



Shopping Addiction: A Brief Review

Daryl Wayne Niedermoser^{1, 2}, Sylvie Petitjean¹, Nina Schweinfurth¹, Lena Wirz¹,
Vivien Ankli^{1, 3}, Hannah Schilling¹, Claudia Zueger³, Martin Meyer¹,
Renanto Poespodihardjo¹, Gerhard Wiesbeck¹, and Marc Walter¹

¹ Department of Addictive Disorders, University Psychiatric Clinics (UPK), University of Basel

² Department of Economics, Kalaidos University of Applied Sciences

³ Department of History, University of Basel

Shopping is, and has long been, an important part of everyday life. It can easily take on the characteristics and symptoms of a behavioral addiction, such as preoccupation, mental appropriation as well as compulsiveness and loss of control. Thus, shopping addiction is becoming an increasingly important topic in research, especially in the context of the current pandemic (COVID-19). The pandemic has resulted in an increase in perceived risk factors. There is a plausible relationship between high perceived stress level along with perceived social isolation and extensive leisure time in shifting toward a pathological shopping behavior. While that does not only have a negative impact on functional but also on social and financial aspects, findings suggest that the threshold is also becoming lower due to changing social values, including changing self-conception and progressing digitalization that make online shopping more accessible. Although different reasons for an increasing prevalence rate are being discussed, the diagnosis conceptualization and classification is still unclear, leading to different and unstandardized therapeutic approaches. In addition to its impact on daily life, shopping addiction can indicate other mental illnesses. As it turned out, it is often comorbid in anxiety disorders, impulsive behaviors and substance abuse. An early and targeted treatment, as well as rising awareness, seem to be crucial and call for further investigation. While young people seem to be more at risk of developing critical shopping behavior, findings show no clear gender differences in frequency but differences in terms of buying motivation. Based on published research papers, the present narrative review therefore describes and critically discusses the phenomenon of shopping addiction and the current state of research in a broad variety of topics, considering types of shopping behavior, including Internet-based, offline, mood, impulse and leisure shopping, and diagnostic and therapeutic options in the context of influencing factors mentioned above. The

This article was published Online First July 29, 2021.

Daryl Wayne Niedermoser <https://orcid.org/0000-0002-7983-1004>

Hannah Schilling <https://orcid.org/0000-0003-2714-8884>

Martin Meyer <https://orcid.org/0000-0002-8041-5884>

We thank Claudia Züger (University of Basel) for proofreading. We thank Melike Sahin (University Psychiatric Clinics (UPK) Basel) and all who contributed to this project.

No potential conflict of interest was reported by the authors.

Daryl Wayne Niedermoser, Sylvie Petitjean, Nina Schweinfurth, Lena Wirz, Veterans Affairs, Martin Meyer, Claudia Zueger, Renanto Poespodihardjo, Gerhard Wiesbeck,

and Marc Walter analyzed published literature and were involved in the writing process. Daryl Wayne Niedermoser, Lena Wirz, Nina Schweinfurth and Sylvie Petitjean wrote and completed the final draft. Claudia Zueger, Renanto Poespodihardjo, Martin Meyer, Gerhard Wiesbeck and Marc Walter commented on the second draft. All authors commented on the final manuscript, which was completed by Daryl Wayne Niedermoser, Lena Wirz, Nina Schweinfurth, and Claudia Zueger.

Correspondence concerning this article should be addressed to Daryl Wayne Niedermoser, Department of Addictive Disorders, University Psychiatric Clinics (UPK), University of Basel, CH-4002 Basel, Switzerland. Email: daryl.niedermoser@upk.ch

topics were selected at the discretion of the authors, whereby no claim is made to be exhaustive.

Clinical Impact Statement

Shopping is and has long been an important part of everyday life. In the context of the current pandemic (COVID-19), shopping addiction is becoming an increasingly important topic in research. Its different forms make the topic so pervasive. The focus of this work is on shopping addiction as a behavioral addiction. This brief review focuses on diagnosis, different types, therapeutic approaches, and empirical studies of shopping addiction. This review provides a brief overview of various aspects of shopping addiction. It is aimed at experts who want to find out more about this topic. In addition, the work could also be of interest to relatives of those affected.

Keywords: review, shopping addiction, behavioral disorder, COVID-19

Shopping has always been very important in people's lives as it is the crucial method for restocking supplies in the modern world. People shop for different things ranging from household supplies to hardware, clothes, and many others. According to [Rose and Dhandayudham \(2014\)](#); today's shopping is considered both "a functional or utilitarian activity as well as a social or leisure activity with hedonistic features." While shopping is common and normal for most people, excessive purchasing behavior occurs in around 5% of the population ([Maag, 2018](#)). Affected individuals cannot control their buying behavior and suffer from periodic buying episodes or impulses to buy mostly unneeded consumer goods. They experience an urge to buy and continue to purchase despite negative consequences or monetary limits in order to achieve temporary pleasure ([Marino et al., 2010](#)).

