

Pain (and pleasure) in marketing and consumption

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DOI:

[10.1016/j.jbusres.2021.11.071](https://doi.org/10.1016/j.jbusres.2021.11.071)

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Document Version

Peer reviewed version

Citation for published version (Harvard):

Kastanakis, M, Magrizos, S & Katerina, K 2022, 'Pain (and pleasure) in marketing and consumption: an integrative literature review and directions for future research', *Journal of Business Research*, vol. 140, pp. 189-201. <https://doi.org/10.1016/j.jbusres.2021.11.071>

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“Pain (and Pleasure) in Marketing: An Integrative Literature Review And Directions For Future Research.

Abstract

This study provides a first-of-its-kind interdisciplinary integrative literature review on pain, including several potential manifestations of relevance to everyday life and consumption. Importantly, it explores in depth pain’s symbiotic relationship to pleasure, especially in the context of various Marketing experiences. This research draws from a vast array of disciplines, including psychology, sociology, biology, neuroscience, medicine, business, and marketing, to identify definitional issues of pain, uncover its sources and determinants, and explore various forms in which consumers, approach, consume and experience pain. The study offers novel theoretical insights and concludes with future research directions, as well as relevant and managerially important lessons, on the intersection of pain, pleasure, and consumption.

Keywords: Pain, Pleasure, Hedonic Consumption, Integrative Literature Review.

1. Introduction

How strange would appear to be this thing that men call pleasure! And how curiously it is related to what is thought to be its opposite, pain! The two will never be found together in a man, and yet if you seek the one and obtain it, you are almost bound always to get the other as well, just as though they were both attached to one and the same head.... Wherever the one is found, the other follows up behind.
—Plato, Phaedo

A prevailing notion in social sciences is that of the hedonic principle: consumers approach pleasure and avoid pain (Alba & Williams, 2013; Freud, 1950). Thus, research has mostly overlooked situations in which individuals willingly participate in painful experiences. This is despite many examples in which “pain and pleasure go hand in hand” (Liu et al., 2018, p. 336); for example, people willingly pay a large fee to enter a painful military-style competition or training sessions (Tough Mudder; Scott et al., 2017) or to participate in Burning Man festivals, in which they voluntarily assume the risk of serious injury for a week of cultural events in a harsh desert environment (Kozinets, 2002). For other people, a more nuanced (i.e., pleasurable) painful experience is eating spicy food, staying in an ice hotel with sub-zero temperatures, getting painful tattoos, watching a scary movie (Alba & Williams, 2013; Liu et al., 2018), or participating in high-risk leisure activities, such as climbing, parachuting, skydiving, and even gambling (Celsi et al., 1993; Cotte, 1997).

Within marketing research, both academic work and mainstream wisdom assume that consumers need to be provided with pleasurable experiences. However, sometimes painful experiences, hardships, or “making life difficult” for consumers can also lead to enhanced customer experiences and, consequently, firm benefits. In an ethnographic study of the retail shop Hollister, Brown et al. (2018) liken a consumer’s visit to the store to an epic hero’s quest. They argue that for Hollister “pain pays” (p. 67), because the prideful feeling of owning its products is partly due to the trials and torments of the in-store experience: “On entering the retail store, heroic consumers either emerge triumphant or retreat defeated. Regardless of the outcome, the experience itself is unforgettable” (p. 68). Similarly, Morrison’s (2012, p. 119)

ethnographic study of shopping at a mall concludes that “the most alarming fact about happiness and consumer choice concerns individuals overcoming terrible odds to finally possess their desired product. The greater the obstacle, the greater the happiness.”

This situation is also supported by anecdotal evidence (uncovered in informal interviews of the first author with managers of luxury stores) in which creating psychological obstacles or outright refusal to source and sell a coveted item enhances customers’ feelings of “a bitter satisfaction” and eventually increases consumer “stickiness” in achieving their goal of chasing and finally owning the desired item. Similar situations may occur in settings of painful experiences (e.g., expeditions, trainings, athletic competitions). In support of these counter-intuitive ideas, the sports arena provides many examples in which pain and pleasure are intertwined. As Pinarello, the high-end Italian cycles’ manufacturer, casually states in its advertisements: “The more you suffer, the more you get satisfied” (Loveridge, 2019). Similarly, in his memoir of his early biking years and battle against cancer, Lance Armstrong (2001, p. 62) recalls his reply when someone asked what pleasure he took for riding for so long: “Pleasure? I don’t understand the question.’ I didn’t do it for pleasure. I did it for pain.”

The notion of ‘no pain – no gain’ or that ‘the greater the obstacle, the better the outcome’ is deeply rooted in the Protestant Work Ethic (Weber, 1905) which considers hard work and pain to be conducive to more desirable outcomes. Protestant Work Ethic translates to consumption as well, as recently Cheng et al., (2017) found that individuals who believed in this notion were more likely to choose a more costly service, evaluate more favorably a bad-tasting cough syrup or walk further to buy a preferred wine.

Psychologists have attempted to explain this counter-intuitive consumer behavior. Keinan and Kivetz (2011) demonstrate how consumers often choose the less pleasurable experiences and willingly trade pleasure for the sake of collecting memorable experiences, in the process of building their “experiential resume”. Andrade and Cohen (2007) explore the

counter-hedonic behavior of consumers and find that people who would approach a painful or apparently aversive experience had the same negative feelings after experiencing it than those who would rather avoid it. This suggests that positive feelings do not replace negative feelings; rather, among those who prefer risky or exhausting extreme sports, scary movies, spicy food, or other pleasurable painful experiences, positive and negative feelings increase *simultaneously* (the co-activation-based approach; Larsen et al., 2001; Cacioppo and Berntson 1994).

In this research, we challenge conventional wisdom and aim to shed light on a relatively ignored and complicated phenomenon of simultaneous pleasure and pain in consumption practices. To fulfil this aim we need to acquire an in-depth understanding of pain and its relationship with pleasure. Hence, we address a twofold purpose: i) explore the concept of pain, its processes and underlying mechanisms (sources and determinants) and ii) investigate pain's relationship with pleasure and its applications in terms of marketing and business practices. A refined/deeper understanding of the sources and determinants of pain and the unconventional and under-researched consumer pursuit has the potential to advance knowledge on the dynamic relationship between pleasure and pain and its boundary conditions, and unravel the motivations of simultaneous pleasure and pain in marketing practices. This is important considering that while traditionally marketing scholars and most companies have treated pain as an "unwanted and uninvited entity" (Chandler, 2013, p. 716), consumers can actively seek, pay for, and enjoy pain and having a better understanding on why is this so can enable companies to offer products, services, and experiences that accommodate this counter-intuitive preference. To fulfil the study's twofold purpose, we adopt the literature review methodology and gather, assess, critique and synthesize findings from various literature streams (psychology, sociology, biology, neuroscience, medicine, business, and marketing) exploring pain use (Toracco 2016).

