. 22). According to Czikszentmihalyi (2012), this reasoning is also highly applicable when aiming to transform human behaviour in the consumer domain.

Naturally, the assumption that the awareness of evolutionary instincts behind consumer decisions categorically results in empowerment must be stated with caution. Indeed, the adoption of self-awareness through self-discovery (i.e. self-help; Bergsma 2008) may depend on many psychological tendencies (Wu et al. 2011). In particular, consumers who see themselves as unique individuals might perceive self-discovery as a constraint on their free will (Wu et al. 2011). For example, evolutionary explanations may be understood as something that forces the individual into some predetermined form of behaviour. Instead, those consumers who regard themselves as less unique and merely as a part of a social system might view self-discovery as a tool for understanding the self and they might be more inclined to incorporate their self-discovery findings into their actual behaviour (Wu et al. 2011). Accordingly, there may be certain segments of con-

sumers who are psychologically more (or less) willing to exploit the potential benefits of evolutionary explanations for empowering purposes (cf. Wilson & Cash 2000).

However, the appropriate use of information is also a matter of virtue ethics (see Hursthouse & Pettigrove 2016/2003). When a consumer is introduced to any explanation, he or she is also confronted with a decision regarding whether to use that explanation to advance virtuous or vicious goals. For example, evolutionary psychology can provide explanations for consumer misbehaviour such as over-eating or reckless conspicuous consumption (cf. Tybur & Griskevicius 2013; Griskevicius et al. 2012), but it depends on the consumers themselves as to whether they will use these explanations to reinforce their misbehaviour or as a stepping stone towards overcoming such misbehaviour. Although deep reflections on what exactly is virtuous and vicious is beyond the scope of this doctoral thesis, I suggest that through the correct understanding of evolutionary instincts, consumers can – at the very least – be provided with a better, more informed opportunity for making virtuous decisions. In this sense, the current thesis connects to a topic recently introduced in TCR, namely, *consumer wisdom* (Luchs & Mick 2018), according to which “the pursuit of well-being for oneself and for others through mindful management of consumption-related choices and behaviors” (p. 20) is the priority.

Overall, if consumers learn about the evolutionary explanations for the psychological mechanisms influencing their instinctual behaviour, they have an opportunity to become critical and resistant to their own impulses and can be empowered in this sense. By knowing the basic assumptions of evolutionary psychology, consumers may also be more resilient to marketers’ efforts to persuade them, as it has been suggested that marketers intuitively use strategies and practices that align with evolutionarily-evolved human desires (Colarelli & Dettmann 2003). Hence, the knowledge of evolutionary psychology may be emancipatory. Marketing exerts power over consumers, but consumers may outpace that power if they have sufficient resources of knowledge and strength (Heath et al. 2017), which, I argue, a critical awareness of evolutionary explanations can supply them with (cf. Buss 2014).

## **1.2 Research purpose and strategy**

The gap in the literature identified in this thesis is that evolutionary-based consumer research has rarely focused on the consumer perspective, which is indicated, for example, by the fact that the practical implications of research findings are typically directed to the managerial side of B2C interactions. How could consumers themselves benefit from this new research stream? In this doctoral thesis,

I suggest that applying evolutionary psychology to TCR, and especially to the concept of consumer empowerment, could offer valuable insights into this question. My primary goal in this thesis is to investigate the usefulness of evolutionary psychology, particularly the consumer's awareness of ultimate explanations, as a self-reflective tool for consumer self-regulation and empowerment.

In order to achieve this goal, I develop a conceptual idea of *evolutionarily-informed empowerment* based on the literature review and then apply it to three distinct consumption-related phenomena. At the very core of this conceptual idea are the reinterpretations using the *ultimate level of explanation* (see section 2.1), which focuses on evolutionary historical reasons why certain behaviours exist and is, therefore, the most central epistemological tool that guides evolutionary psychology (Saad 2017; Griskevicius & Kenrick 2013; Scott-Phillips et al. 2011). As evolutionary psychology does not rely on one single theory but is rather a metatheory that covers different evolutionarily-informed sub-theories (Durante & Griskevicius 2016), I conduct the ultimate-level reinterpretations by applying evolutionary psychological sub-theories that are particularly relevant to each phenomenon.

I base this thesis on three separate empirical articles. Each of these articles presents a consumption-related phenomenon which is not analysed through the evolutionary lens in its original form but is subjected to the aforementioned evolutionary psychological reinterpretation in the current thesis. The phenomena in the three articles are insect-based food and consumer knowledge (Article 1), customer toilets and shopping behaviour (Article 2), and sex toys and taboo consumption (Article 3). If a certain behaviour is closely related to survival (e.g. homeostasis, including both ingestion and excretion) or reproduction (e.g. sexuality), it arguably has strong ultimate explanations (cf. Saad & Stenstorm 2012; Rozin 2000). I argue that all aforementioned forms of consumer behaviour discussed in the articles meet this criterion.

Furthermore, all articles consider somewhat sensitive topics, as each of them relates to behaviour that may be perceived as private or intimate (Lee & Renzetti 1990), that is, eating novel foods, using toilets and having sex. Thus, it is not surprising that the topics may be emotionally laden, cognitively controversial and featured by conflicts in avoidance and approach tendencies (e.g. Corr 2013; 2008) to fulfil the consumer's needs arising from these private or intimate spheres. First, insect-based food evokes ambivalence between disgust and the reasoned perception that such food is sustainable and good for personal health. Second, a decision to go to the toilet is eventually unavoidable, although the use of customer toilets can be loaded with several intuitive concerns relating to safety and hygiene. Finally, buying sex toys is motivated by a desire to pursue a better sexual life and enhance pleasure, but is laden with the fear of being sexually ex-



posed. The reinterpretation of the three articles focuses on ultimate explanations for these approach and avoidance tendencies towards the behaviour.

In sum, with these three articles I aim to provide the readers with illustrative examples of sensitive consumer-related phenomena which have cognitive and emotional dimensions that possess intriguing ultimate explanations. These dimensions can also be relevant beyond the specific consumer domains that are investigated in this thesis. Thus, I argue that consumers can, through the three illustrative examples, learn to recognise ultimate explanations for their behaviour in not only similar and closely related but also in distinct sensitive consumer-related situations they are confronted with in their everyday lives. Presumably, consumers may be able to use the awareness of these explanations as a means for self-reflection, as a source of self-regulation and, consequently, as a catalyst for empowerment; that is, as a starting point for evolutionarily-informed empowerment.

Drawing from these ideas, I form three research questions. The first research question addresses the potential of ultimate explanations to deepen the understanding of consumers' need fulfilment. Specifically, it aims to form an analytical framework which recognises the ultimate explanations behind approach and avoidance tendencies towards consumers' need fulfilment in sensitive situations. The second research question then focuses on conducting the ultimate-level reinterpretation by applying this framework to the phenomena introduced in the three articles. Finally, the third research question develops the idea of evolutionarily-informed empowerment and illustrates how ultimate explanations can promote consumer empowerment, using the reinterpretations of the three articles as examples. Formally stated, the three research questions are:

**RQ1:** *How can ultimate explanations deepen the understanding of consumers' need fulfilment?*

**RQ2:** *What ultimate explanations are related to the approach and avoidance tendencies concerning (a) buying insect-based food, (b) using customer toilets and (c) buying sex toys?*

**RQ3:** *How can ultimate explanations operate as a basis for consumer empowerment?*

The current doctoral thesis belongs to the discipline of marketing, more specifically, to its large sub-discipline, consumer research (MacInnis & Folkes 2010). The main contribution is offered to the recently emerged research tradition of evolutionary-based consumer research (e.g. Griskevicius & Durante 2015; Saad 2009; Saad & Gill 2000) by focusing on the consumer perspective and particularly on the evolutionary psychological applications to TCR, which is also a relatively new research tradition (e.g. Bahl et al. 2016; Mick 2006). The link between evolutionary psychology and the TCR is built by citing the literature from the

evolutionary account of positive psychology (King et al. 2018; Buss et al. 2000). The disciplinary positioning of this thesis is depicted below in **Figure 1**.

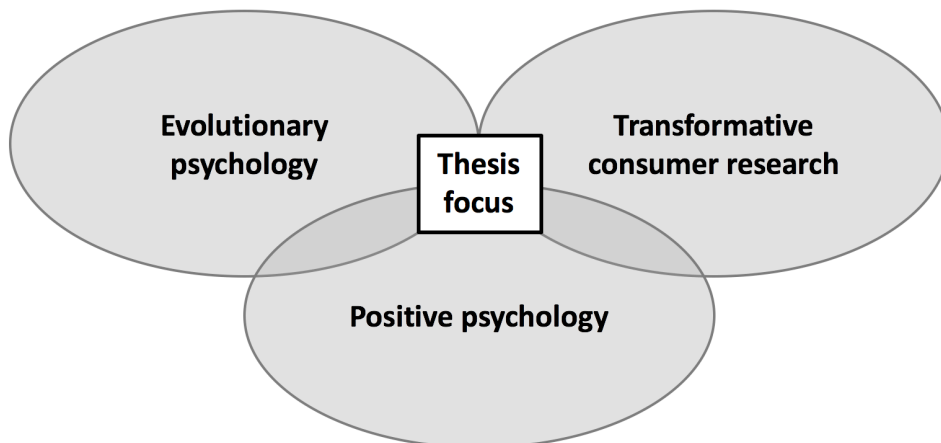


Figure 1 Positioning of the thesis

### 1.3 Outline of the thesis

The current thesis proceeds as follows. Chapter 1 (*Introduction*) is followed by chapter 2 (*Evolutionary-based consumer research*), which provides the theoretical background for the first research question (RQ1). Section 2.1 offers a brief introduction to evolutionary psychology, ultimate explanations and their applications in consumer research. In section 2.2, a popular evolutionary psychological approach based on ultimate explanations, namely, the fundamental motives, is presented. Section 2.3 introduces certain aspects to the approach and avoidance tendencies in consumers' need fulfilment, and builds the analytical framework, which, by using the fundamental motives, aims to provide ultimate explanations for these tendencies.

Chapter 3 (*Methodology and articles*) provides the methodological account of this thesis. In section 3.1, the research approach, including the introduction to instrumentalism at the philosophical and theoretical levels is laid down. Then, in section 3.2, an overview on the background, authorship and methods employed in the articles is provided. Chapter 4 (*Ultimate reinterpretation*) addresses the second research question (RQ2) by conducting an ultimate-level reinterpretation of the three articles. For each article, a summary of the key results is provided first and, after that, relevant evolutionary sub-theories are induced and ultimate explanations suggested for both approach and avoidance tendencies regarding the phenomenon.

Chapter 5 (*On evolutionarily-informed empowerment*) is built around the third research question (RQ3) and, therefore, corresponds with the primary goal of this doctoral thesis. In section 5.1, the conceptual idea of evolutionarily-informed empowerment is first developed by reviewing the central concepts of self-awareness, self-regulation and consumer empowerment and their relationships with ultimate explanations. Then, in section 5.2, evolutionarily-informed empowerment is discussed in light of the ultimate reinterpretations for the approach and avoidance tendencies relating to the three articles, followed by a discussion of how permanent changes can be generated in consumer behaviour via evolutionarily-informed empowerment.

Chapter 6 (*Conclusions*) presents the concluding remarks of the thesis. Section 6.1 discusses how marketing practitioners and consumer and marketing educators could benefit from the conceptual idea of evolutionarily-informed empowerment and from the findings of this study. Section 6.2 then clarifies the limitations of this study, as well as proposing some promising avenues for future research. The thesis ends with a concluding section (section 6.3) where the answers to the three research questions are summarised and the theoretical contribution is stated.

## 2 EVOLUTIONARY-BASED CONSUMER RESEARCH

### 2.1 Evolutionary psychology and ultimate explanations

Evolutionary psychology combines psychology and evolutionary biology; in other words, it is a psychological discipline that explains human nature by utilising the theories and concepts of biological evolution (e.g. Buss 2014). Primarily, evolutionary psychology suggests that our psychological structure, just like our physiological structure, has been shaped by natural and sexual selection to solve adaptive problems related to survival and reproduction (e.g. Buss 2014). The drive for survival and reproduction can be defined as a drive to maximise one's own *inclusive fitness*, referring to the success of passing one's own genes onto the next generations (Kenrick et al. 2010). This is referred to herein as *the axiom of evolutionary psychology*. Accordingly, evolutionary psychology assumes that all behaviour is derived from this very axiom, albeit sometimes in very unconscious and indirect ways (Kenrick et al. 2010; Tooby & Cosmides 2008; Nesse 1990). Unsurprisingly, evolutionary psychology has traditionally been regarded as a realist or even a reductionist discipline (Workman & Reader 2014; Derksen 2010; Tooby & Cosmides 1992).

The most central epistemological tool with which to analyse the evolutionary roots of certain behaviours is the distinction between the *proximate* and *ultimate* levels of explanation (Saad 2017; Griskevicius & Kenrick 2013; Scott-Phillips et al. 2011; Tinbergen 1963). In short, proximate explanations are concerned with questions of *how* certain behaviours function. For example, if a consumer is asked why he wants to eat candy, he may answer that he is hungry and he likes the taste of sweet things so much that he could not resist it (cf. Griskevicius & Kenrick 2013). According to the advocates of evolutionary-based consumer research (Saad 2013), most existing marketing and consumer research is typically concerned with the proximate level of explanation.

Ultimate explanations, instead, are concerned with the deeper *why* questions: What is the evolutionary reason as to why a certain behaviour exists? For example, people like candy because the sweet taste indicates that such nutrition contains a high amount of energy. Thus, on the ultimate level of explanation, the desire for sweet food is an evolved mechanism (i.e. a psychological adaptation; Schmitt & Pilcher 2004) which has helped ancestral people to solve the adaptive

problem of survival in a nutritionally scarce environment (cf. Griskevicius & Kenrick 2013). One major contribution of evolutionarily-based consumer research is that scholars now increasingly recognise the crucial distinction between the proximate and ultimate levels of explanation (Saad 2013). However, it has constantly been highlighted that these levels of explanation are complementary, as both are needed to gain a coherent understanding of human behaviour (Saad 2017; 2013; Griskevicius et al. 2009).

An important notion in recognising the evolved mechanisms and analysing their influences in consumer behaviour is that the human mind has been shaped by natural selection over millions of years under constantly changing environments. These environments are often called the environments of evolutionary adaptedness (Tooby & Cosmides 1992). Thus, in a given moment of our history, most – if any – of our evolved mechanisms are never optimally compatible with the prevailing environment (Workman & Reader 2014). This discrepancy between the environment and our biological or psychological nature is, however, especially prominent in today's society, as our cultural environment has changed much more rapidly than our minds have, suggesting that our current way of living is especially far removed from that which we have evolutionarily adapted to (Workman & Reader 2014).

The disparity between cultural and biological evolution can, indeed, explain several puzzling forms of consumer behaviour. For example, a gustatory preference for high-caloric food helped ancestral people to survive because food was scarce, but in the modern (Western) society where high-caloric food is abundant, the ancestral preference causes obesity and other food-related health problems (e.g. Saad 2006; Birch 1999). Another example can be found when considering sexual behaviour: People have evolved to enjoy sex, not reproduction, and they may aim at engaging in sexual activity even when it is irrational or risky (Capra & Rubin 2011). As Samuelson and Swinkels (2006) suggest, people tend to derive utility from intermediate actions (e.g. sex) and not from the evolutionary outcome itself (e.g. reproduction). This pursuit of intermediate gratifications is, indeed, related to the human intuitive tendency to prefer immediate rewards (e.g. eating high-caloric food or having sex with a stranger), which is often harmful in the long run, over delayed rewards (e.g. well-being and happiness), which may not appear tempting at the decision-making moment (Griskevicius et al. 2011).

## **2.2 Fundamental motives**

Evolutionary psychology is a basic science and its theoretical framework was originally developed to be a metatheory for psychology (Confer et al. 2010; Buss 1995). However, there is a growing body of literature in which the evolutionary

psychology framework is used to solve practical problems (Roberts 2011). Marketing and consumer research are substantially represented in this stream of applied evolutionary psychological literature (e.g. Saad 2017; Durante & Griskevicius 2016; Salonen & Piha 2016; Piha & Lähteenmäki-Uutela 2014; Saad 2013; Griskevicius & Kenrick 2013; Saad 2011a; Miller 2009; Colarelli & Dettmann 2003; Saad & Gill 2000).