Since the purchases are often neither needed nor necessary, the goods are rarely used or not used at all. Instead, they are stowed away, given away or resold. That behavior is experienced as uncontrollable and leads to psychological, social, financial, and even legal problems ([Aboujaoude, 2014](#)). As a result of those buying episodes, sufferers spend money that exceeds their financial possibilities and that often leads to debts. Therefore, in many cases affected individuals use criminal strategies to obtain money in order to be able to continue buying things ([Mueller et al., 2019](#)). As [Müller et al. \(2019\)](#) have shown, addiction leads to reduced quality of life. In the literature shopping addiction is shown as a high comorbidity with mood disorders and other behavioral addictions ([Mueller et al., 2019](#)). Even though shopping addiction was first mentioned 100 years ago in

psychiatric textbooks ([Kraepelin, 1915](#)); the diagnosis and classification of shopping addiction is still not established. Therefore, one of the biggest debates is whether excessive shopping represents an impulse-control, obsessive-compulsive or addictive disorder. Then, there are various different terms for the clinical picture like oniomania, compulsive buying disorder, pathological shopping or shopping addiction. In the following, the term shopping addiction is used, as behavioral addiction is now assumed due to the similar symptoms ([Müller et al., 2019](#)). There are many other debates related to shopping addiction, for instance studies on prevalence and gender distribution as well as studies on psychiatric comorbidity. Another issue is the influence of the Internet, because increasing digitalization has led to a shift toward Internet shopping addiction ([Dittmar et al., 2007](#); [LaRose & Eastin, 2002](#)), due to the fact that online shopping works much easier and faster than physical shopping as there are no time and placement restrictions. This new form of digital addiction as well as the other debates on shopping addiction are explained in more detail below.

Classification and Diagnostics

The unclear classification and correspondingly variable diagnosis of shopping addiction have occupied researchers in recent years. As usual, psychiatrists use the criteria of the internationally recognized and accepted "Diagnostic and Statistical Manual" to diagnose disorders with a mental health component. Three of the key changes from *DSM-IV* ([Saß et al., 2003](#)) to *DSM-5* ([American Psychiatric Association, 2013](#)) have implications

for researches in the field of behavioral addiction. First, the section Substance-Related Disorders was renamed to Substance-Related and Addictive Disorders. Second, Gambling Disorder was moved from the Impulse-Control Disorders Section to the Substance-Related and Addictive Disorders section and classified as a behavioral addiction and third, the Internet Gaming Disorder was introduced ([American Psychiatric Association, 2013](#)). These changes show the emerging importance of nonsubstance-related addictions. However, most nonsubstance-related addictions, such as shopping addiction, are not yet implemented in psychiatric nosology. Due to nonexistent consistent concepts for diagnosis and treatment of excessive reward-seeking behavior, the classification is uncertain.

Therefore, a consistent concept and a standardized classification of the behavioral addiction is of great importance. Only then will it be possible to establish accurate diagnoses and to facilitate effective treatment of affected individuals ([Albrecht et al., 2007](#)).

Diagnostic instruments have also been debated in recent years. There are a few valid and reliable diagnostic instruments for diagnosing excessive buying. Due to no clear conceptualization a generally recognized and accepted diagnostic manual does not exist. The most commonly used diagnostic instruments are briefly presented below.

The “Compulsive Buying measurement Scale”- was one of the first scales for diagnosing excessive buying ([Valence et al., 1988](#)). According to the authors, the items reflect the four dimensions of pathological buying: propensity to buy, urge to buy, postpurchase guilt, and family environment. The scale shows high reliability and validity. According to [Valence et al. \(1988\)](#), high scores also correspond to heightened anxiety levels and frequent occurrence of comorbid disorders such as bulimia nervosa, depression or alcoholism within the family.

The “Hohenheimer Kaufsuchtttest” (Hohenheim Shopping Addiction Test) is a modified German version of the “Compulsive Buying Measurement Scale” and has therefore an analogous structure ([Scherhorn et al., 1990](#)), high reliability and construct validity.

Another measuring instruments based on the «Compulsive Buying measurement Scale» is the so-called “Erhebung von kompensatorischem und süchtigem Kaufverhalten” (Survey of Compensatory and Addictive Shopping Behavior; [Raab et al.,](#)

2005). This self-assessment tool gathers a potential tendency and also risk for compulsive shopping. Also, this instrument has a high reliability and validity.