Our study makes several contributions to marketing/ business research. First of all, to the best of our knowledge, this is the first integrative review that challenges conventional wisdom and assess, critique, and synthesize the literature on pain from a diverse stream of disciplines in a way that will enable new future research pathways to emerge (Torraco, 2005; 2016). By bringing together insights from various related streams, this study adopts a wide perspective, giving access to the spectrum of research interests and findings identified in the literature examined. Hence, it can enhance an understanding of the knowledge base pertaining to the role of pain in consumption practices, unravel its symbiotic relationship with pleasure and provide the reader with ideas on how pleasurable pain phenomena could be studied in the future (Patriotta, 2020). Second, our study does not merely examine an existing body of research. It also suggests future research directions for the benefit of marketing/ business researchers aiming to explore (pleasurable) painful phenomena (Cronin & George, 2020; Snyder, 2019).

From a managerial perspective, marketers usually aim to increase consumers' consumption enjoyment, so they need to understand how they can leverage their marketing actions to contribute to greater consumption enjoyment. Hence, our study can help marketers having a better understanding on the dynamic relationship between pleasure and pain can design communications to ensure congruency within message elements, but also congruency of hedonic framing with the service's broader positioning strategy (e.g., the Pinarello ad mentioned previously). In the next sections, we outline the methodology used, analyze a wide range of definitions and psychological explanations of pain, and discuss key findings from several areas, including biology, sociology, and neuroscience. Next, we synthesize these areas in a discussion on the links between pain and pleasure and suggest directions for future research on pain in marketing and related disciplines.

2. Methodology

To fulfil the twofold purpose of the study, we had to explore how pain has been studied in various research communities to uncover connections between various research literature streams. Given that the purpose of the integrative literature review is to bring and uncover connections among various research communities the integrative literature review method was the most appropriate review type to use (Toracco 2016; Elsbach & Knippenberg, 2020; Cronin & George, 2020). In particular, the integrative literature review method enabled us, first, to synthesize knowledge from different streams of literature to unearth definitional issues of pain, its sources, and determinants (Shuck, 2011) that would provide an in-depth understanding of pain and, second, to investigate pain's applications to the marketing and consumption disciplines.

According to several scholars, the integrative literature review method has several advantages compared to traditional other types of literature reviews (e.g. systematic reviews or narrative reviews), as: (i) can cover more areas and broader topics than for example systematic reviews (Snyder, 2019; Toracco 2016), (ii) determine implications for *what*, *how* and *why* a topic should be studied moving forward (Cronin & George, 2020; Paul & Criado, 2020; Elsbach & Knippenberg, 2020) and (iii) enable authors' creativity in such a way that existing frameworks can be viewed from a different perspective and new conceptual frameworks and/ or perspectives can emerge (Snyder, 2019; Cronin & George, 2020). Elsbach and Knippenberg (2020, p. 1277) describe integrative literature reviews as "the most useful vehicles for advancing knowledge and furthering research in a topic domain" whereas Paul et al. (2021) highlight that review articles that propose future research directions are very useful and insightful.

To conduct an integrative literature review one can borrow techniques from other literature review types, or can choose to conduct a unique creative process in gathering and analyzing

the relevant literature (Cronin & George, 2020; Snyder, 2019; Toracco, 2005). For example, when conducting an integrative literature review a researcher can gather and evaluate studies as systematic reviews or can adopt a more creative process in the collection of data. Nevertheless, it should be noted that even if the researcher conducts a systematic data collection, as in the systematic literature review type, the purpose of the integrative review “is not to cover all articles ever published on the topic but rather to combine perspectives and insights from different fields or research traditions” (Snyder, 2019, pg. 336).

The process of conducting our integrative literature review was inspired by methodological articles in the conduct and writing of integrative reviews (Cronin & George, 2020; Elsbach & Knippenberg, 2020; Toracco et al., 2016; Short et al., 2009), methodological articles on the systematic selection of data (Paul & Criado, 2020; Paul et al., 2021) and exemplary works, such as those of Krishna (2012), Stoeckl and Luedicke (2015) and Vrontis and Christofi (2021). In particular in conducting our integrative literature review we followed a two-stage approach: 1) developing the data pool and 2) conducting a critical analysis and a creative synthesis. In each stage we followed specific steps (see Table 1).

Insert Table 1

2.1. Developing a data pool of relevant studies

In the first stage, we had to identify and collect studies from various research communities studying the topic of pain to ensure completeness (Cronin & George, 2020). Our purpose was to broadly review pain and hence we considered streams of literature from the fields of business, psychology, sociology, biology, neuroscience, medical, and marketing and consumption research. An exploration in these streams of literature, enabled us to unearth definitional issues of pain, its sources, and determinants and its applications to the marketing and consumption disciplines.

To initiate the process and identify the relevant studies, we first carried out a comprehensive search of all articles at the topic of pain within the Business Source Complete (EBSCO) / Web of Science/ Scopus/ Proquest databases to identify marketing and/ or consumption and/ or business studies exploring the topic of pain. The decision to choose these databases for our literature search was based on their comprehensive journal coverage for the marketing and/ or consumption and/ or business fields, as well as their frequent use by other literature review articles (e.g. Vrontis & Christofi, 2021). In this initial search, we were looking for a combination of the following keywords in the title, the abstract, or the keywords of the paper: ((pain) and (consumption) or (consumer) or (marketing) or business) or (pleasure)). The search took place in mid-2020; to avoid a never-ending search of articles, we selected December 2019 as the cutoff date.

In this search we also used inclusion and exclusion criteria. To illustrate, in line with Paul and Criado's (2020) suggestions, our strategy focused on published peer-reviewed journal articles written in English language. As such, we excluded articles published in book chapters, research notes, conference proceedings and/ or unpublished research studies. We further limited this search to studies in peer-reviewed journals ranked 3, 4 or 4* in the ABS 2018 journals to ensure the quality of studies included (Short et al., 2009; Paul and Criado, 2020). Although this procedure may contain a risk of publication bias (Kepes et al., 2012), we took the view that increased scientific rigor would be achieved by basing our results on peer-reviewed work published in high-quality journals.

This process rendered a sample of 62 articles featuring in key marketing, consumption and business journals such as *Journal of Consumer Research*, *Journal of Consumer Psychology*, *Journal of Marketing Research*, *Journal of Marketing*, *Journal of Service Research*, *Journal of Business Research* and others. Most of the articles feature in the *Journal of Consumer*

research (n=16). Next, following Torraco (2005), we screened the abstracts of these 62 articles for relevance determined by our research purpose. We excluded those articles where the topic of pain was not a focal point and only discussed pain by happenstance. (e.g. Jordan et al., 2019; Hulpke, 2017; Kappes et al., 2013; Harrington & Tjan, 2008; Schelfhauert & Crittenden, 2005) since those articles could not provide conceptual and/ or empirical understanding on the pain in consumption experiences and/ or pain's sources, and determinants. Nevertheless, we included those articles in which although pain was not the focal point of investigation they included a discussion on the pain construct (e.g. Korczynski, 2003; Morris et al., 2002) since they could further enabled us to better understand pain's sources, and determinants. The total number of the articles included in the final data pool of marketing/ consumption/ business studies exploring the topic of pain was 48.

Next, using a snowballing technique we searched in the references of our final data pool of marketing/ consumption/ business studies (n=48) to identify articles on pain from other literature streams in the fields of psychology, sociology, biology, neuroscience, and medical research. Our purpose, at this point, was not to cover all articles ever published in the aforementioned fields exploring the topic of pain but rather to combine perspectives and insights from different fields (Snyder, 2019). We also conducted a keyword search of the following keywords in the title, the abstract, or the keywords of the paper: ((pain) and (pleasure)) in the PsycInfo database to identify possibly relevant highly-cited and important studies that were not cited in the articles published in the marketing, consumption/ business journals. Having developed a list of 64 papers exploring the topic of pain, we screened their articles to examine if the topic of pain was indeed their focus. All 64 paper from the fields of psychology sociology, biology, neuroscience, and medical research included in the final data pool (Table 2).