There have been different theoretical ways in which consumer researchers have utilised evolutionary psychology (or related disciplines such as behavioural ecology; e.g. Hantula 2012) in analysing consumer behaviour, but a considerable proportion of this research is derived from the *fundamental motives framework* (Schaller et al. 2017; Durante & Griskevicius 2016; Griskevicius & Kenrick 2013; Kenrick et al. 2010). The fundamental motives framework proposes that on the ultimate level of explanation, the human mind consists of distinct fundamental motivational systems that are psychological adaptations for solving challenges that humans have repeatedly confronted during the course of evolution. Each motivational system is activated by external or internal cues indicating threats or opportunities, and once activated, the systems produce qualitatively different behavioural outcomes. In the framework (**Figure 2**), the systems comprise (1) immediate physiological needs, (2) self-protection, (3) disease avoidance, (4) affiliation, (5) status seeking, (6) mate acquisition, (7) mate retention, and (8) kin care.

Griskevicius and Kenrick (2013) provide a comprehensive review on the relevance of each fundamental motive in the consumer domain. First, immediate physiological needs (e.g. the need for nutrition and shelter) form a basis for all other fundamental motives to exist. Second, self-protection may be activated by interaction with threatening people or by loud noises and darkness, producing behavioural outcomes such as a tendency to conform or decreased risk-taking, for example, through consuming popular or safety-related products. Third, disease avoidance can be activated by perceived dirtiness or the presence of sick people and can promote preferences for new, clean and familiar products. Fourth, affiliation may be triggered by perceived loneliness or the threat of being socially rejected and lead to a preference for conforming products and behaviour. Fifth, status seeking is incentivised by interacting with rivals or by an opportunity for successful competition, and potentially drives conspicuous, luxurious or prestigious consumption. Sixth, mate acquisition may be activated by the presence of a potential partner or by any sexual or romantic stimuli, and it produces gender-specific behavioural outcomes: for men, risk-taking or conspicuous consumption, and for women, increased attention to appearance-related consumption or prosociality. Seventh, mate retention can be triggered by any interaction with one's partner, which may lead to gift-giving or other consumption activities that aim to foster the mutual commitment. Eighth and finally, kin care may be activated by

the presence of family members or any cues from vulnerable others (e.g. babies or animals), which may then produce consumer choices in relation to increased nurturance or giving without any expectation of reciprocation.

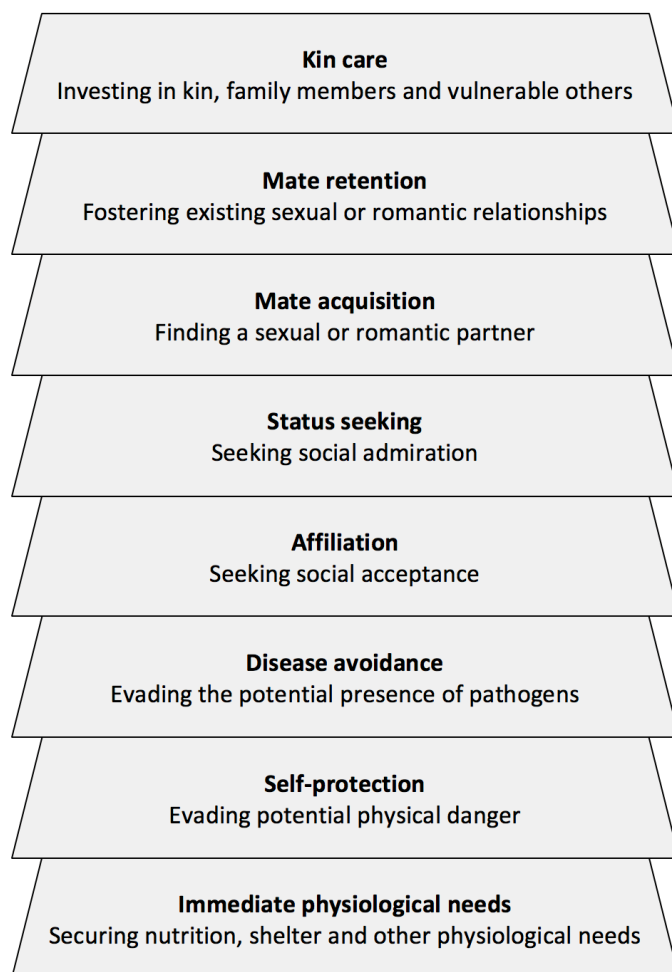


Figure 2 Fundamental motives<sup>3</sup>

Saad's (e.g. 2013; 2007) framework, which denotes four fundamental evolutionary motivational modules (i.e. survival, reproduction, kinship and reciprocal altruism) instead of eight motivational systems, is basically in line with the fundamental motives framework. The motivational modules or systems presented in both frameworks are based on the axiom of evolutionary psychology (see section 2.1) and they can, therefore, be used to explain numerous – if not all –

<sup>3</sup> Modified from Kenrick et al. (2010) and Griskevicius and Kenrick (2013).

consumption activities. However, the fundamental motives framework can be considered as less ambiguous than Saad's (2013; 2007) framework, because eight fundamental motivational systems (Griskevicius & Kenrick 2013) certainly give more specific ultimate explanations for consumer phenomena in comparison to analysing only four motivational modules (Saad 2013, 2007). Due to this superiority in accuracy, the fundamental motives framework is empirically more corroborated in the literature and it is, therefore, also more suitable for the purpose of the current doctoral thesis.

The fundamental system that is activated, for example, by an external cue such as the exposure to a commercial message or a consumer's own internal schema of the upcoming situation, may drastically influence consumers' preferences or behaviour. For example, if a consumer is motivated by the fundamental system of self-protection, he or she will prefer very different products or behaviours than if he or she is motivated by mate acquisition (e.g. Griskevicius et al. 2009). Indeed, these motivations can be in conflict with each other. Self-protection may, for example, motivate a female consumer to dress modestly and conservatively (McKibbin et al. 2009), whereas the mate acquisition motive may instigate wearing more revealing clothes (Durante et al. 2011).

This potential conflict between fundamental motivational systems manifests their hierarchical organisation (**Figure 2**). Like Maslow's (1943) model of the hierarchy of needs, the fundamental motives framework suggests that lower motives, which are closer to the organism's immediate survival, underlay higher motives, which more often relate to the organism's reproductive goals (Kenrick et al. 2010). Thus, in a situation where two fundamental motives clash, it could be expected that the motive which is more tightly related to immediate survival would intuitively outpace the motive that is more remotely related to it. The aforementioned case of modest dressing is an example. Wearing modest clothes may be preferred in everyday life and wearing revealing clothes is only used when the consumer has a peak motivation for doing so (e.g. due to her high sexual drive) and when she can be assured that her immediate safety has been guaranteed. Such a situation might be, for example, a party in a safe nightclub (e.g. Hendrie et al. 2009). Naturally, these motivational conflicts can sometimes be very difficult to solve: A consumer may simultaneously experience both approach (mate acquisition) and avoidance (self-protection) tendencies towards wearing revealing clothes.

### **2.3 Approach and avoidance tendencies**

The distinction between approach and avoidance tendencies (i.e. the behavioural activation system vs. the behavioural inhibition system; Carver & White 1994)



has a deep-rooted intellectual history in psychology; these motivational tendencies are highly intuitive and are automatic neuropsychological mechanisms that humans share with many other organisms across animate life (Elliot & Covington 2001). Indeed, being one of the most influential theoretical structures in psychology, the distinction of approach and avoidance tendencies has also found its way into several streams of consumer research such as hedonic shopping motivations (Arnold & Reynolds 2012), online and offline shopping (Penz & Hogg 2011), consumer responses to high-technology products (Lee et al. 2011), consumers' lay theories (Jain et al. 2009), consumers' use of affect as information (Kramer & Yoon 2007) and consumer information processing (Aaker & Lee 2001), to mention a few examples.

Given the widespread popularity in psychology and even in applied disciplines such as consumer research, it has unsurprisingly also been argued that the approach–avoidance dichotomy has the potential to be a basic conceptual foundation on which all other motivational distinctions are built (Elliot & Covington 2001). However, although the approach–avoidance dichotomy has indeed been regarded as a necessary component for the complete understanding of motivations, it may not be inclusive (Elliot 2006). For example, Kenrick and Shiota (2008) argue that reducing human motivations to this simple dichotomy is often too restrictive, as the mechanisms of approach and avoidance are manifold and context-dependent. Indeed, Kenrick and Shiota (2008) suggest that further light can be shed on approach and avoidance tendencies by considering their psychological domain-specificity, especially in terms of the fundamental motives framework (see section 2.2).

*Approach tendencies* refer to the forms of behaviour that are directed by positive, desirable or rewarding goals (e.g. Corr 2013; Elliot & Covington 2001; Elliot 2006). For example, the fulfilment of consumer needs may be understood in relation to such positive goals (see **Figure 3**): A need is a state of felt deprivation which directs the consumer to look for or approach an object or a means to satisfy it (Kotler et al. 2005). As discussed above, all consumer needs – and approach tendencies that are related to them – can ultimately be traced back to the fundamental motives (cf. Griskevicius & Kenrick 2013). Despite these roots in deep fundamental motives, however, consumer needs are traditionally regarded as cognitive: Consumer needs arise when a consumer *recognises* a difference between his or her current state and a desired state (Engel et al. 1978). In other words, consumer needs are fundamentally-based motivations that have reached the consciousness of the human mind and the mind can, therefore, make conscious efforts to fulfil them (Engel et al. 1978).

*Avoidance tendencies*, correspondingly, refer to the forms of behaviour that are instigated by negative, undesirable or punishing goals (e.g. Corr 2013; Elliot & Covington 2001; Elliot 2006). An avoidance tendency may be cognitive like

an approach tendency, and the same behaviour may simultaneously be directed by both avoidance and approach tendencies, as most situations that humans are confronted by involve multiple goals (Kenrick & Shiota 2008). For example, a consumer may evade eating meat because of his or her environmental concerns, albeit that he or she enjoys the taste of it (cf. Pohjolainen et al. 2016; Loughnan et al. 2010). Deciding whether to approach or avoid the object in such situations is, indeed, a trade-off, which can be predicted and analysed with the fundamental motives framework (Kenrick & Shiota 2008). For example, as expressed in the aforementioned example of wearing revealing clothes, the propensity to wear such clothes may be predicted by recognising the active fundamental motive (i.e. mate acquisition vs. self-protection).

What is noteworthy is that the conceptualisation between approach and avoidance is also relative to one's point of view. For example, the evasion of meat may be understood as an approach and not as an avoidance tendency, given that such evasive behaviour is directed by positive or rewarding goals (e.g. feeling pride). Similarly, eating meat would result in negative outcomes (e.g. feeling guilty) and would, therefore, be subject to an avoidance tendency. In this case, the consumer need is fulfilled when the consumer manages to avoid eating meat and not when he or she eats it. Given the dependency on one's viewpoint, the usage of approach and avoidance tendencies as a theoretical apparatus is, obviously, subject to contextualisation. In the current thesis, I always regard the fulfilment of consumer needs in relation to approach tendencies, whereas avoidance tendencies are something that potentially hinders need fulfilment. This *ad hoc* analytical logic, I argue, is justified because of the sensitive nature of the three consumer phenomena investigated later on in this thesis.

Sensitive consumption may, indeed, be a ground for situations where only the approach tendencies towards need fulfilment achieve the level of cognitive consciousness and avoidance tendencies remain on the more unconscious level. In sensitive consumption-related situations, consumers may perceive an elevated risk of exposure to external threats (Lee & Renzetti 1990): For example, a consumer has a conscious need (approach tendency) to buy or do something that he or she, however, prefers to keep private or that might endanger his or her health. In these potentially threatening situations, the avoidance tendencies may hinder the pursuit of need fulfilment. (In **Figure 3**, the arrow that connects the 'Avoidance tendencies' box to the arrow from the 'Approach tendencies' box illustrates this hindering effect). An explanation for this hindering influence of avoidance tendencies is offered by the psychological term *negativity bias* (e.g. Haidt 2012; Baumeister et al. 2001; Rozin & Royzman 2001). This bias is based on humans' intuitive aversion to engaging in potentially dangerous activities (and, consequently, their preference for maintaining the status quo; Samuelson & Zeckhauser 1998), and it is often manifested by negative emotions.

From the perspective of evolutionary psychology, all emotions can be understood as superordinating programs of the mind, whose function is to govern the sub-programs such as motivational priorities, goals, energy allocation, behaviour, physiology and perceptual mechanisms (Al-Shawaf et al. 2016; Tooby & Cosmides 2008). Each emotion has evolved to adaptively respond to a particular type of situation which has recurred during our evolutionary history (Tooby & Cosmides 2008; Nesse 1990). For example, fear is a negative emotion that has evolved in response to the adaptively significant situations where humans have repeatedly been exposed to a threat. Fear, as a superordinating program, then directs all sub-programs to protect the individual from that imminent threat in order to ensure the individual's survival, for example, by altering his or her motivational priorities so that the approach tendency is suppressed.

A classic example of this kind of situation – that is, the conflict between approach and avoidance tendencies – is the consumption of dental services (cf. Corr 2013). There is a rewarding outcome in going to the dentist, as one's teeth will be repaired, potentially improving one's social status (approach tendency). Simultaneously, however, the situation may be painful and unpleasant (avoidance tendency), and one intuitively fears it, as an unknown person putting a loud and quivering drill into one's mouth is, unsurprisingly, an obvious cue for a physical threat. This fear is, naturally, a manifestation of the fundamental motive of self-protection. As argued in section 2.2, self-protection is more closely related to immediate survival than the fundamental motive of status seeking, so in a situation where these motives clash, consumers may more intuitively behave according to self-protection. Thus, going to the dentist actually requires very advanced cognition and much culturally-transmitted knowledge about the positive outcomes of dental care. The same holds true when wearing revealing clothes: The possible avoidance tendencies are based on self-protection and daring to wear revealing clothes requires a high amount of cultural knowledge about the safety of sexually charged situations such as the social dynamics of nightclubs (e.g. Hendrie et al. 2009).

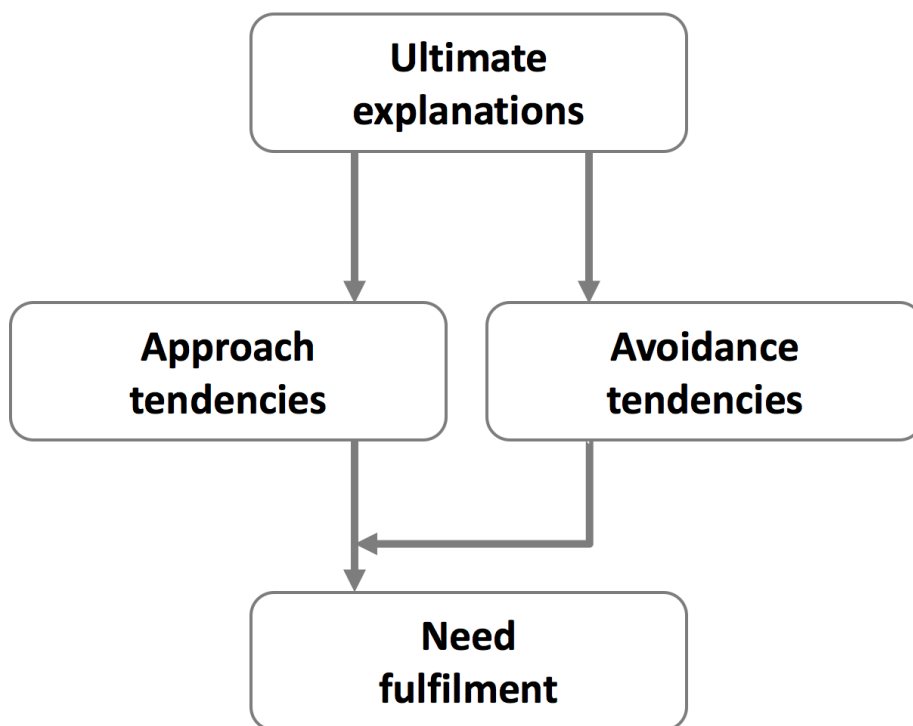


Figure 3 Ultimate explanations for approach and avoidance tendencies towards need fulfilment in sensitive situations

As summarised in **Figure 3**, the fundamental motives can provide ultimate explanations for need fulfilment both in terms of the generation of (1) approach tendencies and (2) avoidance tendencies. Because of the negativity bias (e.g. Haidt 2012; Baumeister et al. 2001; Rozin & Royzman 2001) and the hierarchical organisation of fundamental needs (Kenrick et al. 2010), *the avoidance tendencies often tend to intuitively hinder consumers' need fulfilment, particularly in sensitive consumption-related situations*, where – from an evolutionary perspective – the motives more closely related to immediate survival are of high importance. However, as highlighted by the examples of dental services and revealing clothes, this intuitive dominance of avoidance tendencies is not inevitable but can be consciously altered.