The “Bergen shopping addiction scale,” constructed in 2015 ([Andreassen et al., 2015](#)) is technologically and culturally neutral and can therefore be used flexibly. Shopping disorder is here understood as an addiction and can be used online as well as offline.

Addictive Shopping Behavior

Shopping addiction is a nonsubstance-related addiction, a so-called behavioral addiction. Behavioral addictions can be defined as excessive behaviors that can no longer be properly controlled by those who are affected and therefore assume pathological features and negative consequences. Evidently, no psychotropic substances are consumed. The intoxicating effect results from the body’s own biochemical processes that are triggered by certain excessive, rewarding or reward-seeking behaviors ([Albrecht et al., 2007](#)). These reward reinforce behaviors that can, but need not, become pathological. Most behaviors, including the aspect of rewarding, are important for everyday life and also for surviving. Reward sensitivity has been identified as a component of personality and therefore individuals vary in terms of the degree to which they are sensitive to reward in their environment and the degree to which they are able to control their responses to such a reward ([Rose & Dhandayudham, 2014](#)). [Davenport, Houston and Griffiths \(2012\)](#) recognized that the reward of shopping go beyond the actual buying process and may include pleasure as a result of the shopping process, the attention and praise of others as well as relief from anxiety or stress.

Possible Reasons for Increasing Prevalence

An explanation for the growth of compulsive buying is widely discussed. [Dittmar \(2000; 2001, 2004\)](#) assumes that it is related to economic, social and cultural factors that shape mood and self-identity, both of which are important constructs of shopping addiction. Rising income figures and easy-to-acquire loans enable one to spend money that one does not have and thus help those affected by shopping addiction to experience instant satisfaction through extreme purchases. [Dittmar \(2000; 2001,](#)

2004) further notes that consumer goods play a major psychological role in people's lives. In this way, those affected patients control their emotions (Elliott, 1994) and their social status (McCracken, 1990) by buying things and improve their ideal self through the symbolic meaning of material goods (Dittmar, 1992, 2004). In conclusion, the process of buying seems to be more psychologically motivated than by utilitarian benefits, meaning that people are prompted by obtaining emotional, social and identity-related benefits.

Possible Causes

Different studies on this topic pointed out that there is no single factor explaining the etiology of shopping addiction. O'Guinn and Faber (1989) highlighted the effect of arousal, anxiety and stress, sensations seeking, external environmental stimuli and low self-esteem. Also, personality traits, like impulsiveness, and demographics are mentioned (Black, 2007a, 2007b; Davenport et al., 2012; Lejoyeux & Weinstein, 2010; Workman, 2010). Affected individuals often buy to improve their self-esteem or to reduce tension and to escape negative emotions (Kyrios et al., 2004). Other promotive factors are the tempting marketing strategies and shopping malls, which guide individuals to overbuying behavior. Other studies focused more on predisposing factors, such as development, culture, genetics and neurobiology (Simion, 2018).

Types of Shopping Behavior

Internet-Based Shopping Behavior

Due to increasing digitalization and increased use of the Internet, shopping addiction has shifted more and more into the digital world. Nevertheless, the digital form of shopping addiction does not differ much from the analogue variant. The key terms are still the same, namely extreme mental preoccupation with shopping related topics, strong craving to buy, loss of control and negative consequences. However, Internet-based shopping behavior happens much faster and more simultaneous because there are no time and place restrictions. In addition, specific Internet usage expectations are relevant, such as anonymity or product diversity (Mueller et al., 2019). Online shopping has also become more convenient, so it is no longer necessary to have a PC or laptop; purchases are easily done by using

smartphones or tablets (Kuss et al., 2018). In addition, it is also widely common to own a smartphone; 97.2% of adolescents (12 years and older) in Switzerland have their own smartphone (Brand et al., 2019). Also, companies constantly change their marketing strategies and adapt them to customers' expectations and usage motives, for instance personalized customer advertising, pop-up messages, audio clips, chat rooms with providers and more (LaRose & Eastin, 2002).

Kukar-Kinney et al. (2009) as well as Trotzke et al. (2015) emphasize the importance of anonymity in the Internet. The excessive cognitive demands can be explained by the theory of ego-depletion (Muraven & Baumeister, 2000). While access to Internet shopping websites is practically unlimited, information has to be constantly portrayed and at the same time cognitive efforts should be made to resist the urge to buy. Self-control resources are often exhausted and shoppers can no longer resist their urge to buy due to cognitive overload (Mueller et al., 2019).