Insert Table 2 here

2.2. Critical analysis and creative synthesis

The second stage referred to the critical analysis of the articles in our data pool and the creative synthesis process. Having settled a data pool of 112 (48 from the marketing/ consumption/ business fields and 64 from the other fields), we first proceeded by analyzing the articles qualitatively. In particular, we conducted thematic analysis by carefully exploring the studies from each examined research field with an eye toward identifying concepts, patterns, findings and gaps in understanding pain. We reported the results of each study by aggregating them under thematic headings, writing memos and highlighting promising research themes (Cronin & George, 2020).

Then we proceeded in a creative synthesis where we integrated existing frameworks/ perspectives with insights gained from the critical analysis to formulate new perspectives regarding the topic of pain (Elsbach & Knippenberg, 2020). For example, we integrated the existing time perspective theory (Stolarski et al., 2018) with the theme of “pain perception” (e.g. Liu et al., 2018; Gacs et al., 2020). This process enabled us to expand the theoretical foundation of the specific topic of pain by providing an overview of its knowledge base, critically reviewing it, and re-conceptualizing it as new information (Snyder et al., 2016) until new research directions were generated (Elsbach & Knippenberg, 2020; Torraco, 2016).

3. Interdisciplinary insights into the concept of pain and its relationship with pleasure

To structure this section, we first discuss our findings on the concept of pain, its processes and underlying mechanisms (sources and determinants) and its relation to pleasure (see also figure 1). We then discuss on the pain’s relationship with pleasure.

Insert figure 1 here

3.1 The concept of pain and different types of pain

Pain is an umbrella term that can be described along many dimensions, including its severity (e.g., mild, moderate, severe), duration (e.g., acute, chronic), type (e.g., nociceptive, inflammatory, neuropathic) (Das et al., 2015), and category (e.g., physical, psychological). As a consequence, authors approaching pain from different disciplines and within diverse literature streams have used alternative definitions for different categories of pain. For example, Eagle and Harsh (1988) describe acute pain as a sharp sensation warning of something “alarming” within the body and chronic pain as constant and lasting for several months in duration. The absence of pain is often characterized as pleasure, which is more difficult to define. Indeed, scholars acknowledge that pleasure includes positive emotions/cognitions and have used a variety of names other than pleasure, including satisfaction, happiness, and hedonic tone or utility.

Pain’s primary function is to warn of present and potential harm, thereby promoting survival (Bateson, 1991). Indeed, evolutionary theory casts pain as a warning system, a sensory notification that protects the body from threat or danger. From this perspective, pain functions as an alarm that orients the recipient to a potential environmental threat to prioritize escape and recovery. Pain automatically evokes a fight-or-flight response that allows the recipient to briefly experience blunted pain sensations via neurophysiological responses that block pain receptors to achieve safety and subsequently heal (Dunkley et al., 2020).

Independent of its severity or duration, pain is generally distinguished into two main categories—physical and psychological pain—and involves negative emotions/cognitions. With regard to *physical pain* the most widely used definition within various fields (e.g., neuroscience, medical research) is the one given by the International Association for the Study of Pain (Kumar & Elavarasi, 2016; Leknes & Tracey, 2010), whereas *psychological pain* can be classified under different names, such as mental or emotional pain, and is defined accordingly (see Table 3).

Insert Table 3 here

The context in which pain is studied may also bring to light the different types of pain (including its relationship to pleasure). For example, the sadomasochistic literature provides four types of pain: (1) transformed pain, (2) autotelic pain, (3) sacrificial pain, and (4) investment pain (Dunkley et al., 2020; Newmahr, 2010). *Transformed pain* centers on the reframing of pain, such that pain is experienced as “not hurting” and instead is transformed almost instantly into pleasure. This discourse frames pain as an objective stimulus in which pain is real but rendered as something different; it does not hurt¹ and thus is not bad. *Autotelic pain* describes the enjoyment of actual pain: the pain hurts, but the hurt feels good. The intersection of pain and pleasure with respect to autotelic pain is the experience of pain hurting in a way that is enjoyable. *Sacrificial pain*, or pain for the greater good, frames pain as a steadily undesirable sensation that individuals suffer in the sacrifice (e.g., punishment, discipline). *Investment pain* is an unpleasant stimulus that promises future rewards; reward comes as a result of the pain or from having withstood pain (vs. pleasure being taken from pain itself). Table 4 provided examples of associated pleasures with each of these different types of pain.

Insert Table 4 here

Although literature exploring pain in the sadomasochistic context uncovers these types of pain, *sacrificial pain* and *investment pain* can exist in other contexts as well. For example, many religious people are willing to endure pain during pilgrimages (e.g., Cova & Cova, 2019), reflecting sacrificial pain. Moreover, sacrificial pain is an integral part of the tattooing experience (Atik & Yildirim, 2014). Together with the marks left on a tattooed person’s skin, pain materializes and ‘solidifies’ the abstraction of tattoos and, in this way, shapes the individual’s identity, memory, and spirituality: “The process of tattooing draws amorphous or

¹ A distinction should be made between hurt and harm. The sensation of being hurt can be arousing and enjoyable, whereas harm is considered something negative that causes damage and is typically not desirable (Dunkley et al., 2020).

overwhelming interior elements (thoughts, emotions, memories) out and materialises them through the infliction of pain” (Pagliarini, 2015, p.6). *Sacrificial pain* is also a critical element in intensely physical sports. For example, long hikes such as the Inca Trail (Cutler et al., 2014) generate moments when the mental self is forced to acknowledge the physical self and the body is forced to cope with pain. These moments of difficulty, of overcoming pain and struggle, lead to an understanding of the self and to a certain level of spirituality. *Investment pain* is a critical element in high-performance athletes, such as runners. Athletes can be oblivious to pain in the heat of competition, in which winning is the reward. Pain is a “form of bodily or physical capital, a bearer of symbolic value” (Loland et al., 2006, p. 65) and may be regarded by runners as the deposit, the investment, through which speed is extracted.

3.2. *Pain is subjective*

In general, pain is subjective; that is, the mind perceives pain and thus interprets it as such. This means that people do not have the same perception of painful stimuli, and thus some may be more vulnerable to pain than others and/ or may express pain differently (Craig et al., 2010). The main elements of pain vulnerability are pain sensitivity and pain catastrophizing. *Pain sensitivity* refers to the subjective evaluation of the intensity of pain. Gács et al. (2020) emphasize that people with an increased negative evaluation of the past may develop enhanced sensitivity and a stronger focus on pain, leading to a higher subjective intensity of actual pain. *Pain catastrophizing*² refers to the tendency to amplify the negative emotional value of the pain stimulus and the reduced ability to control pain-related thoughts in anticipation of, during, or after a painful experience (Quartana et al., 2009).