### 3 METHODOLOGY AND ARTICLES

#### 3.1 Evolutionary psychology as an instrumentalist method theory

The current thesis is philosophically based on instrumentalism, a form of philosophical pragmatism (Encyclopædia Britannica 2017b; Internet Encyclopedia of Philosophy; Stanford 2006; O’Shaughnessy 1992). Instrumentalism regards theories not as accurate descriptions of the natural world (cf. realism) but as intellectual structures that provide useful frameworks for solving problems (Cacioppo et al. 2004). There has been some debate as to whether scientific realism or instrumentalism is preferable, but in practice, the two philosophical approaches can be used in an iterative manner to guide scientific research (cf. induction vs. deduction; Cacioppo et al. 2004). While the tradition of realism accentuates theoretical specifications, verification, parsimony, rigor and warfare between competing theories, instrumentalism promotes discovery, open-mindedness, creativity and theoretical pluralism; hence, a realist could be described as a debater or warrior, and an instrumentalist as a discoverer or diplomat (Cacioppo et al. 2004).

The instrumentalist account of theory is common in TCR, as it is more compatible with TCR’s focus on practical implications, societal relevance and dissemination directly to consumers than the theoretically strict realist account is (Crockett et al. 2013; Mick et al. 2012; Ozanne et al. 2011). Another example is psychoanalysis: The value of psychoanalysis is often suggested to rely on the philosophy of instrumentalism as the theory evidently has some truth value due to its success in clinical treatments (Brigati 2015; Hanly 2009; Portin 2003). Similarly, when evolutionary psychology is used to advance consumer well-being within TCR, it does not necessarily need to only be assessed in terms of its realistic truth value (cf. Derksen 2010) but via its success and usefulness as a framework in explaining different consumer phenomena. Coherently, Cohen (2005) remarks that evolutionary psychology is undeniably very effective at discoveries regardless of whether the evolutionary course of psychology can ever be established with certainty. Thus, evolutionary psychology should primarily be thought of as a research programme of heuristic exploration and discovery (Goldfinch 2015). As Alba (2012) suggests, “relaxing” the constraints of theory could potentially lead to the proliferation of scientific discoveries in consumer research.

Methodologically, this doctoral dissertation is theoretical research; that is, it considers the articles as its “empirical material” that is interpreted through a cer-

tain “theoretical lens” (Kallio 2006), namely, evolutionary psychology (i.e. ultimate explanations). When a theory is used as a theoretical lens, it typically follows the instrumental idea of a theory as a tool or intellectual structure (Kallio 2006). Relatedly, an important aspect of the definition of the role of evolutionary psychology in consumer research is the distinction between domain theories and method theories – a framework suggested by Lukka and Vinnari (2014). According to them, domain theory refers to a set of knowledge that is related to a particular field or domain, whereas method theory is a meta-level conceptual system, or theoretical lens, which is adopted from another disciplinary domain and whose typical aim is to offer alternative or deeper insights into the phenomenon of interest. For example, Zahavi’s (1975) costly signalling theory may be regarded as a domain theory in evolutionary biology but as a method theory in social sciences such as consumer research (e.g. Nelissen & Meijers 2011). Indeed, important contributions can be made by conceptualising the consumer phenomena in terms of theoretical constructs that have been established in relation to very different phenomena (Lynch et al. 2012).

The role of method theory is regarded as instrumental, as one of the most prevalent uses of method theories is as a tool for interpreting results (Lukka & Vinnari 2014). Many consumer researchers have consistently argued that theories adopted from other disciplines should play an instrumental role rather than being the primary object of the studies (Simonson et al. 2001; Shimp 1994). According to Murgolo-Poore et al. (2003), however, attempts to address the marketing-related phenomena by instrumentally comparing distinct theoretical lenses have been overlooked, although this kind of theoretical alternation would potentially increase the understanding of these phenomena. Specifically, evolutionary psychology has been suggested to be useful in explaining findings that have already been documented in the earlier consumer research literature with non-evolutionary theoretical frameworks (Saad & Gill 2000). This reinterpretation through the evolutionary psychological lens is primarily based on the distinction between proximate and ultimate levels of explanation (see section 2.1), with the focus on the ultimate level; Saad (2017) even regards it as a core element of *the method of evolutionary psychology*.

One pitfall in the attempts to introduce evolutionary psychology to consumer research may have been the assumption that, according to the principle of consilience (Henriques 2003; Wilson 1998), which is widely accepted among evolutionary psychologists (Saad 2017; 2013), there are no separate disciplines but only one, all-encompassing domain of science. Therefore, evolutionary psychology may have been treated as a domain theory (or “grand theory”) for this all-inclusive disciplinary domain (e.g. Goldfinch 2015). The attempts to apply the theory to consumer research have consisted of efforts to broaden the original domain rather than to adapt the theory to a new domain as a method theory (i.e.

consumer behaviour is nothing more than a context where certain evolutionary psychological processes occur; Pham 2013; Simonson et al. 2001). This reasoning is similar to the accusations of evolutionary psychology being scientifically imperialistic (Patsiaouras & Fitchett 2009; Buller 2005; Dupré 1994) and “greedily” reductionist (Workman & Reader 2014; Dennett 1995; Tooby & Cosmides 1992).

These controversies may still be one of the reasons behind the “motivated” opposition to evolutionary psychology (cf. Burke 2014; see also Hagen 2015; Daly & Wilson 2008). Indeed, the argumentation in favour of evolutionary psychology as a grand theory may understandably cause anger among the social scientists who embrace theoretically more pluralist approaches. Acknowledging this problem in the dissemination of evolutionary psychology, many consumer researchers who are involved with the discipline have already adopted a more moderate form of argumentation. For example, Saad (2017) expresses that “marketing scholars should construe evolutionary explanations not as threatening but rather as complementary to their own research agendas” (p. 473; see also Griskevicius et al. 2009, p. 393). However, the agenda of evolutionary psychology is still meta-theoretical (e.g. Durante & Griskevicius 2016) and evolutionary psychology can still easily be associated with its historical burden of “greedy” reductionism (Workman & Reader 2014; Dennett 1995; Tooby & Cosmides 1992).

Thus, in order to promote evolutionary psychology as a conventional approach, submissive verbal gestures may be insufficient, and an alternative philosophical account for the theory may prove to be a more far-reaching solution to settling the controversies which still potentially restrain the developments of evolutionary psychology (Goldfinch 2015). Highlighting the instrumental, and more conventional, role as a method theory might encourage consumer research to consider evolutionary psychology as an *alternative* theoretical framework through which a richer understanding of consumer behaviour could be gained (Murgolo-Poore et al. 2003). To put it differently, evolutionary psychology could be treated as a tool that can be placed in every consumer researcher’s toolkit, ready to be used to give novel insights into puzzling consumer phenomena that researchers are confronted with.

The instrumental use of evolutionary psychology as a method theory in this thesis is indeed a departure from the mainstream evolutionary-based consumer research, which typically applies the *theory-driven approach* (Pham 2013; Alba 2012; Lynch et al. 2012; Simonson et al. 2001), with the aim of presumably contributing evolutionary psychology as a domain theory. Instead, this thesis follows the *phenomenon-driven approach*; that is, it begins with the enquiry of the phenomena and uses evolutionary psychology as a theoretical lens to gain understanding of the phenomena rather than using the phenomena for testing theoretical causalities (cf. Pham 2013; Alba 2012; Lynch et al. 2012; Simonson et al.

2001). Phenomenon-driven research is often related to inductive epistemology (Pham 2013). In coherence with this idea, the current thesis applies inductive elements, as the evolutionary psychological sub-theories that are used to reinterpret the empirical phenomena are *induced* only after the phenomenon has been introduced (cf. Prendergast & Lam 2013). Each sub-theory relates to a specific fundamental motive (Griskevicius & Kenrick 2013) that is active in the context of the phenomenon. Determining exactly what these active fundamental motives are is based on the understanding derived from previous literature and is discussed alongside the induction of sub-theories (sections 4.1–4.3).

Although consumer research has traditionally emphasised the theory-driven approach, as is evident, for example, in the publication history of *Journal of Consumer Research*, the time is also becoming ripe for phenomenon-driven research, as even this top journal now explicitly welcomes a broader range of manuscripts, including phenomenon-driven contributions (Inman et al. 2018). This, I argue, is positive in terms of enhancing the practical relevance of academic research. While theory-driven research is said to be targeted only at academics, phenomenon-driven research is typically of interest for both the academic and practical audiences (Schwarz & Stensaker 2014). In this sense, phenomenon-driven research is a manifestation of *phronesis* (i.e. Aristotelian practical wisdom), which, according to Flyjberg (2001), refers to the fundamental mission of increasing the relevance of social sciences in practice. In the consumer domain, this means that consumers are better informed of scientific reasoning and they could, thus, make wiser decisions in the marketplace (Mick & Schwartz 2012). Obviously, this approach is consistent with the consumer-oriented emphasis of TCR.

### 3.2 Background, authors and methods of the articles

**Background.** Three empirical articles, Articles 1, 2 and 3, are all phenomenon-driven in the sense that the research processes began with the recognition of puzzling consumption-related phenomena in the marketplace. Although the choices of the phenomena were partly based on their practical relevance, it also became clear that the existing body of consumer research contained only little – if any – literature about them. Thus, it was ensured that scientific inquiries into these practically relevant topics would make both substantive and theoretical contributions to the consumer research literature (cf. Lynch et al. 2012). The details about the rationale behind choosing each of the three phenomena are described in the following paragraphs, along with a brief overview of the subsequent research processes. Additionally, a summary of the purpose, theoretical background,



methods, contributions and implications of the original articles is provided in **Table 1**.

Article 1, about insect-based food, was inspired by the notion about the change in the regulatory environment (Lähteenmäki-Uutela & Grmelová 2016) which boosted much commercial (e.g. start-ups such as EntoCube Ltd, Nordic Insect Economy Ltd, Entomophagy Solutions Ltd), popular (e.g. Kemppainen 2015) and scientific interest (Turun yliopisto 2015) in the topic. My first contact with this topic was a discussion in spring 2015 with Anu Lähteenmäki-Uutela, who was familiar with my interest in investigating idiosyncratic topics, and she thereby asked me to join the national Tekes project “Insects in the Food Chain” (2015–2017). The exact topic of the article was later determined based on the literature review which revealed that there were no previous studies on the potential association between consumer knowledge and a willingness to buy insect-based food. The article was written in spring 2016, and an early version of it was presented at the Eurosense 2016 conference in Dijon, France, in September 2016. The article was submitted in September 2016 to the Eurosense 2016 special issue of *Food Quality and Preference* and it was published after two review rounds in December 2016, although it was only issued two years later in 2018.

Table 1 Summary of the original empirical articles

Article	Purpose	Theoretical background	Method	Contribution	Managerial implications
Insect-based food and consumer knowledge (Article 1)	Analysing how consumer knowledge influences willingness to buy insect-based food.	Consumer knowledge ABC model of attitudes Food choice	Cross-cultural online survey (n=887)	(1) Providing region-specific information about the knowledge-related antecedents of willingness to buy insect-based food.  (2) Highlighting that cognitive structures of food choice may vary even in united cultural areas.	Tailoring effective education or promotion strategies for insect-based food.
Customer toilets and shopping behaviour (Article 2)	Providing a scientifically robust argument about the critical role of customer toilets in retail environments.	Store attribute literature Physiological needs in consumer behaviour	Field survey (n=655)	(1) Deepening the understanding of customer toilets as a specific store attribute shaping shopping behaviour.  (2) Highlighting the fact that consumer behaviour may intensively be influenced by physiological needs.	Encouraging retailers to regard toilets as not only an unwanted property expense but as a marketing investment.
Sex toys and taboo consumption (Article 3)	Investigating the boundaries of taboo destruction in relation to buying products (sex toys) that were once regarded as taboo but which have recently been subject to liberalisation.	Taboo consumption Sexuality-related consumption	Online survey (n=481) Expert interviews (n=26)	(1) Proposing a framework for analysing the dynamic field of taboo consumption.  (2) Suggesting that self-protection and status maintenance are the core forces of taboo construction on the individual level.	Clarifying which taboo forces are the most important preconditions for a successful sex toy retailer in the current consumer culture.

Article 2, about customer toilets, is originally based on my master's thesis (Piha 2013). The master's thesis was inspired by my personal observation in spring 2013 that customer toilets are often ill-maintained and inadequately capitalised, although they potentially influence consumers' shopping value, which was indicated by the scarce academic literature on the subject. My informal discussions with consumers and retail managers reinforced this observation, as well as the occasional media attention on the phenomenon (e.g. Tuomola 2013) and the emergence of commercial activity around it (e.g. Novosan Ltd). The research article, although loosely based on my master's thesis, analyses a larger and more comprehensive dataset, which was collected in cooperation with Metsä Tissue Ltd, a company operating in the forest and (toilet) paper industry. In April 2015, a representative of the company contacted me and asked me to design and conduct an in-store consumer study which would provide insights into the role of customer toilets in retail stores. I collected the data and wrote the research article based on it in summer–autumn 2015 and spring 2016. I submitted the manuscript to *Journal of Retailing and Consumer Services* in September 2016, and after two review rounds it was published in January 2017.

Article 3, about sex toys, was mainly inspired by the observation that the sex toy industry is constantly growing (e.g. Burns 2016; Kyyrö 2016) and the use of such products has become surprisingly popular (Herbenick et al. 2009; Kontula 2009; Reece et al. 2009). This development, however, seemed puzzling in light of the notion that people rarely talk about their consumption of sex toys. The first time I had the idea of conducting academic research about sex toys was in spring 2014 when I presented it at a seminar discussion. I wrote a short research plan about sex toys as a form of taboo consumption and presented it at another seminar in spring 2015. A year later, in spring 2016, a marketing student, Elina Järvinen, contacted me after hearing that I had plans to investigate sex toy consumption. She proposed that she could write her master's thesis<sup>4</sup> about the same topic, and, with my support, she designed and conducted a consumer survey (summer 2016) about sex toy consumption. I used the data from this survey as a starting point for a research article, and in autumn 2017, our team also collected additional qualitative data to fill the gaps in from the original survey. This additional data collection was funded by KULTA, a project (2017–2019) that investigates the latent bond-related needs of consumers (Turun yliopisto 2016). The research article based on these two datasets was accepted in *Journal of Marketing Management* after two review rounds and was published online in July 2018.

**Authors.** In Article 1, I was primarily responsible for study design, data analysis and the writing process; yet another four authors commented on the manu-

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<sup>4</sup> This thesis has already been finished (Järvinen 2017) and gained some media attention, for example, in *Turun Sanomat* (Riihimäki 2018).

script in its different phases. Terhi Pohjanheimo, Anu Lähteenmäki-Uutela and I were responsible for data collection in Finland and Germany, Zuzana Křečková in the Czech Republic and Tobias Otterbring in Sweden. In Article 2, I had the main responsibility for study design, data collection, data analysis and the writing process. Juulia Räikkönen supported the research process, for example, by assisting in the study design and commenting on and complementing the different versions of the manuscript. Article 3 was co-authored mainly with Leila Hurmerinta and Birgitta Sandberg. The earliest versions of the manuscript, containing the theoretical development, study design and data analysis of the quantitative part of the article, were, however, primarily written by me. The data for the quantitative part was collected by Elina Järvinen, but I assisted her in designing the questionnaire. The qualitative part of the article was designed, conducted and authored in close cooperation between me, Hurmerinta and Sandberg.

***Methods.*** The primary methods in the empirical articles are quantitative, as all three analyse data from consumer surveys. However, the final article (Article 3) adopts a mixed-method approach which combines qualitative interviews and quantitative consumer surveys. In sum, the empirical data for the three articles consists of 2049 informants, of which 2023 were participants in the surveys and 26 were interview subjects. The data collection and methods are briefly summarised below, and more detailed descriptions of the data and methods can be found in the original articles.