Offline Shopping

Offline shopping addiction is a phenomenon that stems from marketing and merchandising in stores and, most importantly, from impulse as does online shopping (Duroy et al., 2014). The integral factor behind the trends in both current and traditional settings is the search for information. Shoppers want to know as many facts on the products as possible and use that knowledge for shopping. Research has shown that consumers perceive knowledgeable instore staff as important to their shopping experience and that stores should be equipped with staff that understands the reasons for the return of goods. When stores heed to these preferences and align with consumer needs, it is hard for the customer not to want to shop there as a return shopper. When overdone by retailers, these trends possibly predispose consumers to shopping addiction.

Mood Shopping

As mentioned before, excessive shopping is often a possible way to be eluded from negative emotions like sadness, anger, or depression. Shopping allows individuals to experience a decrease in the intensity of such negative emotions. This attempt to escape the negative emotional spiral and to experience the associated, if only temporary, positive

emotional states can contribute to an addiction. This behavior, which helps to provide temporary relief from negative affective states, has much in common with other psychological disorders such as binge eating or drug disorders (Miltenberger et al., 2003).

Impulse Shopping

Impulse purchases are the result of spontaneous purchase decisions that are less based on cognitive control but more on the direct reaction to certain stimuli. Affected individuals cannot control impulses and are incapable of self-control (Black, 2007b; Davenport et al., 2012). Impulse purchases are very common for people who plan ahead. There is often an inherent sense of fear that a product may run out of stock. Most shoppers start to stock up those products due to the fear that they will not be available at a later date. Such a case has been manifested with the outbreak of the coronavirus pandemic. Ever since the first case was reported in Europe and countermeasures were put in place, impulse buying has become more common, but this time it cut across the demography (Galanakis, 2020). Prior to Woodruffe's study (1997), Elliott (1994) had suggested that a move from essential shopping out of necessity to leisure shopping would be a prerequisite for shopping addiction.

Leisure Shopping

Leisure shopping is widespread in Europe. Tourists from all over the world come to Europe to buy different things. France, Italy and Turkey are known to be shoppers' dream shopping places (Jansen-Verbeke, 1991). People have saved huge amounts of money for the sole purpose to shop in known shopping capitals (Paris, Milan and Istanbul). The temptation and pull are so strong that many have run themselves into financial ruin in the course of those undertakings. Paris is known to attract shopping addicts that are attracted to fashion, style and brands, as does Milan which has the additional touch of food to its attractions. Istanbul is the dream of middle-class income earners who have admiration for quality, class and brands but at affordable prices. From initial thrill-seeking to satisfying impulsive needs, which are not necessarily needed, leisure shopping activities can turn into an addiction. In such a case, normal shoppers become

'spendaholics' who are characterized by their compulsive need to purchase things (Campbell, 2000; Workman, 2010).

Therapeutic Approaches

There are different therapeutic approaches depending on how the problem of addictive shopping is considered. One possibility is teaching alternative coping responses for dealing with negative emotions which can appear and lead to excessive buying episodes (Miltenberger et al., 2003). Miltenberger et al. (2003) suggest further to focus on an individualized assessment of compulsive buyers so that the therapy could be tailored to the individual's needs. Other researchers classified shopping addiction as a social problem. Parka et al. (2019) confirmed that especially recognition and low self-esteem can lead to negative emotions that then can lead to self-display purchases. As a possible treatment solution they suggest to strengthen self-control and to convey the importance of positive thinking in terms of self-image. Murali et al. (2012) noted that an addiction can be controlled and be kept in check. For this purpose, an early intervention is necessary in order to help reduce long-term effects and improve the final outcome. In line with this, Black (2001) identified early identification and intervention as helpful instruments for resolving other underlining psychiatric issues that affect a shopper.

Several Studies on the Topic of Shopping Addiction

A study carried out by Sohn and Choi (2014) established that shopping addiction, like any other behavioral addiction, is adopted in stages. Sohn and Choi (2014) established five stages of shopping addiction based on the experiences of compulsive buyers. The addiction starts with retail therapy, a phase where shoppers buy to fill up an emptiness followed by denial (they ignore overconsumption). In the third stage, there is often an accumulation of debt. Without intervention the fourth phase (impulsive buying) worsens and the fifth phase comes in, a phase that comprises of the development of tendencies of compulsive buying. A full-blown addiction is developed at the time of inception of the fifth stage (Bridgforth, 2004).