Some experiences are more painful than others; it depends on the interpretation of pain. Moreover, different people may perceive pain differently; it depends on intrapersonal and or interpersonal factors. According to Craig (2009), *intrapersonal* influences are what the person

² Factors of pain catastrophizing include rumination, helplessness, and magnification.

brings to the painful experience (personal history). That is, each person brings to painful events a range of potential behavioral reactions constrained by inherited adaptations (genetics) and life history (past experiences and memories) (Craig, 2009; 2010). Biological systems represent the inherited and the acquired dispositions allowing the investigation of the genetic and neurophysiological substrates of functional adaptations, the preoccupation of neuroscientists seeking to unravel the biological substrates of pain. Moreover, each person carries his or her personal history of experiences with pain-related events, including social connections within his or her unique culture. *Interpersonal* influences refer to the impact of the immediate environmental and/or cultural context that may influence pain perception and lead a person to ignore, ameliorate, or enhance pain. Figure 2 presents factors that influence how the individual perceives pain.

Insert Figure 2 here

3.3. *Processing of pain*

To experience pain, different parts of the brain play a more or less active role depending on the precise interplay of the factors involved in influencing pain perceptions, such as cognition, mood, and injury (Das et al., 2015). From a medical perspective, the area of the body from which sensations are elicited sends signals that convey the nature of those sensations to the brain, which in turn sends signals to the nerve cells. The nervous system contains pain receptors, called *nociceptors*, that detect signals for damaged tissue or threat of damage. In certain cases though, pain can arise in the absence of nociception, and in other situations, even high-intensity nociception can fail to produce a subjective experience of pain (Bastian et al., 2014).

What constitutes the “pain matrix” is not unequivocally defined, and literature is not always consistent regarding what brain regions should be included (Das et al., 2015). Although the purpose of our study is not to understand how pain works from a medical perspective, it

should be noted that researchers largely agree that the most typical regions found active during an acute pain experience are the primary and secondary somatosensory, insular, anterior cingulate, and prefrontal cortices and the thalamus. Other regions, such as basal ganglia, cerebellum, amygdala, and hippocampus, and areas within the parietal and temporal cortices can also be active depending on the particular set of circumstances for that individual.

Emotional (and physical) experiences related to pain perception are influenced by *memories of previous painful events*, by the current sensational experiences, and by the anticipation of subsequent pain. Different time perspectives, defined as the way individuals perceive their past, present and future, contribute to memorizing and recalling events experienced in the past and influence the expectations of actual or future events (Gács et al., 2020). Previous pain history predicts future pain development (Denk et al., 2014). For example, people who suffer pain over long periods (chronic pain) typically exhibit higher-than-normal thresholds for various types of pain; Dar et al. (1995) show that soldiers who had been severely injured during their military service had a significantly higher threshold and tolerance for thermal pain than soldiers whose injuries were lighter.³ Under chronic pain too, pain severity lowers the subjective severity of the pain.

Of note, individuals tend to remember painful experiences and forget pleasant ones. A potential explanation for this comes from Baumeister et al. (2001) who find that negative information receives more attention and more in-depth cognitive processing than positive news. Building on this notion, Keinan and Kivetz (2011) argue that painful experiences are often more memorable and thus ‘collectable’, given that those experiences often involve surprises and fascinating life stories. Berridge and Kringelbach (2013) indicate that the neural generators of intense pleasure are restricted neurochemically; for example, mesolimbic dopamine⁴ does

³ A reason for this is the cognitive account for the higher pain threshold, which is based on adaptation theory which suggests that evaluation of pain severity depends on the context in which the pain occurs.

⁴ Mesolimbic dopamine is the most popular brain neurotransmitter candidate for pleasure.

not cause pleasure but selectively mediates a motivational process of incentive salience, which is a mechanism for wanting rewards.

3.4. *The bio-physiological basis of pain*

Individuals experience pain through their senses, which are shaped by their unique characteristics. Thus, the sense of pain in response to a standard stimulus varies considerably between and within individuals. Pain sensitivity per se is *heritable* (for a review, see Crow et al., 2013). Everyone has a unique genome. Research has found that people without a specific chromosome cannot sense pain (Miaskowski, 2009) leading sometimes dramatic pain phenotypes, such as complete analgesia or extreme pain (Denk et al., 2014).

Nevertheless, senses to other stimuli may also shape the vulnerability to pain. For example, a painful experience might give individuals a sense of challenge and achievement (e.g., no pain, no gain), which in turn may enhance their inner identity, power, and self-transformation (Liu et al., 2018; Scott et al., 2017). For example, Scott et al. (2017) report that some individuals choose painful experiences to escape from their daily routines; they view pain from such experiences as a form of release from stresses of everyday life.

Further, endorphins (or endogenous opioids) and endocannabinoids play a significant role in the experience of painful stimuli. Consider, for example, an athlete engaging in intense exercise. During times of intense athletic exertion, endogenous opioids bind to receptors in the brain, which can blunt physical pain by reducing pain sensitivity (Holden et al., 2005). These endogenous opioids can also act on areas of the brain involved in the processing of rewards (Dunkley et al., 2020). Endogenous opioid release also underpins the state of *euphoria* experienced by some people after intense exercise, and this is due to the brain's reward system (Boecker et al., 2008). Opioids are necessary for hedonic experiences ("liking"), and dopamine helps get ready for them ("wanting") (Leknes & Tracey, 2010). From a medical perspective,

pain elicits the release of dopamine and endogenous opioids, which are linked to motivation, learning,⁵ and the experience of pleasure (Zubieta et al., 2001). Neural processes promote the release of inhibitory transmitters and increase the release of dopamine, enabling physical stress upon the body to be experienced as pleasurable. Dopamine more selectively mediates a motivational process of incentive salience, which is a mechanism for wanting rewards. Yet mesolimbic dopamine does not cause pleasure or “liking” at all (Berridge & Kringelbach 2013); instead, certain neurotransmitters, including serotonin, norepinephrine, and dopamine, play a role in spinal-descending inhibition of pain (Dunkley et al., 2020).⁶

In the context of physical exercise, intense athletic exertion also stimulates the production of endogenous cannabinoids, which act on the same cannabinoid receptors in the brain as marijuana. Endogenous cannabinoids produced during physical distress exert central effects on the brain, such as reducing anxiety, improving mood, and facilitating a sense of well-being (Calignano et al., 1998; Watkins & Mayer, 1982). These findings are important, and relevant to the marketing literature as they can elucidate on why some individuals might seek pain and what potentials gain they might be receiving from pain.

3.5. External factors affecting response to pain

3.5.1 Gender

Biological and social constructs, such as gender, can also influence pain (Tracey & Mantyh, 2007; Williams & Craig, 2016). Gender differences in pain perception may arise from differences in perceptual sensitivity or style, in cognitive and emotional ways of dealing with pain, and in social or occupational roles (Lamberg, 1998). Research shows that females have lower thresholds of pain, a greater ability to discriminate pain, and higher pain ratings or less

⁵ Reward involves three neuropsychological components: the hedonic affect of pleasure (“liking”), motivation to obtain reward (“wanting”), and reward-related learning (Berridge & Kringelbach, 2013).