Article 1 presents a cross-cultural online survey dataset ( $n = 887$ ) collected in four European countries (Finland, Sweden, Germany and the Czech Republic) from May–June 2016. The data is analysed with full structural equation models and multi-group models. Article 2 is based on the explanatory field survey dataset ( $n = 655$ ) which was collected at one of the largest department stores in Finland, Kyläkauppa Veljekset Keskinen Ltd, in July 2015. The main methods of analysis are descriptive statistics and a path model, that is, a structural equation model with observed variables and without the measurement model of latent constructs. Article 3 adopts a mixed-method strategy that is based on (1) an online survey dataset ( $n = 481$ ) collected in Finland from June–July 2016 using the consumer panel of a Finnish market research company, and (2) a set of qualitative interviews ( $n = 26$ ) with Finnish experts in sexual health (see **Appendix**), conducted from November–December 2017. The principal method of analysis for the survey data was a sequential, moderated regression analysis, and regarding the interviews, the method was qualitative content analysis, that is, a combination and conceptualisation of quotation-based and informant-centric terms and codes into upper-level categories.

Although all three articles have been published or accepted for publication in reputable scientific journals, and thus have passed in-depth peer-review processes, some remarks on their methodological validity as a part of this doctoral thesis

are needed. Most importantly, as mentioned in section 1.2, the three articles did not apply evolutionary psychology in the first place. Thus, the methodological choices made when designing the articles were not based on the rationale provided by evolutionary or ultimate theorising. While this restrains the possibilities of testing any evolutionary hypotheses or contributing to evolutionary psychological theories (cf. the theory-driven approach; see section 3.1), it certainly enables the use of evolutionary psychology as an interpretative framework (cf. the phenomenon-driven approach; see section 3.1). However, this also means that the articles might be subject to other kinds of theoretical reinterpretation.<sup>5</sup>

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<sup>5</sup> As is evident, this study focuses on ultimate reinterpretations for the three consumption phenomena (insect-based food, customer toilets and sex toys) detailed in chapter 4. However, I also acknowledge the explanatory power that non-evolutionary theories might possess as alternative interpretative frameworks. For example, Mary Douglas's (1966) theories on purity, dirt and taboo, as well as Sigmund Freud's (see Strachey 1966) theories on sexuality, taboo and instincts might provide applicable and fruitful reinterpretations to any of the three phenomena.

## 4 ULTIMATE REINTERPRETATION

### 4.1 Article 1: Insect-based food

**Central findings.** Based on the literature regarding the consumption of insect-based food (e.g. Hartmann et al. 2015) and consumer knowledge (e.g. Alba & Hutchinson 1987), Article 1 analysed how consumer knowledge influences one's willingness to buy insect-based foods. The study was conducted in a cross-cultural context, as consumers from Northern and Central Europe were compared. The central finding of the study was that consumers in Northern Europe are generally more knowledgeable about and positive towards insect-based food than their counterparts in Central Europe. Relatedly, the knowledge constructs predict a willingness to buy insect-based food more strongly in Northern Europe than in Central Europe, and, respectively, food neophobia is a stronger (negative) predictor of willingness to buy in Central than in Northern Europe. However, product-related experiences (i.e. the individual has tasted or seen insect-based food before) is a universal predictor of willingness to buy. Generally, it appears that when the knowledge about insect-based food is higher, then the willingness to buy it is also higher and the hindering effect of food neophobia is lower.

**Inducing ultimate explanations.** A central approach tendency for buying insect-based food is presumably the need to eat healthily and sustainably, which is supposedly based on the fundamental motive of status seeking. The avoidance tendencies are, instead, disgust and neophobia relating to insect-based food, which are fundamentally motivated by disease avoidance. As suggested by Kenrick et al. (2010) and discussed in sections 2.2–2.3, disease avoidance is lower in the hierarchy of fundamental motives than status seeking, so avoidance tendencies are supposedly more intuitively followed with regards to buying insect-based food. The approach and avoidance tendencies towards buying insect-based food are depicted in **Figure 4** and discussed below.

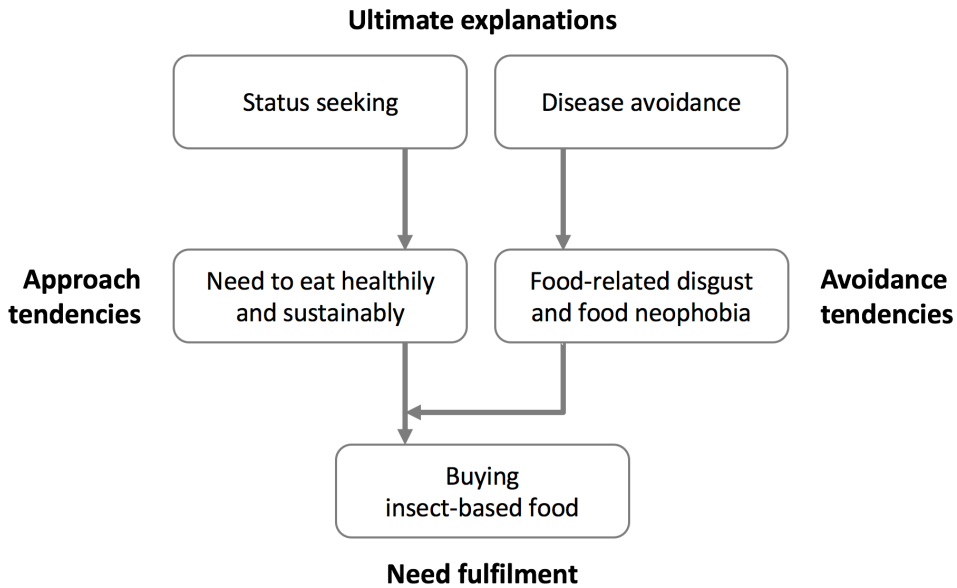


Figure 4 Ultimate explanations for approach and avoidance tendencies towards buying insect-based food

**Approach tendencies.** High social status is evolutionarily connected with higher fitness than low status is, and humans have, thus, evolved psychological mechanisms for adaptive problems related to seeking status (e.g. Anderson et al. 2015; Cheng et al. 2010). According to Henrich and Gil-White (2001), status can be achieved not only through physical dominance but also through prestige. Prestige refers to freely conferred deference and can be attained by possessing socially valued skills and knowledge and by having a prosocial attitude towards sharing that knowledge. In other words, prestigious individuals attain status because they are popular: It has been evolutionarily advantageous for other group members to be close to those individuals so that they can learn useful skills and knowledge from them. The related positive emotion to prestigious status is pride (Cheng et al. 2010), which is an evolved psychological mechanism to direct positive attention towards the self (Gilbert 1997).

Individuals themselves can increase their prestigious status by demonstrating their own knowledge and by highlighting their prosocial attitudes (Cheng et al. 2010). According to Griskevicius et al. (2010b), this can be done through several conspicuous consumer choices, for example, by choosing environmentally-friendly, sustainable and prosocial products. Consuming these products may signal that the individual is aware of sustainability issues (i.e. he has a lot of knowledge), but also that he or she is willing to pay a premium for a product that benefits the environment and society, and not necessarily himself or herself. Griskevicius et al. (2010b) argue that this kind of self-sacrificing behaviour po-

tentially results in an increase of the individual consumer's social status in the reference group.

Food choice can be understood as a way for prestigious status signalling, as, for example, favouring organic foods may be fundamentally motivated by *status-seeking* functions (Puska et al. 2018; 2016). In the context of insect-based food, which is reported to be an extremely healthy and environmentally-friendly but largely unutilised source of nutrition, prestigious status signalling may be even more prevalent. As described later (under the topic of avoidance tendencies), insect-based food is the subject of high food neophobia and strongly evokes the emotion of disgust. Thus, by consuming insect-based food the consumer not only signals his or her prosocial and sustainable attitude, but also self-sacrifices himself or herself by engaging in a behaviour that is commonly perceived as disgusting. In sum, when an individual consumes insect-based food, he or she effectively demonstrates prestige, as by that choice the individual (1) shows awareness and knowledge about sustainability issues and (2) performs self-sacrificing behaviour. Both potentially result in status increase, and therefore, the approach tendency (the need to choose healthy and sustainable food products) for eating insect-based food may be based on the fundamental motive of status seeking.

***Avoidance tendencies***<sup>6</sup>. The need to attain and perform prestigious status by choosing insect-based food may be inhibited by the avoidance tendency of disgust and the related trait of food neophobia. Disgust is associated with the fundamental motive of *disease avoidance*, that is, the intuitive protection from the potential presence of pathogens and it has been an adaptation with great value for survival (Griskevicius & Kenrick 2013; Neuberg et al. 2011; Kenrick et al. 2010). Humans' precautionary system for pathogen avoidance – the behavioural immune system – functions by detecting cues for the presence of pathogens (e.g. spoiled food, bad smells, rotten organisms, faeces) in the immediate environment, triggering the relevant psychological responses such as disgust and facilitating behavioural avoidance of the objects that are perceived to be pathogenically contaminated (Tybur et al. 2013; Schaller & Park 2011).

Disgust sensitivity is often related to the evolutionary psychology of food choice, which, however, can also be explained more broadly. An intriguing attempt to analyse the puzzles of human food choices and food-related behaviour begins with the so-called generalist's dilemma (Rozin 2000, see also Pollan 2006). The generalist's dilemma refers to the adaptive problem of approval and aversion when confronting novel foods. Humans, as omnivorous animals, can basically eat almost anything, and this flexibility has favoured humans in the course of evolution, enabling our species to occupy and live in countless different

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<sup>6</sup> I have put forward a similar discussion on avoidance tendencies towards eating insect-based food in my viewpoint in *Tieteessä tapahtuu* (Piha 2017).



habitats (Rozin 2000). However, whenever a human individual is confronted with a new food, he or she must always decide whether that food can be eaten without the risk of pathogenic intoxication, as there are no domain-specific genetic instructions in our mind that would automatically make the choice for us (Rozin 2000). For example, a human is very different from another mammal, the giant panda, which almost exclusively eats bamboo (e.g. Pan et al. 2014). This exclusive diet means that pandas are very dependent on the environments that sustain bamboo, but on the other hand, these bears are not confronted with the generalist's dilemma.

Many strategies have evolved to solve the adaptive problem of the generalist's dilemma characteristic of the omnivorous human species. Among them is the trait of *food neophobia*, which refers to an overall reluctance to eat unfamiliar foods (Pliner & Hobden 1992). According to this strategy, the food is easily rejected solely on the basis that it is unfamiliar; it does not need to possess any sensory cues relating to a pathogenic presence. Insect-based food may be the subject of an avoidance tendency because such food is largely unfamiliar in many (Western) parts of the world. Thus, one solution to the generalist's dilemma regarding insect-based food is the accumulation of cultural and social knowledge. People learn from each other and knowledge is culturally transmitted (e.g. Smith et al. 2008). Deciding what is edible and what is not may be based on other people's experiences, not necessarily on one's own (in)experience with the food (Birch 1999).

However, the aversion towards insect-based food is hardly completely explained by the claim that such food is unfamiliar: So are many other foods and they still do not invoke as intensive aversive reactions as insects do (La Barbera et al. 2018). Thus, besides being unfamiliar, could insects themselves have some adaptive features that evoke an intuitive aversion such as, for example, spiders arguably do (e.g. Öhman et al. 2001)? To be considered as an adaptation, a trait must be culturally universal (Schmitt & Pilcher 2004). Evidently, the disgust of insects as food is not universal, as insects are commonly eaten in some parts of Asia, for instance. In this light, an aversion towards insects is not as straightforward as an aversion towards spiders.

The aversion towards insects as food may instead be explained by the deeply held associations between insects and other disgust-eliciting items (La Barbera et al. 2018). Many insects occur in places with high pathogen stress such as in faeces and rotten organisms. Therefore, the adaptation for aversive reactions may not be related to insects *per se*, but there is instead an adaptive pressure to easily learn to avoid insects in certain circumstances. For example, spoiled food typically attracts insects; if insects are used as a food ingredient, this spoilage-related association may be the reason behind the aversive reaction towards such insect-

based food. This disgust-related association may then be either culturally reinforced (e.g. Western countries) or diminished (e.g. Asia).

***Relationship with the findings.*** As previous experiences about insect-based food are a predictor of one's willingness to buy in both Northern and Central Europe, supporting the idea that insect-based food may be regarded as a regular unfamiliar food, this food type can become more accepted just by accumulating experiences about it, similarly to any new and strange food. However, the fundamental motive of status seeking may provide an additional explanation. The status-seeking motives predict that sustainability and healthiness are incentives for consuming insects. An important prerequisite for the activation of status-seeking motives is, though, that consumers are aware of these beneficial features of insect-based food. According to the findings, consumers in Northern Europe know more about the benefits and, consequently, they are more willing to buy insect-based food. In contrast, there is no effect between knowledge and one's willingness to buy in Central Europe, presumably because consumers in Central Europe do not know as much about the sustainability and healthiness of insect-based food. Thus, because consumers in Central Europe are not aware of the status-attaining potential of consuming insects, the disease-avoidance motive (disgust and food neophobia) still dominates behaviour. Assumingly, if consumers in Central Europe became aware of the benefits of eating insects, their status-seeking motive would also be activated and start to override the disease-avoidance motive as has happened in Northern Europe.

## 4.2 Article 2: Customer toilets

***Central findings.*** Based on the literature of consumer behaviour in store environments (e.g. Turley & Milliman 2000; Sherman et al. 1997) as well as physiological needs in terms of consumer behaviour (e.g. Tuk et al. 2011), the purpose of Article 2 was to provide a scientifically robust argument about the critical role of customer toilets in retail environments. The results supported the assumption from previous literature, informal discussions and the author's personal observation that customer toilets are considered as a very important supplementary service in retail stores, but they may also influence actual shopping behaviour by increasing consumers' in-store time and, thereby, their spending.

***Inducing ultimate explanations.*** Unsurprisingly, the primary approach tendency for using customer toilets during a store visit is to relieve a physiological urgency. However, although physiological urgencies obviously originate from the fundamental motive of immediate physiological needs, the fundamental motive that drives consumers to use toilets to relieve that urgency is rather social, namely, affiliation. The avoidance tendencies arguably relate to fear and disgust,

which are, correspondingly, fundamentally motivated by self-protection and disease avoidance. In the hierarchical model of the fundamental needs (see sections 2.2–2.3; Kenrick et al. 2010), the fundamental motive behind approach tendencies, that is, affiliation, is higher and thereby would presumably be overruled by avoidance tendencies based on the lower fundamental motives, namely, self-protection and disease avoidance. The approach and avoidance tendencies regarding using customer toilets are presented in **Figure 5** and discussed below.

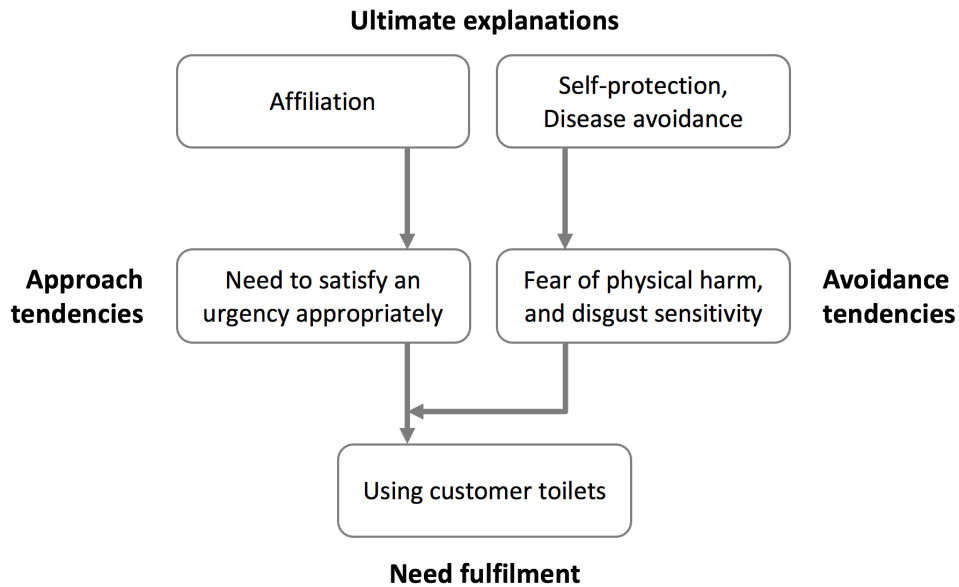


Figure 5 Ultimate explanations for approach and avoidance tendencies towards using customer toilets

**Approach tendencies.** In the evolutionary account of the hierarchy of needs (Kenrick et al. 2010; Bernard et al. 2005), physiological needs are at the bottom, as they occurred in the earliest stages of evolution and are the most essential for the individual's immediate survival. These physiological needs still largely dominate human behaviour in the background, as if there is a deprivation of one of these needs, the higher needs tend to be overruled until the physiological balance is reacquired (Maslow 1943). Fortunately, humans have an evolved ability to learn how to control many of their physiological needs (e.g. urination, defecation, hunger), so although these needs are very primitive and evolutionarily old, they are in the cognitive realm of the human mind. In other words, humans may choose when and where they satisfy the need, given that it will happen in the immediate future. Thus, the need for using customer toilets is to relieve these unavoidable, physiological urgencies, which mainly relate to excretory (urination and defecation) functions but can also be something else such as thirst or menses.