Several studies showed strong associations between shopping addiction and a variety of emotions. Thus, in a study by [Harvanko et al. \(2013\)](#) affected subjects reported emotions such as happiness (80%), strength (71%) or enthusiasm (54%). Immediately after shopping the subjects mentioned they feel disappointment (63%), frustration (58%), irritability (42%), depression (33%), and pain (29%). Initial tension and subsequent gratitude was evident in almost all participants (96%). However, these positive experiences are most often followed by guilt, anger, sadness or indifference ([Hollander & Stein, 2007](#)). In line with this, Miltenberger's participants reported feelings of sadness or depression, anxiety and tension, boredom as well as being self-critical before shopping. During the episodes, feelings of happiness, euphoria and calmness were being reported. Afterward many participants said they feel guilty, depressed or bored ([Miltenberger et al., 2003](#)).

[Duroy et al. \(2014\)](#) set out to study the characteristics of compulsive buying and the interrelationship between them. The study was carried out at Paris Diderot University with a sample population consisting of students and was done in a cross-sectional manner. They found out that compulsive buying had a prevalence of 16.1% and Internet addiction had a 26% prevalence. These numbers are worrying for such a sample population. The students' alignment spelled most trouble with online shopping, a channel that is also the main cause of shopping addiction. Much worse is the fact that the online shopping domain also has subdomains within it; mobile, web and application ([Duroy et al., 2014](#)). Further research has to be done to find a way to deal with increasing digitalization and related Internet- and shopping addiction in order to improve treatments.

The latest research on a topic that is currently occupying the whole world, the 2019 coronavirus disease, is carried out by [Dubey et al. \(2020\)](#). They analyzed the relationship between the 2019 coronavirus disease and addiction. The pandemic, arguably the greatest public health catastrophe of our time, was and still is a challenge for everyone in more than one aspect. Unexplained causes and effects, fear of infection, home office and seclusion due to the lockdown are a challenge for most members of society. This is a particular challenge for people who have already suffered from an illness, such as substance use disorder or a behavioral addiction. It has been a devastating time because the sufferers are invariably more prone to

contract infection ([Columb et al., 2020](#); [Ornell et al., 2020](#)). All the stress caused by the pandemic can trigger negative effects. In order to minimize this, distressed people could use addictive substances or negative behaviors could manifest themselves. In fact, it can be seen that the use of the Internet, mainly pornography and gaming websites, increased significantly during the first lockdown period ([Király et al., 2020](#)). Increased use of the Internet and increased screen time suggest that shopping addiction, particularly over the Internet, may have increased as well. [Touyz, Lacey and Hay \(2020\)](#) have come to the same conclusion. The COVID-19 pandemic not only seems to be responsible for a lot of stress, depression, social isolation, physical distance, anxiety and excessive leisure time, but it also seems to be the beginning of a new vicious circle to which particularly vulnerable people can easily fall victim. Research on the effects of the corona pandemic will certainly flourish. However, the treatment and therapy of sufferers should also be emphasized so that they can quickly recover from the negative effects of the pandemic and their addiction cannot manifest itself.

Discussion

In the following, research gaps and implications for future research are discussed. First of all, it is important to highlight the rising importance of addictive behavior disorders, such as shopping addiction. High preoccupation, loss of control and excessive shopping episodes characterize this disease which leads to functional, social and financial problems. The increasing prevalence and especially the constantly evolving digitalization suggest that shopping addiction, especially in the digital form, will be a main topic in the future. However, shopping addiction is not yet implemented in psychiatric nosology. Due to non-existing consistent concepts for diagnosis and treatment of excessive reward-seeking behavior, the classification is uncertain. Therefore, a consistent concept and a standardized classification of behavioral addictions is of great importance. Only then will it be possible to establish accurate diagnoses in order to facilitate effective treatment of affected individuals ([Albrecht et al., 2007](#)).

There are many different therapy approaches, but there is no consistent or generally applicable model. The question is whether this is necessary at

all or whether the variety of possible therapies could also be an advantage.

Another big debate is on the influence of gender factors in terms of shopping addiction. Studies did not report unitary results, so it is not clear whether the female gender or whether the male gender is more affected by shopping addiction. More consistent results in connection with the gender debate exist in relation to the motivations and the goods which are purchased. It is clear that more research on the topic is necessary in order to be able to make clear statements about gender differences.

As seen, there are various reasons for shopping addiction. Many predictors, such as developmental, social, genetic or cultural factors, have already been researched. Especially in the future there could be other causes or stimuli that favor shopping addictions. This stands in relation to the COVID-19-pandemic or increasing Internet-shopping addictions. Online shopping, with its various forms and possibilities, should be investigated as well.