⁶ This natural painkilling pathway includes the prefrontal cortex, the amygdala, and the hypothalamus and deeper parts of the brain and spinal cord, in which signals are sent to the sensory nerve cells receiving sensory input.

tolerance of noxious stimuli than males (Miller & Newton, 2006). Moreover, with regard to emotions, Rozin et al. (2013) show that females are more likely to enjoy sadness. Sheridan and Gregoricka (2020, p. 6) report that females have “superior capabilities” for pain, not only biologically, from their capacity for childbirth, but also socially, because they have greater freedom to express pain than men. Moreover, higher stress hormone levels in males result from memories of pain, indicating that anticipated pain translates into greater pain sensitivity (Sheridan & Gregoricka, 2020). American medicine has traditionally viewed males as more stoic; thus, when they do express pain, it is considered more severe than when a female does so. Indeed, according to Miller and Newton (2006), males are less likely to report pain, and when they do so, they often have difficulty explaining the extent of their pain experience. Women, however, are more likely to develop certain chronic pain conditions, as are older people, though in some instances, age may function as a protective factor (Denk et al., 2014).

More recent research reports that both estrogen and progesterone cause female pain responding, as high progesterone levels correlate with lower pain thresholds, while dynamic estrogen levels throughout the menstrual cycle are consistently recorded as a modulator of nociception (Archev et al., 2019). Archev et al. (2019) also report that testosterone may alter behavioral expressions of pain, and they propose that future studies would benefit from incorporating participants with chronic pain conditions to explore testosterone’s influence on pain.

3.5.2 Culture

Pain perception may also be influenced by cultural factors that impose societal roles that further influence the interpretation and expression of pain (Miller & Newton, 2006). Dubreuil and Dion, (2019), note that the spectacle of pain can be traced across all times and cultures, from the gladiators’ arena, to the ancient Olympic Games and the modern rugby games. Different cultures, however, react differently to pain. Indeed, Hobara (2005) identifies

culture as a factor that influences a person's reaction and expression of pain (for a review, see Cleland et al., 2005).

Attitudes toward and reactions to pain are learned in early childhood within the context of multicultural societies consisting of many ethnic subgroups, each with different beliefs, values, and customs (Villarruel & Ortiz de Montellano, 1992). For example, Hobara (2005) shows the traditional Japanese cultural emphasis on stoicism and the desirability of concealing pain and emotions, while Euro-American culture puts greater emphasis on the expression of personal feelings (see also Nayak et al., 2000). Traditional stoicism, a well-known characteristic of many Asian cultures, may also result in greater acceptance of pain and enhanced coping skills (Brena et al., 1990). Moreover, Thomas and Rose (1991) investigate differences in pain intensity experienced immediately after ear piercing in a group of Afro-West Indians, Anglo-Saxons, and Asians. They find that Afro-West Indians had significantly lower intensity levels of pain than Anglo-Saxons, who in turn reported lower levels of pain than Asians, suggesting that culture plays a role in how people perceive and express pain. Nevertheless, a fairly common misperception in the medical community is that black people feel less pain than their white counterparts, male or female (Sheridan & Gregoricka, 2020).

Moreover, Rozin et al. (2013, p. 446) report that the "enjoyment of the burn of chili pepper is more common and more extreme in Mexico than in United States." Rahim-Williams et al. (2012) conduct a systematic literature review and analysis of studies using experimental pain stimuli to assess pain sensitivity across multiple ethnic groups. They report potentially important ethnic-/racial-group differences in experimental pain perceptions and propose future research pathways with regard to ethnic-group differences in pain sensitivity. Moreover, they mention that given that previous studies have examined healthy young samples, further research that compares ethnic-group differences among older populations would be fruitful.

The idea that close interpersonal relationships help people cope with pain has received increasing support in social psychology (Master et al., 2009). Indeed, when recalling painful moments in life (e.g., a serious physical injury, a severe illness), many people find having a close other nearby soothing to help cope with the pain. Reimann et al. (2017) report that participants experienced less pain when receiving social support than when dealing with pain alone or engaging in non-support-related activities. Moreover, the social contexts of people's lives are powerful determinants of pain. Specifically, social factors determine the extent to which people experience pain; what they think, feel, and/or sense during a painful experience; and how they communicate their distress to others.

4. Pain and Pleasure in Marketing and Consumption Contexts.

Our investigation on the definitional issues of pain and the sources, determinants and consequences of pain was a necessary prerequisite to understand the various forms in which consumers approach and experience pain during marketing experiences and to also consider pain's applications to the marketing discipline. In the next subsections, we offer insights into the consumption of pain, attempt to explain why individuals might seek pain, and reflect on pain's applications for marketing theory and practice.

4.1. Pain and pleasure: a symbiotic relationship?

While conventional wisdom holds that people avoid pain and seek pleasure, many documented positive aspects of pain, as well as negative side effects of pleasure, exist. For example, pain offers many advantages to those experiencing it: it acts as a protective mechanism to help avoid bodily harm (Bateson, 1991), facilitates learning and motivation through the release of dopamine and endogenous opioids when experiencing pain (Zubieta et al., 2001), and promotes affiliation by arousing empathy from others, motivating social

connection, and enhancing group formation (Bastian et al., 2014; Leknes & Bastian, 2014). More important, however, pain facilitates pleasure by providing an important contrast for pleasurable experiences, increasing sensitivity to sensory input, and facilitating self-rewarding behavior (Bastian et al., 2014; Dunkley et al., 2020). As described in detail in section 3.4, the release of endogenous opioids and cannabinoids produced during physical distress exerts positive effects on the brain, such as improving mood and reducing anxiety and resulting in a state of euphoria experienced by some individuals after intense exercise. Moreover, physical pain helps individuals forget the daily stresses of everyday life and offers a temporary relief from emotional pain (Dunkley et al., 2020). As Liu et al. (2018, p. 337) conclude, “pain, as an intensified sensory experience, brings the body into sharp focus and provides a temporary relief from the busyness of our everyday life, thus satisfying people’s need to escape the mundane.”

By contrast, negative emotions may result from pleasurable activities, such as a deterioration of health and food disorders after frequent consumption of junk food (e.g., Berridge et al., 2010) or sadness and pain after watching a sad movie (Hanich et al., 2014). Moreover, close relationships with friends may lead to psychological pain through constant comparison and self-evaluation (Tesser et al., 1988). Finally, a significant achievement such as a promotion or the acceptance of an athlete to the Olympic games may enhance emotional stress, while failure may even lead to depression (Bennie et al., 2019).

Equally overlooked are the negative consequences of pleasure and pleasurable activities. Specifically, the human brain’s hedonic and reward circuits might lead to people to engage in excessive use of pleasurable but painful activities, such as the disproportionate consumption of junk food leading to obesity and food disorders (e.g., Berridge et al., 2010). Seeking pleasure is also often the motivation behind dangerous or unethical practices, such as gambling (Cotte, 1997), smoking (Leventhal & Avis, 1976), or risky traveling behavior (Fuchs, 2013). Thrill-seeking employees might sabotage their own company’s well-being (Harris &

Ogbonna, 2009), and thrill-seeking consumers might shoplift just “for fun” (Babin & Babin, 1996). Relatedly, Hart (2007) demonstrates how the endless pursuit of pleasure can leave people numb, stressed, increasingly unsatisfied, and, in the end, less happy.

All these instances indicate that different types of pain and different types of pleasure (i.e., social, sensory or intellectual pleasure) can exist simultaneously. For example, sensory/physical pleasure and autotelic pain can occur when eating red hot chili peppers, while intellectual pleasure can occur simultaneously with investment pain when an athlete wins a sports game (Bennie et al., 2019).