Importantly, however, merely the need to satisfy the urgency is based on the fundamental motive of immediate physiological needs. Instead, the need to satisfy it in a particular place, that is, in a toilet, is socially motivated, as, technically speaking, there are no physiological mechanisms that would prevent us from urinating or defecating in public. Therefore, it can be assumed that learned control over physiological needs such as bodily urgencies is related to socially appropriate behaviour, which, in turn, is based on the fundamental motive of *affiliation* (i.e. social belongingness; Kenrick et al. 2010). Affiliation is intertwined with the fundamental motive of status seeking (see section 4.1), as both are connected to the individual's social standing in his or her reference group. However, the two motives are distinguished in a way that affiliation concerns the minimum requirements for “getting along” in the group, while status seeking relates to “getting ahead” or rising in its social hierarchy (e.g. Anderson et al. 2015). Thus, affiliation is about social acceptance, whereas status seeking is about social admiration.

***Avoidance tendencies.*** Relieving the emerging physiological urgency in a socially appropriate way may be hindered by fear of being attacked and disgust induced by a pathogenic presence, which are both commonly perceived as risks in public toilets (e.g. Haslam 2012). First, the evasion of physical harm is related to the fundamental motive of *self-protection* (Griskevicius & Kenrick 2013; Kenrick et al. 2010), as physical violence has been a considerable threat to survival in the course of evolutionary history (Neuberg et al. 2011). A mental precautionary system for self-protection takes place under conditions where the individual intuitively regards himself to be exceptionally vulnerable to a physical threat or violence (Neuberg et al. 2011). It may be triggered by several different cues such as uncomfortable surroundings (e.g. a cramped and dark space that might have been adaptively worth avoiding in our evolutionary history; e.g. Orians & Heerwagen 1992) and the presence of unknown people (in evolutionary terms, members of coalitional outgroups, especially men; e.g. McDonald et al. 2012). Fear is a typical emotional response, and flight or avoidance are the most likely behavioural responses to the cues stemming from a physical threat (Öhman & Mineka 2001). Needless to say, using customer toilets is potentially a situation that is accompanied by such fear-inducing cues and may, therefore, be a subject of evasion.

However, many aforementioned explanations go beyond customer toilets: Consuming environments are typically full of unknown people and they are not necessarily comfortable in evolutionary psychological terms (cf. Joye et al. 2011). There are, indeed, some conjectures as to why these ultimate explanations might be especially relevant in the context of toilets. Bassotti and Villanacci (2013), for example, suggest that the control of defecation is an adaptation for predator avoidance, as faeces and scents that are left in undetectable and secure places prevent predators from tracking their prey. Additionally, humans might

have benefitted from this voluntary control, because revealing sexual organs for excretory functions has arguably put our ancestors in a vulnerable position (Westermarck 1921): Whenever urination or defecation take place, an individual is temporarily exposed to attacks by predators or fellow humans. For example, a common social phobia called shy-bladder syndrome (i.e. a difficulty or incapability in urinating when there are other people around; e.g. Haslam 2012) may be a by-product of this self-protective function. Hence, it has been evolutionarily advantageous to be able to control excretion until a safe and private place has been found to do so.

The second mechanism which may cause avoidance of public toilets is the evasion of pathogenic contamination, that is, disgust sensitivity, based on the fundamental motive of *disease avoidance* (see section 4.1). As the primary use of toilets is to sanitise bodily waste, and in public toilets, this is done by multiple people, public toilet facilities are potentially very dirty places with poor hygiene and high pathogen stress (Curtis & Biran 2001). Disgust sensitivity may, indeed, be a specific adaptive function for conscious excretory control. For example, Morris (1967) suggests that this dates back to the time when primates began to eat meat (meat-based faeces have stronger odours), dropped down from the trees, and started to settle down and stay in the same location for longer periods. In maintaining this new way of living and in avoiding pathogenic contamination (cf. Rantala 2007; 1999), it was adaptively important to develop conscious control of urination and defecation. However, disgust sensitivity only explains why urination and defecation are not socially acceptable in inappropriate places (e.g., in the middle of the ancestral camp or shopping centre). The preference for safe and private places is better explained by the adaptive function of the fear of being attacked.

***Relationship with the findings.*** Why do consumers place so much importance on customer toilets? The proximate explanation would be practical: If there are toilets available, shopping is more convenient, as consumers can be more relaxed and flexible in their actions, because they know that they always have an easy and socially acceptable chance to relieve their physiological urgencies. However, on the ultimate level of explanation, toilets are regarded as fear- and disgust-inducing places and, thus, visited by consumers only when it is unavoidable. Subsequently, there is an ongoing psychological conflict between two undesirable choices, that is, between the uncomfortable holding on to a physiological need (or, alternatively, a socially completely unacceptable way to relieve it) and a visit to a potentially threatening or disgusting toilet facility. Encyclopædia Britannica (2014) offers an illustrative analogy for this intense conflict between a fear and a need: A child may fear his or her mother because she is rejecting, but the child is simultaneously extremely dependent on the mother's care, which easily results in the child's anxiety. Similarly, in the context of customer toilets, a con-

sumer's dependency on a fear- and disgust-inducing place potentially results in anxiety. Supposedly, this anxiety is manifested by the high importance that consumers put on the provision of customer toilets. In other words, clean, safe and sufficient customer toilet facilities are valued because they are a way to alleviate the conflict between two undesirable choices by making the inevitable visit to toilet a pleasurable rather than a threatening or disgusting experience.

### 4.3 Article 3: Sex toys

**Central findings.** By contributing to the literature on taboo consumption (e.g. Sabri et al. 2010) and sexuality-related consumption (e.g. Walther & Schouten 2016; Gould 1995a), Article 3 investigated the boundaries of taboo destruction in relation to buying products – sex toys – that have earlier been considered as taboo but are today subject to liberalisation. The findings of the study indicate that consumers' intentions to buy sex toys are primarily motivated by the idea that sex toys would result in enhanced sexual pleasure (Study 1). On the other hand, the study suggests that while the liberalisation of Western society has catalysed sex toy consumption by dismantling the barriers of selling, buying and using such products, consumers still keep their sex toy consumption hidden, because being too open about one's sexuality would threaten the individual's safety and social acceptance (Study 2).

**Inducing ultimate explanations.** A primary approach tendency for buying sex toys is suggested to be the need to enhance sexual pleasure, which is supposedly based on the fundamental motives of mate retention and mate acquisition. Accordingly, an avoidance tendency that hinders this need is the fear of being sexually exposed (i.e. sexual modesty), which is based on the fundamental motives of self-protection and affiliation. Again, the fundamental motives behind avoidance tendencies are lower in the hierarchy (Kenrick et al. 2010) than the fundamental motives behind approach tendencies, indicating that consumers' behaviour would more intuitively be directed by avoidance tendencies in terms of sex toy buying (see sections 2.2–2.3). The approach and avoidance tendencies in relation to sex toy buying are illustrated in **Figure 6** and discussed below.

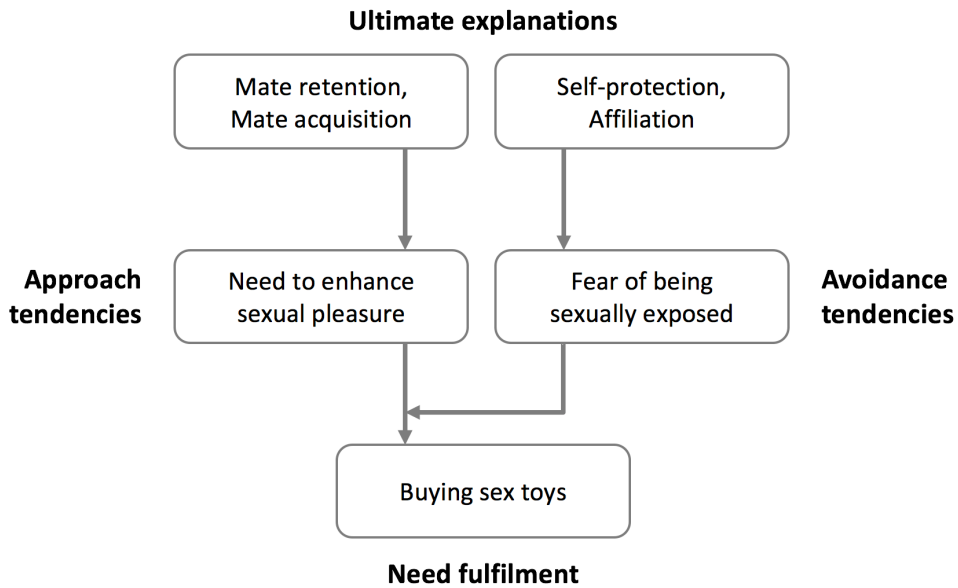


Figure 6 Ultimate explanations for approach and avoidance tendencies towards buying sex toys

**Approach tendencies.** Human sexual behaviour is a departure from other mammals, as concealed ovulation has resulted in women being sexually accessible during their entire menstrual cycle, making human sexual activity very flexible (Benagiano & Mori 2009). However, the lack of any visible signs of the peaks in women's fertility has also created an adaptive problem regarding *when* to copulate. A solution for this problem is *sexual pleasure* (i.e. positive sensations and emotional experiences that are induced by sexual stimulation), whose adaptive function has been to motivate humans to recurrently engage in sexual intercourse in order to maximise the probability of fertilisation (De la Garza-Mercer 2007; Abramson & Pinkerton 2002). As a consequence, although reproduction continues to be the core function of sexuality, sexual pleasure has begun to serve other adaptive functions as well, such as helping to maintain relationships, strengthening existing emotional bonds, reducing social and psychological tensions, and holding human couples together while parenting their helpless offspring (De la Garza-Mercer 2007; Abramson & Pinkerton 2002; Diamond 1997).

Sexual behaviour that aims to facilitate sexual pleasure rather than procreation is often referred to as recreational sex (Diamond 1997). In a long-term relationship, recreational sex can be understood as a manifestation of the fundamental motive of *mate retention*; that is, to keep the partner satisfied and prevent him or her from engaging in infidelity (Buss 1988). For example, providing the partner with benefits which enhance sexual pleasure but do not lead to fertilisation (such as oral sex) is primarily motivated by mate retention (Sela et al. 2015; Pham &

Shackelford 2013). Arguably, the approach tendency to buying sex toys relates to the adaptive function of recreational sex, similarly to the other sexual behaviours that are not directly motivated by procreation. Indeed, recreational sex has often been described as play between adults (e.g. Nathanson 1992) and the function of toys is to serve the purpose of the play by intensifying and diversifying its pleasure.

Of course, sex toys can also be used individually to induce sexual pleasure as a part of masturbation either to compensate for a lack of partnered or satisfying sex, or to complement an active and pleasurable sexual life (Das 2007). Thus, a fundamental motive behind this individual use of sex toys is not necessarily related to mate retention, but to controlling one's own sexual drive. Basically, sexual pleasure provided by the individual use of sex toys may function as a low-cost way of replacing gratification for *mate acquisition* drives. These drives would otherwise instigate the individual to acquire actual or additional partners, which, however, would be very costly in terms of time and energy, and risky in terms of violating a committed relationship with a current partner, being contaminated by sexually transmitted diseases, or causing an undesired pregnancy. Nevertheless, regardless of what the activated fundamental motive (mate retention or mate acquisition) is, the need for using sex toys is the same: to enhance sexual pleasure.

***Avoidance tendencies.*** While the need to enhance sexual pleasure may motivate consumers to buy sex toys, this need may be suppressed by avoidance tendencies relating to the fear of being sexually exposed. A certain mode of human behaviour that is closely related to this fear is called *sexual modesty* (Westermarck 1921). According to Weinberg (1965), sexual modesty can be defined as sexual reserve, that is, the communication of non-availability for any sexual interaction. Sexual reserve is especially adaptive for women for whom it may have evolved as a mechanism to prevent unwanted sexual attention, sexual harassment and even sexual violence (e.g. McKibbin et al. 2009; Studd & Gattiker 1991), which might be very costly for women because of the risk of a child being conceived with an undesirable man.

In line with these ideas, Westermarck (1921) suggests that sexual modesty has served the adaptive function of *self-protection*. However, Westermarck (1921) also argues that sexual reserve (or "feminine sexual coyness", as he labels it) is not necessarily performed only by women but also by men, because men may have prudent motives behind avoiding distressing the opposite sex. Additionally, Westermarck (1921) suggests that sexual modesty is not entirely based on the avoidance of unwanted sexual attention, sexual harassment and sexual violence, but it also serves the adaptive function of incest avoidance. Sexual modesty tends to be very high between members of the same family as an adaptation to avoid inbreeding. The influence of this mode of behaviour absorbed in early life is easi-



ly associated with all sexual behaviour beyond the family circle, as during the course of evolution, humans have very likely been genetically closely related to people living near to them. Thus, although sexual modesty is originally based on the protection of one's genes (either from undesirable mates or inbreeding), today it has become socially expanded and functions as a cultural and social institution.

As sexual modesty is not always a direct self-protective response to the fear of being sexually violated, it may also be understood as a tendency to avoid anything that could lead to sexuality-related shame (Westermarck 1921). Shame can be defined as a family of closely related negative emotions covering such feelings as embarrassment and humiliation (Nathanson 1992), which all follow the moment when one unwillingly exposes something that one would prefer to keep concealed (Robbins & Parlavecchio 2006; Edelman 1985), for example, sexual activity (Nathanson 1992). In terms of fundamental motives, shame is related to *affiliation* (see section 4.2). The adaptive function of shame is to alert and defend the self when the individual does or reveals something that he perceives will receive negative attention from others and, consequently, will violate the individual's status as an appropriate member of the social group (Sznycer et al. 2015; Gilbert 1997). In a sense, shame is the opposite of prestigious pride (cf. section 4.1), as the latter is an evolved mechanism to direct social attention towards the self, whereas shame is a mechanism to direct it away from the self (Gilbert 1997).

Given that sexual modesty is a cultural and social institution, any behaviour that is incoherent with the institution can potentially lead to status losses. For example, people may be modest regarding their sex toy buying because it is socially expected that such behaviour should be kept private, not because revealing it would lead to an imminent threat to their reproductive autonomy. This social expectation, of course, originates from the self-protective function of sexual reserve, but for most people today, breaking it does not necessarily mean any real risk of being physically violated. Instead, being too open regarding sex toy buying could potentially lead to the loss of social status or attaining a reputation that the consumer does not want to have (e.g. pervert, promiscuous or erotophilic). Shame functions as an emotional mechanism that prevents people from engaging in such behaviour. However, this does not mean that sexual modesty regarding sex toys would not also sometimes serve its original adaptive function of self-protection. By hiding the buying situation of sex toys, for example, a young woman may avoid sending any sexuality-related signals that could potentially be misinterpreted and lead to unwanted sexual advances.