In general, research should invest in the exploration of shopping addiction. In the future more research has to be done so that this kind of nonsubstance related addiction gets more attention. Affected individuals should have the right to receive adequate diagnosis and effective treatment, because shopping addiction is a serious illness that leads to suffering in more than one aspect.

References

- Aboujaoude, E. (2014). Compulsive buying disorder: A review and update. *Current Pharmaceutical Design*, 20(25), 4021–4025. <https://doi.org/10.2174/13816128113199990618>
- Albrecht, U., Kirschner, N. E., & Grüsser, S. M. (2007). Diagnostic instruments for behavioural addiction: An overview. *GMS Psycho-Social Medicine*, 4, 1–11.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5)*.
- Andreassen, C. S., Griffiths, M. D., Pallesen, S., Bilder, R. M., Torsheim, T., & Aboujaoude, E. (2015). The Bergen Shopping Addiction Scale: Reliability and validity of a brief screening test. *Frontiers in Psychology*, 6, 1374. <https://doi.org/10.3389/fpsyg.2015.01374>
- Black, D. W. (2001). Compulsive buying disorder: Definition, assessment, epidemiology and clinical management. *CNS Drugs*, 15(1), 17–27. <https://doi.org/10.2165/00023210-200115010-00003>
- Black, D. W. (2007a). Compulsive buying disorder: A review of the evidence. *CNS Spectrums*, 12(2), 124–132. <https://doi.org/10.1017/S1092852900020630>
- Black, D. W. (2007b). A review of compulsive buying disorder. *World Psychiatry*, 6(1), 14–18.
- Brand, S., Lemola, S., Mikoteit, T., Holsboer-Trachsler, E., Kalak, N., Bahmani, D. S., Pühse, U., Ludyga, S., & Gerber, M. (2019). Schlaf und Befindlichkeit bei Kindern und Jugendlichen - ein narratives Review [Sleep and Psychological Functioning of Children and Adolescents - a Narrative Review]. *Praxis Der Kinderpsychologie Und Kinderpsychiatrie*, 68(2), 128–145. <https://doi.org/10.13109/prkk.2019.68.2.128>
- Bridgforth, G. (2004). When shopping is a sickness. *Essence*, 35(4), 154–157.
- Campbell, C. (2000). Shopaholics, spendaholics, and the question of gender. *I Shop, Therefore I Am: Compulsive Buying and the Search for Self*, 57–75.
- Columb, D., Hussain, R., & O'Gara, C. (2020). Addiction psychiatry and COVID-19: Impact on patients and service provision. *Irish Journal of Psychological Medicine*, 37(3), 164–168. <https://doi.org/10.1017/ipm.2020.47>
- Davenport, K., Houston, J. E., & Griffiths, M. D. (2012). Excessive eating and compulsive buying behaviours in women: An empirical pilot study examining reward sensitivity, anxiety, impulsivity, self-esteem and social desirability. *International Journal of Mental Health and Addiction*, 10(4), 474–489. <https://doi.org/10.1007/s11469-011-9332-7>
- Dittmar, H. (1992). *The social psychology of material possessions: To have is to be*. Harvester Wheatsheaf and St. Martin's Press Press.
- Dittmar, H. (2000). The role of self-image in excessive buying. In A. L. Benson (Ed.), *I shop, therefore I am: Compulsive buying and the search for self* (pp. 105–132). Jason Aronson.
- Dittmar, H. (2001). Impulse buying in ordinary and “compulsive” consumers. In E. U. Weber, J. Baron, & G. Loomes (Eds.), *Cambridge series on judgement and decision making. Conflict and tradeoffs in decision making* (pp. 110–135). Cambridge University Press.
- Dittmar, H., Long, K., & Bond, R. (2007). When a better self is only a button click away: Associations between materialistic values, emotional and identity-related buying motives, and compulsive buying tendency online. *Journal of Social and Clinical Psychology*, 26(3), 334–361. <https://doi.org/10.1521/jscp.2007.26.3.334>
- Dittmar, H. (2004). Understanding and diagnosing compulsive buying. *Handbook of Addictive Disorders: A Practical Guide to Diagnosis and Treatment*, 42(4), 411–450.
- Dubey, M. J., Ghosh, R., Chatterjee, S., Biswas, P., Chatterjee, S., & Dubey, S. (2020). COVID-19 and addiction. *Diabetes & Metabolic Syndrome*,