Taking into account the negatives of pleasure and positives of pain, we propose moving away from a binary distinction of pain and pleasure and conceptualizing a symbiotic relationship between pain and pleasure in many, if not most, life experiences and consumption practices. Scenarios in which people pursue experiences that combine pain and pleasure are frequent; a simple example is a large reward that is accessible only at the “price” of a small pain, such as the pleasure of eating hot curries or having a deep tissue massage. Hanich et al. (2014) explore the pleasure of watching sad movies and find that sadness led to enjoyment as it often had the power to move viewers. These are typical examples of hedonic reversals, that is, “the alteration of a usually innate negative experience into a positive experience” (Rozin et al., 2013, p. 439). Safety from pain causes a pleasant feeling of relief—relief from pain activates reward and valuation circuitry, such as the ventral striatum and the ventromedial prefrontal/orbitofrontal cortices (Leknes et al., 2008). Indeed, pain is associated with positive outcomes; pain may be evident in ice swimming or in various forms of therapy massage. Rozin et al. (2013) examine 29 hedonically rated items and show that people may enjoy initially negative experiences that the body (brain) falsely interprets as threatening (*benign masochism*). “This realization that the body has been fooled, and that there is no real danger, leads to pleasure derived from “mind over body” (Rozin et al., 2013, p. 441).

To explore *how* pain can lead to pleasurable moments, we draw from medical research to understand the processes of perceiving pain as pleasure. According to Dunkley et al. (2020), pain and pleasure are linked from the neurological overlap in the networks that *regulate* pleasure and pain, which allows pain to be experienced concurrently. These authors emphasize that pain can be consciously and immediately transformed in the brain after receiving the sensory input from nerve cells in the body,⁷ and there, the brain interprets it as pleasure and relays this back to the nerve cells being stimulated. In particular, the brain regulates the degree of pain it will experience through descending impulses mediated by the activation of endorphins (or endogenous opioids) and endocannabinoids. Indeed, the activation of the opioid system, which may be caused by either pain or pleasure, makes positive stimuli seem less unpleasant. For example, endurance running can produce a positive experience through the activation of opioid receptors. The brain's spinal cord circuit⁸ is thus an opioid-sensitive circuit that acts as pain volume control, with some painkilling circuits muting pain transmission through the activation of *opioids* and *endorphins*. In the next subsections, we turn our attention to marketing research and consumption practices of pain/pleasure.

4.2. Pain in marketing

While marketing research has investigated pain, much of the focus has been on negative aspects of pain, thus ignoring the nuanced symbiotic relationship between pain and pleasure. Investigation of painful but (somewhat) pleasurable experiences has significant implications for marketing theory and practice. Individuals may choose to consume painful experiences to

⁷ Leknes and Tracey (2010), however, argue that the processes underlying the subjective interpretation of a sensory event can be understood as the manifestation of an unconscious decision process. This decision process requires information about the homeostatic state of the individual (e.g., hunger), sensory input, and knowledge about impending threats and rewards. The basic premise for the decision process is that anything that is potentially more important for survival than pain should exert antinociceptive effects. This allows the animal to ignore pain and attend to other, more important events.

⁸ These brain–spinal circuits are influenced by psychological factors (e.g., emotions, context) that can modulate pain transmission (Lumley et al., 2011).

escape from their daily routines and use pain as a form of release from stresses of everyday life (Scott et al., 2017). Relatedly, developing close relationships with a brand can serve to alleviate physical pain. A series of experiments have recently revealed that brand love can insulate consumers against pain, given brands' ability to provide a resemblance of social connectedness (Reimann et al., 2017). In an ethnographic study on the consumption of spirituality, Cova and Cova (2019) confirm that the transformative power of pain can lead to a focus on the body and enhance the spiritual experience. Pain, then, becomes a means for accessing spirituality; it provokes corporal immersion in a spiritual context (Husemann & Eckhardt, 2019). Thus, tattooing, piercing, fighting, adventure racing, and extreme hiking all appear to depart from the dominant aversion to pain (and, therefore, the efforts made to avoid it) by allowing people to realize a kind of spirituality through pain.

The idea that consumers might be attracted to the consumption of pain may revolutionize the value propositions of many companies. While this concept is championed by service offerings, such as those by ice hotels, scary movies, spicy foods, roller coasters, bungee jumping, and the like, we argue that a more widespread adoption of painful pleasure is possible. The luxury industry, for example, could direct consumers to embrace the pain of (over)paying not as a necessary sacrifice but as a painful but cathartic experience that facilitates the pleasure of owning the luxurious product. Similarly, more mainstream companies can benefit from some consumers being "pain seekers" in particular (e.g., sports, transformational activities), though "pleasurably painful" products and services will not appeal to everyone to the same degree. Liu et al. (2018) show that consumers with a promotion mindset (attaining positive outcomes) are more interested in a service that emphasizes a pain element than consumers interested in avoiding negative outcomes (prevention mindset). Service marketers should therefore pay attention to hedonic framing when designing marketing communications to ensure congruency

within message elements, but also congruency of hedonic framing with the service's broader positioning strategy.⁹

Another implication involves shoppers' "pain of paying." According to Lee et al. (2019), the pain of paying is not a metaphor: spending activates a brain region (insula) associated with anticipated physical pain and financial loss and deactivates a brain region associated with anticipated gain (the medial prefrontal cortex). The pain of paying can be affected by the form of payment used for a transaction (e.g., cash, check, credit/debit card) (Shah et al., 2016). For example, consumers often buy a larger volume of goods when paying with credit cards rather than cash, even for regular purchases such as groceries (Lee et al., 2019). In general, the pain of paying varies across consumers, means of transaction, the size of the account from which resources are drawn to make a purchase, and perceived social support while spending the money (Lee et al., 2019; Shah et al., 2016; Soster et al., 2014; Xu et al., 2015). Marketers can therefore attempt to disassociate between the payment and receipt of the product or service. This argument might help explain the positive experience most consumers receive from the sharing economy model (e.g., booking an Airbnb, using Uber).

Pain is evident in a variety of service experiences, but these painful experiences may also deliver pleasure. Indeed, prior marketing research emphasizes that pain may be linked with positive and pleasurable outcomes (e.g., Cova & Cova, 2019; Scott et al., 2017). Even overcoming a small amount of pain might enhance the pleasure from that experience, as in the case of extreme sports. Consumers seem to be attracted to painful experiences first because, these are more memorable and collectable (Keinan & Kivetz, 2011), because they facilitate escape from a saturated self (Cova, 2021) and, finally, because a painful experience might

⁹ For example, CrossFit PHX uses the following advertising slogan: "The pain you feel today will be the strength you feel tomorrow!" This represents a pain frame coupled with a promotion-focused benefit that aligns with the brand's broader positioning.

confer them a sense of challenge and achievement, which in turn enhances their confidence, perceived power, and leads to self-transformation (Liu et al., 2018; Scott et al., 2017).

5. Discussion and Perspectives for future research

In this section, we turn to key directions for future research on pain (and its relationship to pleasure) in marketing and related disciplines and offer two propositions. Drawing on our exploration of pain and the discussion in section 4, we group the directions for future research under three key research themes and, in Table 5, provide sub-questions for each theme.