***Relationship with the findings.*** The boundaries of taboo destruction regarding sex toy buying are in the individual's mind. Although cultural liberalisation may have pushed these boundaries, there are psychological mechanisms that set the

final limit for the cultural change. This final limit may be fruitfully elucidated by the distinction made by the fundamental (avoidance) motivations of affiliation and self-protection. As explained above, one purpose of sexual modesty is to prevent the individual from experiencing sexuality-related shame, which relates to affiliation. Cultural liberalisation may naturally move the threshold of sexual modesty: What used to be considered shameful before may not be considered shameful anymore. However, although cultural liberalisation can obviously reduce shame and free people's own attitudes towards buying sex toys to enhance their private sex lives, sexual modesty is also an evolved self-protective mechanism to communicate that one is not available for sexual interaction. Given this deeply-rooted evolutionary function, it seems unlikely that sexual behaviour, including sex toy buying, will ever become a permanently public form of consumption, no matter how far the cultural liberalisation extends. The self-protective function of sexual modesty might be too strong to be completely dispelled by cultural influences.

## 5 ON EVOLUTIONARILY-INFORMED EMPOWERMENT

### 5.1 The psychology of empowerment

Empowering consumers, or consumer empowerment, conventionally refers to the consumers' increasing sovereignty in the marketplace as a result of the power shifts, and it can be analysed on many different levels (e.g. Denegri-Knott et al. 2006; Shankar et al. 2006), as power is a very pervasive and fundamental concept in all social systems and thereby in the social sciences (Rucker et al. 2012). As the foci in this doctoral dissertation is more psychological, I primarily refer to the psychological literature of empowerment. However, in order to position the concept of psychological empowerment in the wider field of empowerment research, I provide a short, subjective typology of different, more or less implicit, uses of empowerment in consumer research. In this typology, I organise consumer empowerment research into three intertwined streams: the cultural (i.e. emancipation), social or group-level, and individual streams.

First, consumer empowerment research within the cultural stream (or macro level) is associated with emancipation, its characteristic concepts or trends being, for example, liberation, resistance, escapism and anti-consumption. As empowerment is always featured by a power shift, within the cultural stream, this shift might be understood to happen from power structures to human agency. Logically, this type of empowerment research promotes contesting the existing marketing or consumption systems. Characteristic theoretical traditions behind the cultural stream are critical theory in general, and Consumer Culture Theory in particular. Scholarly works in consumer research that may be interpreted as representing this tradition are, for example, Heath et al. (2016), McShane and Sabadoz (2015), Cherrier (2009), Kozinets (2002), Firat and Venkatesh (1995) and Murray and Ozanne (1991), each of which deals with the concepts of consumer liberation, resistance, escapism or anti-consumption.

Second, consumer empowerment research in the social stream (or meso level) deals with consumers as "political" interest groups, rather than with entire consumer culture, and some of its central concepts and trends are consumerism and conscious consumption. This level of empowerment is featured by the power shift from marketers to consumers (or their representatives such as consumer policies), which is actualised, for example, by the increased freedom of choice, ena-

bled by the expansion of information and consumers' increased economic power. However, unlike the cultural stream, the social stream does not promote contesting the existing marketing or consumption system but merely adjusting it. In consumer research, the social stream may particularly be of interest to marketing management, because empowered consumers represent a new operational environment. Exemplar consumer research on this stream includes Broniarczyk and Griffin (2014), Pires et al. (2006), Wright et al. (2006), Howells (2005) and Wathieu et al. (2002), where the topics range from the expansion of information and freedom of choice to the role of the internet and customer experiences in relation to empowerment.

The third stream of empowerment is the individual stream (or micro level), and as later explained, it focuses on psychological processes, exemplar concepts being self-regulation and mindfulness. The power shift takes place in an individual's mind, that is, from the unconscious to the conscious self, and the aim is self-improvement rather than adjusting or contesting the entire marketing or consumption system. From now on, the focus of this thesis is on the individual stream of empowerment. However, the distinction of empowerment research into three streams is merely an analytical exercise, and the streams certainly have overlapping features, as demonstrated later when comparing psychological empowerment and emancipation.<sup>7</sup>

Overall, the concept of *psychological empowerment* may be used synonymously with individual-level empowerment (Zimmerman & Warchausky 1998). Psychological empowerment is strongly associated with well-being and happiness, as they form a self-reinforcing cycle, where positive emotions – the ingredient for well-being and happiness – arise from the experiences of achieving goals, and these positive emotions empower people to pursue new goals (Diener & Biswas-Diener 2005). When well-being and happiness are regarded as a self-reinforcing cycle, they will inevitably be associated with *eudaimonic* happiness (e.g. Waterman 1993). When considering eudaimonia (i.e. “the state of having a good indwelling spirit, a good genius”; Encyclopædia Britannica [2017a]), well-being and happiness are not regarded as an outcome or end state but as a continuing process of realising one's full potential (Deci & Ryan 2008).

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<sup>7</sup> The connections between the cultural and individual streams of empowerment research, that is, emancipation and psychological empowerment, may actually be regarded as a manifestation of the pervasive academic discussion about the relationship between mind and culture. Important contributions to this discussion have been provided by many classic authors in psychoanalysis such as Carl Jung (e.g. 1989/1961) and Sigmund Freud (e.g. 1962/1930), and also by evolutionary psychologists such as Tooby and Cosmides (1992). However, deeper reflections on these discussions are beyond the scope of this thesis in which the explicated focus is on psychological empowerment.

Similarly, psychological empowerment can be considered as a process rather than as an outcome: Zimmerman (1995) defines empowering processes as “those where people create or are given opportunities to control their own destiny and influence the decisions that affect their lives” (p. 583). Specifically, psychological empowerment constitutes the individual’s proactive approach to life and critical awareness and personal control of the factors that inhibit or enhance the individual’s attempts to manage his or her own life (Zimmerman & Warchausky 1998; Zimmerman 1995). According to Chartrand (2005), these factors often lie outside conscious awareness and may relate to environmental features (e.g. the social situation, presence of other people, physical place), automatic psychological processes (e.g. activation of emotions and stereotypes) and outcomes (e.g. consumer choice).

*Self-awareness*, broadly defined as “a conscious awareness of one’s internal states and interactions with others” is also associated with positive psychological well-being (Sutton 2016, p. 647). Psychological science has conceptualised self-awareness in several different and often overlapping ways such as mindfulness, self-reflection and insights (Sutton 2016). Mindfulness refers to “receptive attention to and awareness of present events and experience” (Brown et al. 2007, p. 212), self-reflection is “the inspection and evaluation of one’s thoughts, feelings and behaviour” and insight is “the clarity of understanding of one’s thoughts, feelings and behaviour” (Grant et al. 2002, p. 821). Although the different conceptualisations of self-awareness have nuances in their meanings depending on the focus of the research (Sutton 2016), what all of these conceptualisations have in common is that they can be understood as antecedents of self-regulation (i.e. autonomy; Ryan & Deci 2006). According to Higgins (1996), one of the main functions of self-awareness is, indeed, to enable self-regulation; this kind of self-awareness may be referred to as self-digest.

*Self-regulation* or self-control<sup>8</sup> refers to the individual’s capability to alter or override his or her prevailing responses and to regulate behaviour, thoughts and emotions (Baumeister et al. 1994). Self-regulation is said to serve as a psychological tool for survival and adaptation to the environment (Higgins 1996). An ability for self-regulation also potentially leads to positive behavioural change (Alberts et al. 2011; Chartrand 2005; Ryan & Deci 2004; Brown & Ryan 2003; Grant et al. 2002), as a large amount of psychological literature argues that self-regulation is positively related to well-being, success and eudaimonic happiness (Hofmann et al. 2014; De Ridder et al. 2012; Ryan et al. 2008; Baumeister et al. 2007; Baumeister 2002). This is also the core idea of emotional intelligence: Per-

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<sup>8</sup> Following Baumeister and colleagues (e.g. Baumeister et al. 2008; 1994), I use the terms self-control and self-regulation interchangeably.

ceiving, understanding and anticipating one's own emotions is a pathway for managing and regulating them to achieve desired outcomes (Kidwell et al. 2008; Salovey & Grewal 2005; Gross & John 2003).

As is evident, increased self-awareness and self-regulation are central antecedents of psychological empowerment and this reasoning naturally applies to the consumer domain (Baumeister et al. 2008; Hofmann et al. 2008). For example, Thøgersen (2005) argues that consumer empowerment reinforces experiences of autonomy, competence and self-determination in the marketplace. Recent attempts to introduce mindfulness in TCR (Bahl et al. 2016; Van De Veer et al. 2016) are also coherent with this idea: Mindfulness in consumption enables consumers to be aware of and reflect on their responses to tempting marketing stimuli, providing them with insights and power to alter their otherwise reactive responses.

In a similar vein, McGregor (2005) highlights the self-reflective processes in her definition of consumer empowerment as the consumer's inner perception of power, that is, *inner power*. Although somewhat ambiguously defined, this inner power arguably refers to the commonly accepted idea that self-regulation is an internal, psychological resource that operates like a muscle, as it can be developed consciously (e.g. Baumeister et al. 2008; Muraven & Baumeister 2000; Baumeister et al. 1998). For example, consumers can be supplied with the means – such as a new, inspiring way of thinking – by which they can critically reflect on their behaviour (Mezirow 1997). Using these self-reflective means, consumers can gain insights and “aha” moments which result in an increased inner power (cf. Lyke 2009; Sternberg & Davidson 1995; Kuiken et al. 1987), that is, in the capability for self-growth, control over their own destiny and, consequently, empowerment. In pedagogy, this process is referred to as transformative learning (Mezirow 1997).

Empowerment can thus be associated with liberation, given that liberation refers to the emancipation from oppressive powers directing our behaviour (McGregor 2005). These oppressive powers might not only be understood as external or societal forces, which is often the case when considering empowerment from the tradition of critical marketing (see the beginning of this section; e.g. Heath et al. 2017; McShane & Sabadoz 2015). Instead, oppressive powers may also be internal or psychological forces, for example, reactive ways of thinking, personal habits or instincts that are unconsciously driving our behaviour. Inglis (1997) even makes a semantic distinction between “empowerment” and “emancipation” by contemplating that the former refers to the personal transformation and the psychologisation of emancipation, whereas the latter considers the individual's situation in relation to socio-structural oppressions.

An illustrative example of the dichotomy between the emancipation of external and internal oppressive powers can be found from the personal history of

Irish poet Oscar Wilde (see Grey 1992; Cohen 1987). In the last decades of the 19th century, Wilde lived in a Victorian society that strongly suppressed homosexual behaviour. Through his bold writings about sexuality, Wilde acted as an opinion leader who inspired many homosexuals to emancipate from the conservative Victorian culture. In Wilde's case, empowerment primarily meant the emancipation from societal and external forces that aimed to suppress people's instinctual behaviour, that is, their inherent sexual drive. The contrast to today's idea of emancipation from internal power is strikingly different, almost contradictory. As manifested, for example, by emotional intelligence (Kidwell et al. 2008; Salovey & Grewal 2005; Gross & John 2003), the central aim of empowerment is in exerting conscious control over one's instincts, not freeing one's instincts from external or societal pressure. Ironically, a century ago, people struggled to be emancipated from the external restrictions of their instincts so that they could, one hundred years later, start struggling to control these instincts by themselves – voluntarily.

If the goal is the emancipation from internal powers such as instincts, evolutionary psychology can be presented as a self-reflective means to gain necessary empowering insights (Buss 2000), that is, to see and understand the *inner nature* of the mind clearly (Seifert et al. 1995). This inner nature can be captured by using the ultimate level of explanation (e.g. Saad 2017), which helps to recognise the evolved mechanisms such as fundamental motives that subconsciously influence our behaviour and drive it in specific – sometimes unwanted or harmful – directions (Tybur & Griskevicius 2013; Griskevicius et al. 2012). The baseline logic, which I refer to as *evolutionarily-informed empowerment* (**Figure 7**), is that as people learn ultimate explanations for their own behavioural tendencies, they can exert control over these tendencies and “take a few halting steps toward fulfilling the human desire for happiness” (Buss 2000, p. 20). Thus, in the same way as consumers can use information to start a healthy diet that decreases their immediate pleasure but increases their health in the long run, they can use the knowledge about the evolved mechanisms to pursue happiness (Nesse 2004).



Figure 7 The process of evolutionarily-informed empowerment

The baseline logic is related to the dual-processing model of the human mind (Evans 2003), which is often illustrated with Haidt's (2006) metaphor of the mind as an elephant and a rider (**Figure 8**). The elephant represents the evolu-

tionary old, unconscious mind (e.g. fundamental motives), whereas the rider is a metaphor for the conscious mind (e.g. reasoned and rational processes), which is unique for humans as a species. According to Haidt (2006), the way to achieve self-improvement is in the rider's ability to control the impulses of the elephant; that is, the ability of the conscious mind to act without the disruptions of the unconscious mind. A consumer need, as discussed in section 2.3, is the elephant's motivation that has reached the rider's conscious attention. If the rider is determined enough, he or she can drive the elephant in the direction motivated by this conscious need, even though the elephant may have other, more unconscious, perhaps conflicting motivations which may interfere with the rider's determination.

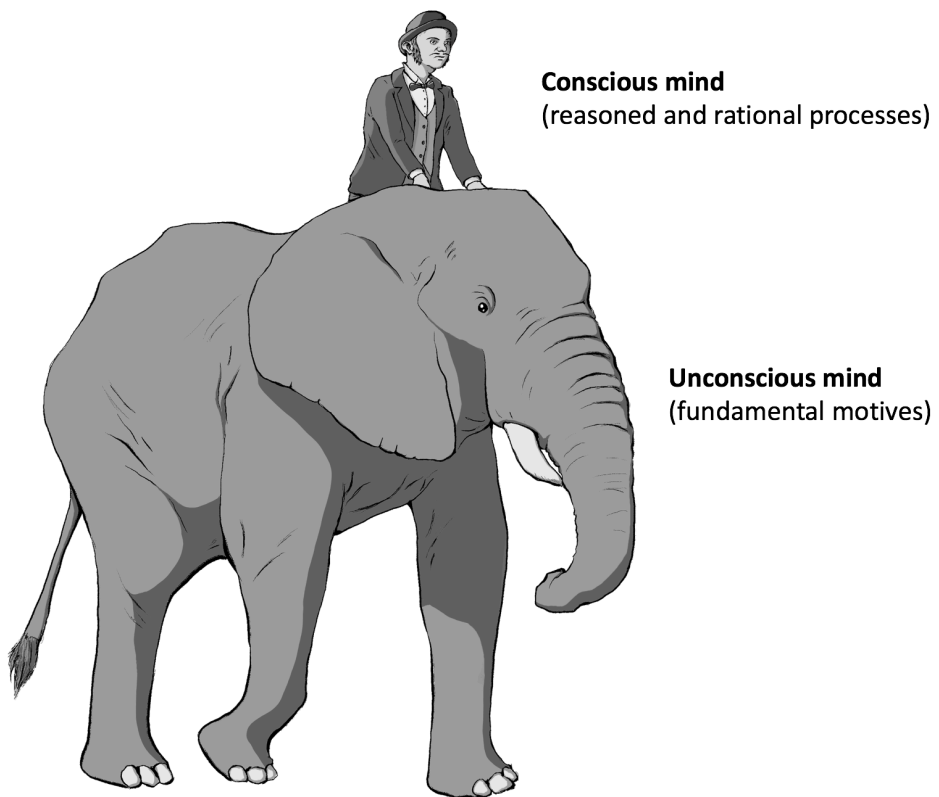


Figure 8 The consumer's mind as an elephant and a rider<sup>9</sup>

Building on this idea, this thesis can be metaphorised as a manual for driving the elephant through the land of consumption (i.e. consumer domain). The manu-

<sup>9</sup> I am grateful to my brother Jousia Piha who drew Figure 8 upon my request.



al describes how the elephant typically behaves in certain consumption-related situations and, thus, instructs the rider as to how he or she can understand and predict these behaviours in order to maintain control over the animal. As Goleman (1998) writes: “Biological impulses drive our emotions. We cannot do away with them – but we can do much to manage them. *Self-regulation*, which is like an ongoing inner conversation, is the component of emotional intelligence that frees us from being prisoners of our feelings” (p. 98; italicised by me).

## 5.2 Articles as illustrative examples

In chapter 4, consumer phenomena from the three articles were reinterpreted through an evolutionary psychological lens. Reflecting on these phenomena as illustrative examples, consumers can assumedly also learn to recognise ultimate explanations for their behaviours in other situations. Then this information can be used as a means for self-regulation and consumer (psychological) empowerment, following the conceptual idea of evolutionarily-informed empowerment developed in the previous section (5.1). In what follows, the empowering potential of being aware of ultimate explanations is discussed in the context of the phenomena presented in the articles.<sup>10</sup> The central points of this discussion are illustrated in **Figure 9**.