- 14(5), 817–823. <https://doi.org/10.1016/j.dsx.2020.06.008>
- Duroy, D., Gorse, P., & Lejoyeux, M. (2014). Characteristics of online compulsive buying in Parisian students. *Addictive Behaviors*, 39(12), 1827–1830. <https://doi.org/10.1016/j.addbeh.2014.07.028>
- Elliott, R. (1994). Addictive consumption: Function and fragmentation in postmodernity. *Journal of Consumer Policy*, 17(2), 159–179. <https://doi.org/10.1007/BF01016361>
- Galanakis, C. M. (2020). The Food Systems in the Era of the Coronavirus (COVID-19) Pandemic Crisis. *Foods*, 9(4), 523. <https://doi.org/10.3390/foods9040523>
- Harvanko, A., Lust, K., Odlaug, B. L., Schreiber, L. R., Derbyshire, K., Christenson, G., & Grant, J. E. (2013). Prevalence and characteristics of compulsive buying in college students. *Psychiatry Research*, 210(3), 1079–1085. <https://doi.org/10.1016/j.psychres.2013.08.048>
- Hollander, E., & Stein, D. J. (2007). *Clinical manual of impulse-control disorders*. American Psychiatric Pub.
- Jansen-Verbeke, M. (1991). Leisure shopping: A magic concept for the tourism industry? *Tourism Management*, 12(1), 9–14. [https://doi.org/10.1016/0261-5177\(91\)90024-N](https://doi.org/10.1016/0261-5177(91)90024-N)
- Király, O., Potenza, M. N., Stein, D. J., King, D. L., Hodgins, D. C., Saunders, J. B., Griffiths, M. D., Gjonneska, B., Billieux, J., Brand, M., Abbott, M. W., Chamberlain, S. R., Corazza, O., Burkauskas, J., Sales, C. M. D., Montag, C., Lochner, C., Grünblatt, E., Wegmann, E., . . . Demetrovics, Z. (2020). Preventing problematic internet use during the COVID-19 pandemic: Consensus guidance. *Comprehensive Psychiatry*, 100, Article 152180. <https://doi.org/10.1016/j.comppsy.2020.152180>
- Kraepelin, E. (1915). *Psychiatrie: Ein Lehrbuch für Ärzte und Studierende. 4: Klinische Psychiatrie; 3. Barth* [Psychiatry: A Textbook for Doctors and Students. 4: Clinical Psychiatry; 3. Barth].
- Kukar-Kinney, M., Ridgway, N. M., & Monroe, K. B. (2009). The relationship between consumers' tendencies to buy compulsively and their motivations to shop and buy on the Internet. *Journal of Retailing*, 85(3), 298–307. <https://doi.org/10.1016/j.jretai.2009.05.002>
- Kuss, D. J., Kanjo, E., Crook-Rumsey, M., Kibowski, F., Wang, G. Y., & Sumich, A. (2018). Problematic mobile phone use and addiction across generations: The roles of psychopathological symptoms and smartphone use. *Journal of Technology in Behavioral Science*, 3(3), 141–149. <https://doi.org/10.1007/s41347-017-0041-3>
- Kyrios, M., Frost, R. O., & Steketee, G. (2004). Cognitions in compulsive buying and acquisition. *Cognitive Therapy and Research*, 28(2), 241–258. <https://doi.org/10.1023/B:COTR.0000021543.62799.32>
- LaRose, R., & Eastin, M. S. (2002). Is online buying out of control? Electronic commerce and consumer self-regulation. *Journal of Broadcasting & Electronic Media*, 46(4), 549–564. https://doi.org/10.1207/s15506878jobem4604_4
- Lejoyeux, M., & Weinstein, A. (2010). Compulsive buying. *The American Journal of Drug and Alcohol Abuse*, 36(5), 248–253. <https://doi.org/10.3109/00952990.2010.493590>
- Maag, V. (2018). *Kaufsucht in der Schweiz: Verbreitung, Ursachen und Konsequenzen-Studie 2010* [Shopping addiction in Switzerland: Distribution, causes and consequences study 2010]. Somedia Buchverlag.
- Marino, J. M., Ertelt, T. W., Mitchell, J. E., & Lancaster, K. (2010). Compulsive buying. In *Addiction Medicine* (pp. 649–660). Springer. https://doi.org/10.1007/978-1-4419-0338-9_31
- McCracken, G. D. (1990). *Culture and consumption: New approaches to the symbolic character of consumer goods and activities* (Vol. 1). Indiana University Press.
- Miltenberger, R. G., Redlin, J., Crosby, R., Stickney, M., Mitchell, J., Wonderlich, S., Faber, R., & Smyth, J. (2003). Direct and retrospective assessment of factors contributing to compulsive buying. *Journal of Behavior Therapy and Experimental Psychiatry*, 34(1), 1–9. [https://doi.org/10.1016/S0005-7916\(03\)00002-8](https://doi.org/10.1016/S0005-7916(03)00002-8)
- Mueller, A., Trotzke, P., & Steins-Loeber, S. (2019). Buying-Shopping Disorder on the Internet. *Suchttherapie*, 20(4), 192–197.
- Müller, A., Brand, M., Claes, L., Demetrovics, Z., de Zwaan, M., Fernández-Aranda, F., Frost, R. O., Jimenez-Murcia, S., Lejoyeux, M., Steins-Loeber, S., Mitchell, J. E., Moulding, R., Nedeljkovic, M., Trotzke, P., Weinstein, A., & Kyrios, M. (2019). Buying-shopping disorder-is there enough evidence to support its inclusion in ICD-11? *CNS Spectrums*, 24(4), 374–379. <https://doi.org/10.1017/S1092852918001323>
- Murali, V., Ray, R., & Shaffiullha, M. (2012). Shopping addiction. *Advances in Psychiatric Treatment*, 18(4), 263–269. <https://doi.org/10.1192/apt.bp.109.007880>
- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126(2), 247–259. <https://doi.org/10.1037/0033-2909.126.2.247>
- O'Guinn, T. C., & Faber, R. J. (1989). Compulsive buying: A phenomenological exploration. *The Journal of Consumer Research*, 16(2), 147–157. <https://doi.org/10.1086/209204>
- Ornell, F., Moura, H. F., Scherer, J. N., Pechansky, F., Kessler, F., & von Diemen, L. (2020). The COVID-19 pandemic and its impact on substance