Insert Table 5 here

5.1. Research direction 1: pain perceptions and intertemporal decision making

Gács et al. (2020) suggest that time perspectives, can influence the way people experience pain. Taking these findings into account and bearing in mind that, as discussed in section 4.1, pleasure can also derive from the consumption of hedonic reversals (e.g., kayaking, skydiving), it would be useful to examine different individuals (with different time perspectives) who choose hedonic reversal activities, to better understand which types of individuals are more susceptible to hedonic framing that emphasizes pain in such experiences. Such an understanding is important because it may help marketers develop more appropriate advertising campaigns and positioning strategies.

Time perspectives may influence the way people perceive pain, because these perspectives are linked with their emotional experiences (Stolarski et al., 2018). According to Goldsmith et al. (2012), both positive and negative emotions can enhance the pleasure experienced from hedonic consumption. Nevertheless, time perspectives seem linked to different emotions, and thus it may be inferred that individuals with different time perspectives will demonstrate a different promotion (vs. prevention) focus and, consequently, will react differently to hedonic framing that emphasizes pleasure or pain.

Zimbardo and Boyd (2015) distinguish among five different time perspectives: (1) *past negative orientation*, which focuses on the failures experienced in the past; (2) *past positive orientation*, which is characterized by a positive view of past events; (3) *present-hedonistic orientation*, which emphasize a hedonistic pleasure attitude with an ignorance of future consequences; (4) *present-fatalism orientation*, which is based on a belief that events are predetermined by external factors and that the future is preordained; and (5) *future orientation*, in which individuals focus on planning and tolerate delays in gratification to achieve long-term aims. These time perspectives may influence individuals' vulnerability to pain as well as the way they perceive pain. This is mostly due to the link between time perspectives and individuals' emotional experiences (Stolarski et al., 2018).

For example, the past-negative time perspective is associated with several indicators of negative affectivity, such as depression and anxiety (Stolarski et al., 2018), thus demonstrating the past-negative time perspective of focusing on experiences associated with a negative emotion, such as pain or regret. We argue that individuals with this perspective are more likely to have a prevention focus (Higgins, 1997). Liu et al. (2018) show that consumers with a prevention (vs. promotion) focus react more favorably to hedonic framing that emphasizes pleasure and, as a consequence, may avoid hedonic reversals. In a similar vein, a present-hedonistic focus is characterized by an orientation to "present enjoyment, pleasure, and excitement, without sacrifices today for rewards tomorrow" (Zimbardo & Boyd, 1999, p. 1278) and reflects a hedonistic, risk-seeking attitude toward time and life. Moreover, a present-hedonistic orientation is positively associated with openness to experience (Stolarski et al., 2018), and thus it may be inferred that individuals with a present-hedonistic orientation will mostly have a promotion focus because such a focus is concerned with growth (Liu et al., 2018), and growth results from openness to new experiences.

A past positive orientation is characterized by a positive view of past events (Gács et al., 2020). Nevertheless, the past positive orientation is not clearly linked with positive or negative feelings, and therefore it is difficult to know whether individuals with this orientation will demonstrate a promotion or a prevention focus. A present-fatalism orientation is associated with a fatalistic, helpless, and hopeless attitude toward the future and life. “It lacks the goal focus of future-oriented individuals or the emphasis on excitement of hedonists. Instead, it is associated with a belief that the future is predestined and uninfluenced by individual actions, whereas the present must be borne with resignation because humans are at the whimsical mercy of fate” (Zimbardo & Boyd, 1999, p.1275). As a consequence, individuals with a present-fatalism orientation are more likely to react the same to either pleasurable or painful experiences. The future dimension is characterized by planning for and achieving future goals (Stolarski et al., 2018), and thus it may be inferred that individuals with a future orientation are more likely to have a promotion focus (Higgins et al., 1997), because such a focus is concerned with achievement and growth (Liu et al., 2018).

Taking the aforementioned discussion into account, we formulate the following propositions for future research to confirm or reject :

- P1.** Consumers with present-hedonistic or with a future orientation will react more favorably to (pleasurable) pain activities when evaluating service offerings that combine pleasure and pain (e.g. they will avoid hedonic reversal activities).
- P2.** Consumers with past positive orientation or with a present-fatalism orientation will react the same either to service offerings that combine pleasure and pain (e.g. they will avoid hedonic reversal activities) or to pleasurable activities.
- P3.** Consumers with past-negative time perspective will react less favorably to (pleasurable) pain activities when evaluating service offerings that combine pleasure and pain (e.g. they will avoid hedonic reversal activities).

5.2. Research direction 2: painful experiences may be “consumed” as status symbol

By willingly accepting (and *paying* for) a painful experience, individuals experience pain not as passive suffering but as an action, suggesting that the “ability to absorb punishment becomes a semiheroic sign of courage and endurance” (Morris, 1991, p. 54). The same way that courage is “demonstrated not by a complete absence of fear [but] by showing sufficient discipline to act when one is afraid” (Spaaij, 2008, p. 377), ultimate luxury is not paying for comfort and an easy life but earning bragging rights for achieving something *despite* the pain it inflicts upon oneself. Consumers’ willingness to sacrifice pleasure for ‘status’ was recently confirmed in experiments by Desmichel and Krekels (2020) who found that consumers who earned (vs not earned) their wealth preferred non-healthy (vs healthy) luxury goods. Rejecting pleasure, or accepting and embracing pain is evident in many subcultures—for example, many professional athletes, army veterans, religious followers, and others all proudly show off their scars, limps, and other injuries as “badges of honor.” An indisputable sign of *status* gained after experiencing pain signals (at least among members of the same subgroup) what we conceptualize as *earned* luxury. Specifically, earned luxury is a form of luxury that a person cannot buy (so is not available to everyone) but, instead, must earn through a process involving a painful or difficult experience or ritual; in this sense, the person is earning the right to brag about achieving something despite the pain it has brought.

To illustrate this idea of earned luxury, every year a large number of people spend as much as \$100,000 and sometimes years of advance training to get a chance to sample a unique experience of luxury—climbing Mount Everest (Tarbox, 2012). Diverse crowds of people, ranging from hardcore climbers to casual explorers, most (though not all) with an appetite for experiencing and enjoying varying degrees of psychological and physical pain, pay hefty

amounts of money (for licenses, royalty fees, training, equipment, mountain guides, logistics, insurance, and medicine, as well as various opportunity costs, including a non-negligible potential loss of some funds in case the expedition is called off) to climb the mountain. When asked, they cite myriad reasons for spending that kind of money that few can afford—from proving to themselves that they can make it, to bragging to friends or on Facebook, to earning the hard way a badge of honor, to experiencing pain to toughen themselves (Ewert, 1994; Leste, 1983). This experience is not only expensive but also extremely risky (on average, six people die every year) and very painful. Burke et al. (2010) in an ethnographic study of Mount Everest climbers describe how they anticipated but also embraced pain: “You know you are going to have pain and be cold and miserable at times” (Climber 4: p.384) and “I like the feeling I get when I have worked so hard that I sun burnt the inside of my lungs. I have always enjoyed that kind of sensation. You know you are hurting either physically or mentally but at the same time you are totally coping with it” (Climber 3, p.384).