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<sup>10</sup> As the focus in chapter 4 was on recognising fundamental motives behind approach and avoidance tendencies, the subsequent theoretical discussion could have reflected upon the connections between evolutionary psychology and the wide literature on consumer motivations (e.g. Barbopoulos & Johansson 2017; Renner et al. 2012; Babin et al. 1994). However, considering the overall purpose of this thesis, which relates to consumer empowerment, I rather argue that providing a discussion that stems from consumer self-improvement, consumer education and social marketing is a more appropriate alternative.

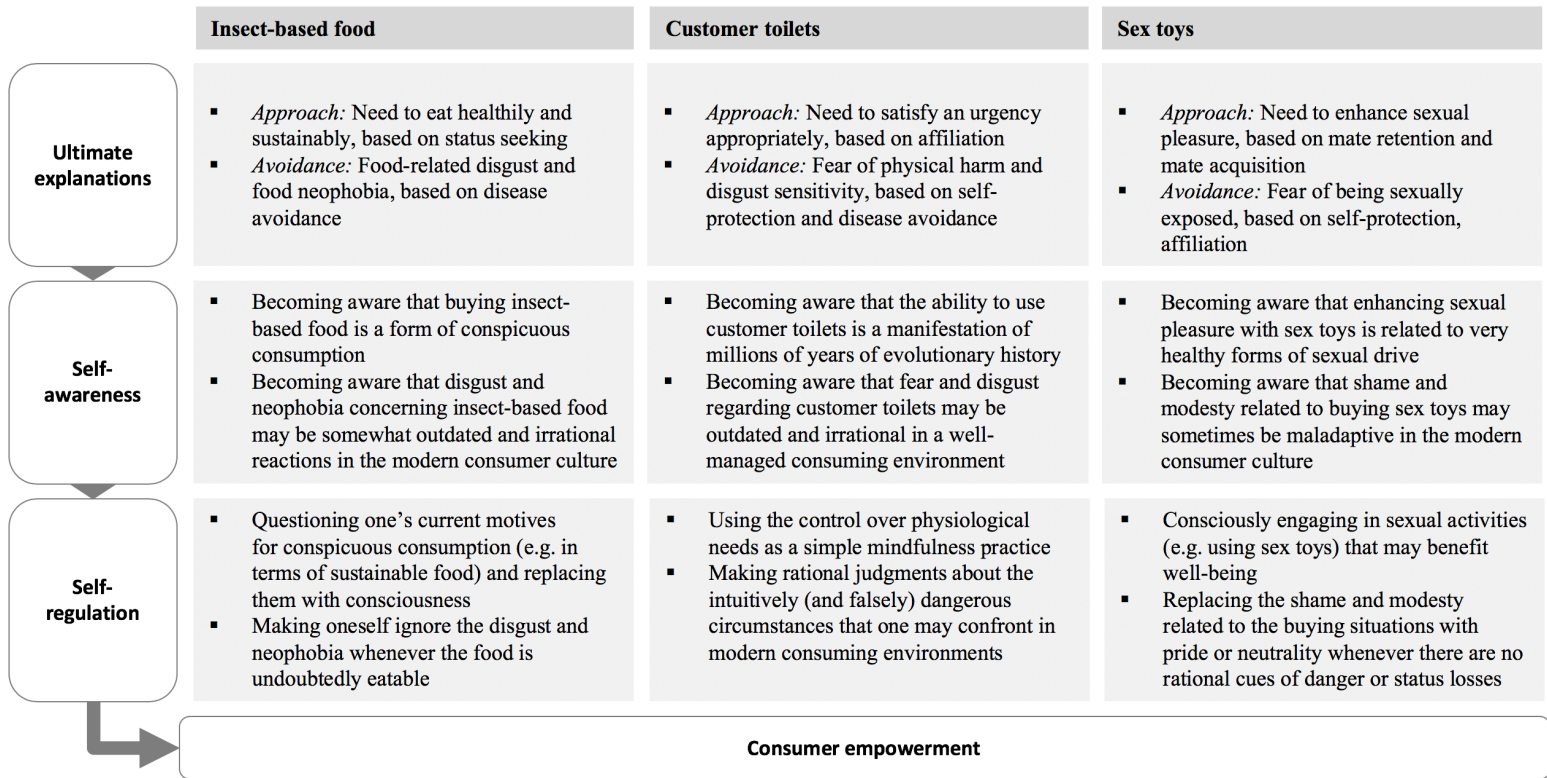


Figure 9 Illustration of evolutionarily-informed empowerment in insect-based food, customer toilets and sex toys

First, the ultimate reinterpretation of Article 1 on insect-based food suggested that the desire for buying insect-based food is based on the consumer's need to show prestige by consciously choosing sustainable and healthy products, although this product would not otherwise be his or her personally preferred choice (Griskevicius et al. 2010b). Thus, this food choice is largely based on the fundamental motive of seeking status among a group of people. An individual consumer may benefit from being aware that status seeking can be pervasive in consumer behaviour, as not only the products that have traditionally been regarded as conspicuous (e.g. clothes and cars; Wang & Griskevicius 2014; Saad & Vongas 2009) but also the products whose primary function is not necessarily to impress others (e.g. organic food; Puska et al. 2018; 2016) can be used to signal and seek social status. In the context of sustainable consumption, consumers may, for example, reflect on their own motivations for choosing environmentally-friendly products and ask themselves whether they buy these products to advance their own standing in society, or whether they truly care for the environment. Nevertheless, being aware of true motivations behind sustainable consumption can provide consumers with the resources for making more rationally-informed decisions and help them avoid the behaviour that the *Harvard Business Review* has labelled as "personal greenwashing" (Coutu 2009), that is, making one's own behaviour seem sustainable although it is not.

On the other hand, disgust and food neophobia as avoidance tendencies towards insect-based food are based on the fundamental motive of disease avoidance. These avoidance tendencies represent a typical bias between reasoned, rational thinking and irrational, evolutionarily old impulses, based on the mismatch of our present living environment and our ancestral environments of evolutionary adaptedness (e.g. Tybur & Griskevicius 2013; Griskevicius et al. 2012). Although scientific evidence suggests that eating insects would not only be completely safe, but also healthy and sustainable, people still easily reject such food because it appears as unfamiliar and/or disgusting to them. If consumers knew that these strategies of rejection are only evolved mechanisms for adaptive problems that do not typically apply to the modern consumer culture (for example, if a food is sold in a Finnish convenience store, it is guaranteed to be safe, even if I do not have previous experience with it and it appears disgusting), consumers could again make more rationally-informed choices. Basically, humans' ancient gustatory preferences are outdated (Saad 2006) and if consumers knew that, they would be on the right track towards ignoring these preferences.

Second, in Article 2 on customer toilets, the approach tendency is a need to satisfy an immediate physiological urgency in a socially appropriate way, which will dominate human behaviour until the need is satisfied. The ultimate account for this dominance (i.e. the need to use toilets is purely socially learned and, thus, consciously controlled) may provide the consumer with some insights, for exam-

ple, regarding mindfulness. An emerging physiological deprivation is a sign that something extremely deep and ancient in the consumer's mind is reminding him or her about its existence. An empowering experience might arise from the awareness that the consumer can consciously exert control over these ancient drives: Consumers can individually choose where and when they satisfy their needs. According to the Freudian psychosexual theory, an ability to control bodily urgencies is the basis for developing a sense of personal accomplishment and autonomy, as it means that the Superego and Ego finally take over the Id (e.g. Meissner 1993). However, from the viewpoints of evolutionary psychology and mindfulness, controlling the Id is not only about outdoing one's personal impulses; it may be thought of as winning against millions of years of evolutionary history.

More concrete implications for consumer empowerment can be drawn from the avoidance tendencies regarding the use of customer toilets. Customer toilets are a "necessary evil" (cf. Encyclopædia Britannica 2014), as using them is unavoidable if one wishes to spend a long time in consuming environments. These facilities may also accompany many evolutionarily-relevant cues of danger and a pathogenic presence such as an architectural design that offers no escape in the case of physical threat, the presence of unknown people in an intimate situation (i.e. exposing one's genitals) and bad smells or visible waste (cf. Neuberg et al. 2011). This is, again, a sound example of the bias caused by evolutionary old and irrational impulses. By knowing that the fundamental motives of self-protection and disease avoidance may be active prior to and during using customer toilets, the consumer may reflect on whether the situation is dangerous and risky in the rational sense, or whether it is just an evolutionary flaw. Thus, in a similar way as in the case of insect-based food, a consumer can use his or her knowledge about humans' sensitivity to evolutionarily-relevant fear-inducing cues to make more rational judgments about the seemingly dangerous situations that he or she is confronted with in the modern consumer culture.

Third and finally, in Article 3 on sex toys, the approach tendency is the need to enhance sexual pleasure and it is based on humans' ability to engage in sex not only for procreation but also for recreation (De la Garza-Mercer 2007; Abramson & Pinkerton 2002; Diamond 1997). The recreational use of sex toys may be fundamentally motivated either by mate retention or mate acquisition (cf. Sela et al. 2015; Pham & Shackelford 2013; Das 2007) and these ultimate explanations may have wide implications for consumer empowerment.

On the one hand, becoming aware that recreational sex, and sex toys as a part of it, may actually function in helping to preserve something that many people consider to be important, that is, maintaining their existing intimate relationship. This awareness may certainly reduce the individual's restrictions regarding recreational sex, as the consumer potentially realises that recreational sex is not re-

dundant, but it serves an adaptive function. This reasoning might be especially interesting for people with rather conservative sexual morals: Conservatives typically condemn unusual sexual behaviour (e.g. Haidt & Hersh 2001) but simultaneously embrace monogamous sexual and romantic relationships (e.g. Tybur et al. 2015). Thus, there is an evolutionary psychological rationale for engaging in unusual sexual activities (such as using sex toys) to strengthen the existing monogamous relationship.

On the other hand, a consumer may also feel empowered by realising that his or her individual use of sex toys is not necessarily about selfish hedonism, but it is about taking control over one's own sexual drives in order to prevent socially, psychologically or physically risky outcomes that are related to the acquisition of new or additional sex partners. Thus, in evolutionary terms, the individual use of sex toys actually represents a high-level cognitive ability to exert self-control. Overall, ultimate explanations for enhancing sexual pleasure by buying sex toys may help consumers to understand and reinforce the common argument that sexual activity is related to wellness, health and well-being, rather than to dirty, selfish or pleasure-seeking aspects (Debrot et al. 2017).

The avoidance tendency of buying sex toys relates to the fear of being sexually exposed, manifested by sexual modesty, and it is based on the fundamental motives of self-protection and affiliation. Sexuality is a sensitive sphere in human behaviour (Lee & Renzetti 1990), which is why ultimate explanations for understanding its dimensions may offer considerable empowering potential. For example, it may be interesting for consumers to know that sexuality-related shame may largely be based on the evasion of status losses (cf. Nathanson 1992). To offer some stereotypical instances, a man does not want to speak about his sex toy consumption in order to prevent him developing a reputation as a pervert or an intruder, and a woman does not want to do this either, because she wants to avoid stigmatisation at being thought of as promiscuous. Knowing that these fears of potential status loss fundamentally originate from the self-protective function of sexual modesty (Westermarck 1921) may provide a starting point for self-reflection. If a consumer knows that his or her intuitive shame in relation to expressing his or her sexuality is only a cultural expansion of an adaptive sexual reserve, he or she may ask whether this emotional response is always optimal. Could there be situations where sexuality-related shame is maladaptive?

For example, if I buy a sex toy in a grocery store, I might try to mask it by buying some non-embarrassing products together with it (cf. Blair & Roeser 2013). By knowing the ultimate reasons behind sexuality-related shame, I may consider whether the masking behaviour is rational. Given that the situation is not physically threatening and, therefore, not risky for my sexual autonomy, and there are only unknown people present so the situation does not bear risks for far-reaching status losses either, what is the harm in letting them know that I am

buying sex toys? Perhaps an evolutionarily-informed, empowered and mindful consumer could become aware of this irrationality and be able to buy sex toys without experiencing shame. After all, sex toys are a means for well-being, so they could, in principle, be bought with pride, rather than with shame.

Overall, the ability for self-regulation and empowerment through the self-awareness of ultimate explanations follows the idea suggested by several authors cited in this thesis: Automatic psychological influences such as fundamental motives can become conscious through deliberation, and then strategically altered to advance well-being (Bahl et al. 2016; Van De Veer et al. 2016; Kidwell et al. 2008; Haidt 2006; Salovey & Grewal 2005; Buss 2000; Goleman 1998). This process is very similar to Mezirow's (1997) theory of transformative learning and is also consistent with the idea of individual unlearning, as framed by Hislop et al. (2014). According to them, individual unlearning involves the "discarding, abandoning, or giving up particular (...) behaviour[s] by consciously choosing not to continue using them" (p. 542). However, as Hislop et al. (2014) point out, unlearning does not mean that the individual permanently loses the reactive tendency he or she has unlearned. Referring to Niaura (2002), Hislop et al. (2014) present the recovery from drug addiction as an example: While coping strategies to avoid drug-taking can be consciously developed, the addiction can never be completely unlearned.

This, naturally, raises the question as to how permanent the conscious alteration of behaviour that is based on the deliberation of fundamental motives can be. Will it lead to a continuous process of psychological empowerment (Zimmerman 1995)? The reasoning introduced by Bublitz et al. (2013) may shed light on this question. According to Bublitz et al. (2013), once the automatic influences have been recognised and turned to deliberative ones, these deliberative influences may be translated into habits or routines, that is, they can be re-automatised. A consumer can learn that insect-based food is not spoiled, customer toilets are no more dangerous than any other places and sex toys can be bought without shame. When the consumer has learned these facts, he or she can stop deliberating about them and engage in these consumer-related behaviours on a habitual basis. Thus, the recognition of the automatic influence of an evolved mechanism may be a starting point in a continuum from reactive to deliberative influences, and from deliberative influences to habit formation, which results in positive automatic influences (**Figure 10**). It is, of course, still a relevant question as to whether even these new rationally-informed habits can be unconditionally permanent. However, at the very least, the more fixed the new routine is, the less vulnerable the consumer is to relapse into his or her old reactive, harmful behaviours.

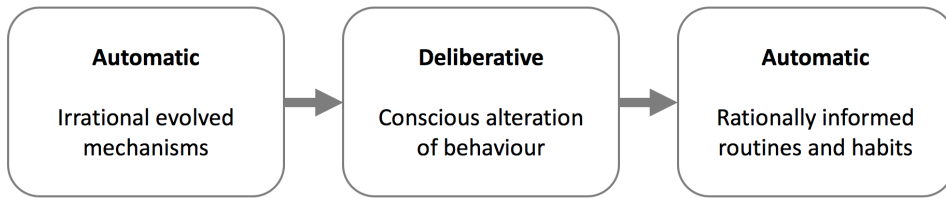


Figure 10 The continuum of psychological empowerment<sup>11</sup>

To conclude this discussion chapter, it is important to underline that as this thesis has mainly dealt with psychological empowerment, my primary focus has been on the awareness and regulation of an individual's own internal states and tendencies that are evolutionarily motivated. Thus, the main focus has not directly been on emancipation from the external oppressive pressures of marketing (cf. Heath et al. 2017), which is a typical approach to empowerment in the literature on critical marketing. However, as marketers intuitively use strategies and practices that match with evolutionarily-evolved human desires (Colarelli & Dettmann 2003), self-control over one's own psychological tendencies is arguably also control over the power of marketers. Recalling the metaphor of an elephant and a rider (section 5.1), the inventor of this metaphor, Jonathan Haidt, describes successful persuasion as follows: "If you want to change people's minds, you've got to talk to their elephants" (Haidt 2012, p. 57). Thus, the most persuasive marketer is the one who lures the consumers' elephants, not the one who addresses the riders. Hence, if the consumer's rider knows how the elephant reacts to this persuasion, the rider can harness the animal and save both of them from falling into the trap set by the marketer.

<sup>11</sup> Modified from Bublitz et al. (2013).