- use: Implications for prevention and treatment. *Psychiatry Research*, 289, 113096. <https://doi.org/10.1016/j.psychres.2020.113096>
- Parka, O.-H., Jeongb, J.-H., & Leec, S.-K. (2019). The Effect of Adult Social Anxiety on Shopping Addiction in Relation to Self-Control and Public Awareness. *International Journal of Innovation, Creativity and Change*, 7(3), 320–331.
- Raab, G., Neuner, M., Reisch, L., & Scherhorn, G. (2005). *SKSK. Screeningverfahren zur Erhebung von kompensatorischem und süchtigem Kaufverhalten* [SKSK. Screening procedure to determine compensatory and addictive buying behaviour]. Hogrefe.
- Rose, S., & Dhandayudham, A. (2014). Towards an understanding of Internet-based problem shopping behaviour: The concept of online shopping addiction and its proposed predictors. *Journal of Behavioral Addictions*, 3(2), 83–89. <https://doi.org/10.1556/JBA.3.2014.003>
- Saß, H., Wittchen, H.-U., Zaudig, M., & Houben, I. (2003). *Diagnostisches und Statistisches Manual Psychischer Störungen—Textrevision—DSM—IV—TR*. Deutsche Bearbeitung und Einführung.
- Scherhorn, G., Reisch, L. A., & Raab, G. (1990). Addictive buying in West Germany: An empirical study. *Journal of Consumer Policy*, 13(4), 355–387. <https://doi.org/10.1007/BF00412336>
- Simion, I. (2018). Shopping addiction. *Romanian Journal of Cognitive Behavioral Therapy and Hypnosis*, 5(1–8), 20–31.
- Sohn, S.-H., & Choi, Y.-J. (2014). Phases of shopping addiction evidenced by experiences of compulsive buyers. *International Journal of Mental Health and Addiction*, 12(3), 243–254. <https://doi.org/10.1007/s11469-013-9449-y>
- Touyz, S., Lacey, H., & Hay, P. (2020). Eating disorders in the time of COVID-19. *Journal of Eating Disorders*, 8, Article 19. <https://doi.org/10.1186/s40337-020-00295-3>
- Trotzke, P., Starcke, K., Müller, A., & Brand, M. (2015). Pathological buying online as a specific form of Internet addiction: A model-based experimental investigation. *PLoS ONE*, 10(10), e0140296. <https://doi.org/10.1371/journal.pone.0140296>
- Valence, G., d'Astous, A., & Fortier, L. (1988). Compulsive buying: Concept and measurement. *Journal of Consumer Policy*, 11(4), 419–433. <https://doi.org/10.1007/BF00411854>
- Woodruffe, H. R. (1997). Compensatory consumption: Why women go shopping when they're fed up and other stories. *Marketing Intelligence & Planning*, 15(7), 325–334. <https://doi.org/10.1108/02634509710193172>
- Workman, L. (2010). Compulsive buying: A theoretical framework. *Journal of Business Inquiry*, 9(1), 89–126.

Received September 1, 2020

Revision received March 9, 2021

Accepted March 16, 2021 ■