## 6 CONCLUSIONS

### 6.1 Implications for practitioners

As has been highlighted in section 1.1, pitting consumers and marketers, that is, the consumer and managerial perspectives against each other is inevitably more or less artificial because of their interdependency. In the discipline of marketing, a central doctrine has long been that the most vital condition for the survival and success of business is its focus on customers' needs and wants (e.g. Kotler et al. 2005; Panula 2000; Levitt 1995/1960; Kohli & Jaworski 1990). Thus, consumer empowerment, as discussed in this thesis, is not a threat to marketers, but, instead, it may offer new business opportunities. At the very least, becoming familiar with the dynamics of consumer empowerment is a useful chance for marketers to deepen their understanding of the recent developments in consumer preferences.

For example, as Wright et al. (2006) suggest, the most successful firms are successful because they understand what consumers really desire: "Far from the popular view of consumers being manipulated by firms, successful firms try hard to and succeed in *empowering* consumers in their marketing activities" (p. 925; italicised by me). In other words, if consumers are empowered and happy, and the marketer can help them to achieve this sense of empowerment and happiness, the consumers are more satisfied with and loyal to the firm. More broadly, future successful marketers may be those who can facilitate consumers' eudaimonic happiness; that is, by boosting the consumer's sense of accomplishment (Deci & Ryan 2008; Waterman 1993). It is not far-fetched to assume that at least some of the consumption-related phenomena presented in the articles could operate as a basis for such business. For example, marketing-induced eudaimonia can take place if a sex toy retailer (Article 3) can facilitate consumers' opportunities to experience sexual pleasure while simultaneously helping consumers to overcome the negative emotions associated with these opportunities. This facilitation would, of course, be partly enabled by the retailer's knowledge of consumers' fundamental motives behind sexuality.

The article about the role of customer toilets in retail stores (Article 2) also illustrates Wright et al.'s (2006) reasoning about empowered consumers being more loyal and satisfied. Indeed, providing customers with unlimited and free opportunities to use toilets can be understood as a marketing effort which aims to



empower customers. As Wright et al. (2006) argue, consumers want to enjoy their shopping trip, and they can be empowered by providing them with all the amenities that help them do that, including customer toilets. In the case of toilets, however, the opportunity to use toilets is hardly a way for consumers to eudaimonically “accomplish” themselves. Instead, this opportunity solves a particular conflict in the consumer’s mind which would otherwise prevent consumers from gaining eudaimonic happiness and a full sense of accomplishment from their shopping trip.

Another managerial implication relates to the idea that when consumers are aware of their own irrational impulses caused by the evolved mechanisms, and they try to regulate these impulses, they are arguably trying to act rationally, like *Homo economicus*. As is known, rational behaviour is easier to predict and, therefore, consumers who behave rationally should logically be an ideal target group for marketers. An interesting question is whether marketers should take a more active role in consumer education to promote rational consumer behaviour. This may depend on the business model of the firm. If the idea is to, for example, exploit consumers’ emotional and evolutionary impulses, consumer education may not be a top priority for the firm, whereas if the idea is to provide sustainable solutions for customers, then the firm could benefit from rationally-behaving consumers. Marketing insect-based food (Article 1) is a good example of the latter case. Eating insect-based food would be very rational. Firms selling insect-based food would, naturally, benefit if the consumers could overcome their disgust and behave rationally, and they, therefore, have a clear incentive to combine consumer education with their marketing strategies. Needless to say, these firms could also be facilitators of eudaimonic happiness, as trying a novel and strange food may be a particular moment of accomplishment for many consumers.

As mentioned above, some firms can benefit from consumer education as a marketing strategy. However, consumer education may also be of interest to a stakeholder other than marketers, namely, society. Consumer education can be understood as a part of social marketing, that is, marketing that aims to “influence the voluntary behavior of target audiences to improve their personal welfare and that of the society of which they are a part” (Andreasen 1994, p. 110). Accordingly, the goal of consumer education is to empower consumers by equipping them with the attitudes, skills and knowledge to cope in a consumer society (e.g. Atherton & Wells 1998). I argue that the conceptual idea of evolutionarily-informed empowerment may function as a pedagogical tool which consumer educators can use to deepen their students’ understanding of the ultimate reasons for behaviour in the marketplace. For example, consumers’ ambivalence with respect to sex toys (Article 3) – arguably a product that is a good for health but hampered by shame and sexual modesty – could be alleviated by increasing consumers’ understanding of the evolutionary roots of such a psychological conflict.

Indeed, evolutionary psychology has been used to educate consumers to prevent problematic behaviour (e.g. Tybur & Griskevicius 2013; Griskevicius et al. 2012), so it could also be applied to encourage behaviour that is considered healthy and beneficial.

Finally, I suggest that evolutionarily-informed empowerment could also be used as a tool in the education of marketing professionals. In my view, it would be useful for a marketing student to be aware of the ultimate reasons behind his or her own consumer behaviour, because, obviously, being a marketer is basically the opposite of being a consumer. In this regard, the skill to understand ultimate explanations for one's own behaviour may be utilised as an introspective tool to gain insights into consumer behaviour on a more general level (e.g. Gould 1995b), as ultimate explanations are universal for all people. Additionally, one thing, finely put by Bazerman (2001), is so obvious that it is often neglected in the consumer research literature: "Many more college students are educated on how to market rather than on how to consume, and yet, many more students will be consumers than will be marketers" (p. 503). I argue that educating marketing students to be exemplarily wise and responsible not only as marketers but also as consumers might have positive trickle-down effects on the entire consumer society. As wise consumers who also happen to be marketing professionals, these people would potentially act as opinion leaders among their peers.

## **6.2 Limitations and future research**

This thesis is built on the argument that ultimate explanations can operate as a basis for consumer empowerment. This argument is, indeed, corroborated throughout the thesis, but it still needs to be noted that the idea of evolutionarily-informed empowerment only suggests one potential source of consumer empowerment. As discussed in the beginning of section 5.1, consumer empowerment is a manifold phenomenon which can be related to social (e.g. economic power) and cultural domains (e.g. emancipation from systematic oppression) in addition to the solely psychological domain. Also, psychological empowerment may naturally take place without any awareness of ultimate explanations. For example, the mindset literature, which is often based on cultural psychology rather than on evolutionary psychology, is oriented towards psychological empowerment (e.g. Price et al. 2018). Thus, consumer empowerment can certainly happen without evolutionary psychology, but evolutionary psychology may contribute to it by introducing a novel perspective on the phenomenon.

This doctoral thesis also has certain limitations regarding the implementation of evolutionarily-informed empowerment, that is, the exact conditions where the conceptual idea is applicable. Potential sources of errors are the interfaces be-

tween the theoretical concepts of ultimate explanations, self-awareness, self-regulation and consumer empowerment. All these interfaces can be interfered with by certain factors and these factors should be taken into account, for example, as moderators when designing subsequent research on the topic.

First, ultimate explanations do not unconditionally result in increased self-awareness, as consumers may differ in their receptiveness to self-discovery (see section 1.1; Wu et al. 2011). An important prerequisite is also that the consumer accepts the evolutionary theory in biology and psychology; in other words, the individual must believe that his or her behaviour can be explained by evolutionary psychology. There is also a risk that ultimate explanations will be misunderstood and used to justify consumer misbehaviour (see section 1.1). Acknowledging this risk, the current thesis has highlighted the positive psychological approach to evolutionary psychology; being aware of our instincts and drives is not a justification for misbehaviour, but a stepping stone to overcome it.

Second, although there is evidence that self-regulation can be achieved by increasing self-awareness (Alberts et al. 2011; Chartrand 2005; Brown & Ryan 2003; Grant et al. 2002), there may be interferences hindering this effect. Primarily, ego depletion, that is, an occasional decrease in the individual's capability or willingness to commit volitional self-control (Baumeister et al. 1998), caused, for example, by exhaustion, may be such an interference. However, only deliberative behaviours that require many cognitive resources are vulnerable to ego depletion (Vohs et al. 2008). As suggested in section 5.2, the important idea of translating self-awareness into self-regulation is that the deliberative behaviours which were automatic before they became a subject of self-reflection can again be translated into habitual or routine behaviours (Bublitz et al. 2013) so that they no longer need many cognitive resources to be performed. Thus, the problem of ego depletion is prominent only during the self-reflective phase when the behaviour is deliberative and will vanish once the behaviour has become habitual.

Third, while the mainstream literature agrees that self-regulation is a key factor influencing well-being and psychological empowerment (Hofmann et al. 2014; De Ridder et al. 2012; Kidwell et al. 2008; Baumeister et al. 2007; Diener & Biswas-Diener 2005; Salovey & Grewal 2005; Baumeister 2002), self-regulation may also be disadvantageous if it is used to reinforce behaviour that is harmful to the self (Rawn & Vohs 2011). For example, trying tobacco for the very first time is often displeasing and it requires self-control to keep smoking until the addiction has been developed (Rawn & Vohs 2011). In a sense, self-regulation can be understood only as a psychological tool (or muscle; see section 5.1) which may be used for advantageous or disadvantageous purposes. Thus, when applying the framework in future research, there must be a normative pre-conception about the (dis)advantageousness of the phenomenon of interest.

In addition to the limitations regarding the use of a conceptual framework, a specific restriction is that while the fundamental motives that were suggested to shed light on the consumer phenomena presented in the articles are highly influential, they are not necessarily the only ones. Consumer choice is always a combination of multiple factors, so the approach and avoidance tendencies towards a product or behaviour may be driven by several distinct fundamental motives, depending on the situation. For instance, it has been suggested that openness to new foods (i.e. food neophilia) is a mating display; that is, by showing off his capability to eat novel foods, an individual – likely a male – reveals fitness-relevant information about his immunological robustness (Al-Shawaf et al. 2015). Thus, the desire to buy insect-based food would not be motivated solely by status seeking but also by mate acquisition. Overall, the ultimate explanations provided in this thesis only focus on some dimensions of the phenomena and they must be regarded as illustrative examples of the power of ultimate explanations rather than as exhaustive accounts of evolutionary influences behind the phenomena.

As described in section 3.1, the current thesis is a form of theoretical research. Accordingly, the theoretical structures used in the reinterpretation of three empirical phenomena rely on existing literature and are only illustrated, not tested. Thus, this thesis offers a natural basis for a deductive analysis of the influence of ultimate explanations on empowerment. An intriguing avenue for future research would be to experimentally test whether priming consumers with an ultimate explanation will result in more self-awareness and self-regulation in the consumer domain. For example, any of the empirical phenomena examined in this thesis would serve as an eligible context for such an experimental follow-up study.

Besides this methodological extension, the current doctoral thesis sets several starting points for future research that could adopt and further develop its theoretical ideas. In particular, the thesis could be a step to tackling the wide topic area of consumer behaviour related to mental health and mental illness (cf. Kaleva & Valkonen 2013; Keyes 2007). These mental issues have remarkable economic impacts, as according to some estimations, every fourth EU citizen is expected to suffer from mental health problems during their lifetime (McDaid 2008) and the total costs of work-related depression in the EU are as much as €620 billion per year (Matrix 2013). In consumer societies, almost all domains of human life can be understood as consumption practices (Wilska 2002). Thus, mental health issues are also inseparable from consumer behaviour, and it can be argued that mental health and illness are partly reflected, or even generated, by consuming decisions.

Theoretical ideas from evolutionary psychology have been used to understand mental health, mental illness and public health issues (e.g. Rantala et al. 2018; Tybur & Griskevicius 2013; Troisi 2011; Nesse 2006; Stevens & Price 2000), but, to the best of my knowledge, there is only scant research that comprehen-

sively analyses mental health and illness from the viewpoint of evolutionary psychology in the consumer domain. Thus, what I am proposing as an avenue for future research is the application of evolutionarily-informed empowerment in understanding consumer behaviour related to the socially and economically important problems of mental health and illness.

A promising evolutionarily-inspired concept that could be used to analyse this domain is the so-called *supernormal stimulus*, which refers to the artificially intensified versions of stimuli to which humans have evolved responsiveness (Barrett 2010). For example, artificially sweetened food (e.g. candy) attracts our innate taste for sweet things and artificially intensified sexual stimuli (e.g. pornography or other sexualised imagery) attracts our innate sexual desire. Indeed, it appears that the entire consumer culture is featured by ubiquitous supernormal stimuli in almost all domains of life, which might be one reason why the current consumer culture is a fertile ground for many mental health issues to emerge (cf. Morris 1994/1969). Future research should investigate whether consumers' understanding of evolutionary reasons for their behaviour and preferences would help to regulate their actions under this constant cross-pressure of ubiquitous supernormal stimuli. This avenue could also be fruitful in terms of combining evolutionary-based consumer research with Consumer Culture Theory (Arnould & Thompson 2005), the two paradigms of consumer research that have often been regarded as incommensurable (Salonen & Piha 2016).

The specific domains of consumer behaviour in which the aforementioned future research could be conducted might relate to the topics covered in the three articles. Food consumption and consumer activities around it, are, unsurprisingly, tightly related to mental health and illness (e.g. Keipi et al. 2015; Luomala et al. 2006; Sarlio-Lähteenkorva et al. 2004), and also customer toilets, for example, in terms of shy-bladder syndrome (section 4.2) could be a prolific setting for future research. However, perhaps the most promising direction is connected to sexuality-related consumption. Sexuality is an omnipresent human feature (Kontula 2009), sexual stimulus is typically a subject of supernormalisation (Barrett 2015) and the influence of sexuality extends to almost all fields of everyday human life (Räsänen & Wilska 2007), including consumer behaviour (Walther & Schouten 2016). In spite of that, there is clearly a lack of consumer research that explores sexuality-related consumption from the perspective of sexual health. What kind of consumer behaviour do people engage in when they try to promote their sexual health and, on the other hand, prevent sexual disorders? How could commercial and social marketers encourage this kind of consumer behaviour? As shown in this doctoral thesis, evolutionary psychology may be of high value in offering insights into sexuality-related concepts such as sexual pleasure, sexuality-related shame and sexual modesty. Thus, it might also be a fruitful theoretical approach

to explore the aforementioned questions about consumer behaviour related to sexual health.

### **6.3 Final statement on the theoretical contribution<sup>12</sup>**

The objective of this doctoral thesis has been the investigation of the usefulness of evolutionary psychology, and especially the consumer's awareness of ultimate explanations, as a self-reflective tool for consumer self-regulation and empowerment. Three research questions were derived from this objective (see section 1.2). Answering the first research question, the potential of ultimate explanations to deepen the understanding of consumers' need fulfilment was discussed by introducing the analytical framework of ultimate explanations behind consumers' approach and avoidance tendencies (chapter 2). By applying the analytical framework, the second research question addressed the ultimate-level reinterpretation of these tendencies within the phenomena presented in the three articles (chapter 4). As the final outcome, and by answering the third research question, the idea of evolutionarily-informed empowerment was laid down and illustrated through the three articles (chapter 5).

The main contribution of the thesis is that it takes the consumer perspective on evolutionary-based consumer research by conceptually integrating evolutionary psychology (e.g. Saad & Gill 2000) and TCR (e.g. Mick 2006). Specifically, by discussing how ultimate explanations can operate as a basis for consumer empowerment, the thesis introduces a conceptual idea of evolutionarily-informed empowerment which suggests that by being aware of the evolved mechanisms behind their behaviour, consumers may be able to self-regulate and empower themselves. I hope that this contribution, which is accompanied by the promotion of an instrumental account of evolutionary psychology (chapter 3), will encourage not only consumers but also marketing practitioners, educators and academics (cf. Panula 2000) to use evolutionary psychology more wisely, diversely and creatively in their future efforts.

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<sup>12</sup> Being theoretical research (see section 3.1), theoretical implications are discussed thoroughly and in many different parts of the thesis. This section only states the brief summary of these implications as a closing statement.

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## APPENDIX: INTERVIEWEES IN ARTICLE 3

*Pirkko Brusila*, naistentautien ja synnytysten erikoislääkäri, pari- ja seksuaaliterapeutti

*Roni Grinberg*, seksuaaliterapeutti

*Pauliina Hälinen*, psykoterapeutti, seksuaaliterapeutti

*Milja Ilkka*, psykoterapeutti VET, seksuaaliterapeutti

*Patric Jern*, apulaisprofessori

*Katja Kero*, LT, naistentautien ja synnytysten erikoislääkäri, seksuaalineuvoja

*Marja Kihlström*, erityistason seksuaaliterapeutti (NACS)

*Eeva Nevanen*, ratkaisukeskeinen psykoterapeutti (ET), seksuaaliterapeutti (NACS)

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