In a study of professional rugby players in Wales, Howe (2001, p. 296) finds that pain “becomes a positive indicator of hard work,” and Young (1993) describes how professional athletes receive “official recognition” from teammates and fans for playing through pain and injury. Normalization of pain occurs often in many sports contexts (Roderick, 2006; Dubreuil and Dion, 2019); for example, in boxing an athlete must “harden oneself to pain” (Wacquant, 1992, p. 246). Smith (2008, p. 131; emphasis added) performed an extensive ethnographic study on how professional wrestlers deal with pain and concluded that “pain becomes *attractive* to wrestlers because it is given substantive meaning that encompasses denial, authenticity, solidarity and dominance.” *Denial* is about normalizing pain as part of “doing business,” *solidarity* focuses on the social connections between wrestlers, and pain also functions to assert *dominance* and respect. Regarding authenticity, performers also “frequently flaunt their painful marks and bruises in a sado-masochistic fashion. Visible indications of pain like limping,

bruises, bleeding, scars, and red marks are commonly flaunted, legitimating the realness of hurt and sacrifice” (Smith, 2008, p. 141). Amateur athletes engage in similar behavior as well. Willig (2008) interviewed extreme sports practitioners and found that their experiences combine seemingly contradictory feelings of pleasure and pain. He also concludes that “while participants tended to talk about pain and injury as undesirable dimensions of the experience, there was also a sense in which some degree of physical suffering was a necessary part of pushing oneself to one’s limits, and beyond” (p. 695). All these examples showcase how undergoing pain can manifest as a sign of status, indisputable evidence of having suffered through something challenging.

Future research, therefore, could expand on the idea of ‘earned’ luxury and ‘painful leisure’ and attempt to answer the following propositions for future research :

P1 : consumers will value “earned” luxury more than experiences of “paid” luxury.

P2 : Photos, trophies (Harris and Magrivos, 2022) and various memorabilia are used to solidify the painful, liquid experiences in order for them to be communicated to others.

P3 : The link between pain and status is more complicated than previously thought. A painful experience’s effect on perceived status will be non-linear (inverted-U shape) so that small amounts of pain will lead to more perceived status up to a point and larger amounts of pain will have negative connotations for the person experiencing the painful experience.

5.3. Research direction 3: types of pain and individuals’ prevention/promotion focus

Liu et al. (2018) conclude that consumers with a promotion (prevention) focus react more favorably to a pain (pleasure) frame when evaluating service offerings that combine pleasure and pain. Yet they call for future research to try to gain a deeper understanding of consumer responses to various types of pain. That is, some types of pain may be desirable or

undesirable, meaning that those who enjoy the experience of pain may not necessarily enjoy all types of pain (Dunkley et al., 2020). For example, transformed pain does not hurt (is desirable); pain is perceived as pleasant. Autotelic pain hurts in a way that is enjoyable (desirable); pain is perceived as pleasant as well. In sacrificial pain, people suffer in the sacrifice (not desirable) and thus do not perceive it as pleasant. In investment pain, reward comes from having withstood the pain and thus is not perceived as pleasant.

All this means that, in some cases, people who do not perceive pain as pleasant will probably demonstrate a prevention focus and will react differently to hedonic framing that emphasizes pleasure or pain and, thus, to consumption. Taking this into account, we propose the following:

P1. Consumers with a promotion focus will react more favorably to transformed, autotelic, sacrificial, and investment pain when evaluating service offerings that combine pleasure and pain.

P2. Consumers with a prevention focus will react less favorably to transformed, autotelic, sacrificial, and investment pain when evaluating service offerings that combine pleasure and pain.

5.4. Other Suggestions for future research

We should note that our discussion on the future directions in this article is not exhaustive but selective, focusing on key future research areas we consider especially pertinent to the symbiotic relationship between pain and pleasure. Researchers may view other issues, not discussed here, as especially salient and we hope that our study will aid future research to produce complementary work and enrich the discussion around pain in marketing. For example, there is limited research on the effect of sharing pain with others. The bonding effects of shared pain reported by Bastian et al. (2014) might have implications for consumption, for

example when sharing a pleasurable painful experience with friends and acquaintances. Further, while we have referred throughout the paper almost exclusively to the intentional pain which is ‘sought’ by consumers, future research could focus on incidental pain and explore its links with pleasure. Similarly, while we referred to counterhedonic behaviours such as consumption of a sad movie and spicy food, future research could focus on consumption after (or due to) more acute psychological pain such as social rejection or heartbreak. Finally, it is worth keeping in mind that the effect of Covid-19 and the increased mortality salience in consumers mind might negatively affect the appeal of pain.

6. Conclusion

In this study we aimed to advance our understanding of a relatively ignored and complicated phenomenon of simultaneous pleasure and pain in consumption practices and investigate its applications to the marketing discipline—from both a scholarly and a managerial perspective. To do so, we conducted an integrative literature review on pain and its links with pleasure, especially in marketing settings, and provided clarity on the definitions of pain; the sources, determinants, and consequences of pain; and the positive implications of pain. By synthesizing parallel but—until now—unconnected streams of literature, we advance novel theoretical insights leading to a more nuanced understanding of pain and related pleasurable manifestations. We also suggest ways to further explore pain in marketing and related fields (e.g., psychology). Overall, we conceptualize and explain pain within its symbiotic relationship to pleasure (and vice versa) and provide future research directions that can further enhance understanding of this nuanced domain. In addition, we contribute to marketing practice by offering actionable implications. Future research could benefit from this analysis and our ensuing suggestions by focusing on products and experiences that can be painful, but pleasurable and valuable, for various types of consumers and marketing settings. Pain can be

used, ethically and responsibly, to facilitate pleasure, status and luxury, escapism, and unique, memorable, and even more meaningful consumption.

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Table 1: Stages and steps in the conduct of the integrative literature review on pain

| Stage | Purpose | Steps | Results |
|---|--|--|---|
| Developing the data pool | <ul style="list-style-type: none"> • Articulate the boundary conditions that will guide the literature search using literature within marketing/ consumption/ business fields | <ul style="list-style-type: none"> • Conduct a keyword search using a range of databases to find studies exploring the topic of pain within the marketing/ consumptions and business disciplines • Find studies exploring the topic of pain from other disciplines using a snowballing technique - search in the references of the studies identified in the previous step | <ul style="list-style-type: none"> • Develop a list of studies on the topic of pain from the marketing/ consumption and business communities • Develop a list of studies on the topic of pain from the other research communities |
| Conducting a critical analysis and creative synthesis | <ul style="list-style-type: none"> • Capture emerging connected areas that need to be given voice about pain's application to marketing and consumption | <ul style="list-style-type: none"> • Conduct of thematic analysis in order to determine what the studies from the different research communities demonstrate about the topic of pain • Proceed with a creative synthesis of the themes, identifying also possible relationships among perspectives | <ul style="list-style-type: none"> • Critically discuss where findings from studies across research fields converge, diverge, and are disconnected • Offer novel theoretical insights and future research directions, on the intersection of pain, pleasure, and consumption. |

Table 2: Authors of the studies included in the integrative review

| Marketing/ consumption/ business fields | Psychology field | Other fields (sociology, biology, neuroscience, and medical research) |
|--|---|--|
| <p>Aaker & Lee, 2001; Aggarwal & Meng, 2006; Andrade & Cohen, 2007; Bagchi & Block, 2011; Bradford et al., 2005; Cavusgil, 2007; Chark & Muthukrishnan, 2013; Chase & Dasu, 2001; Cutler et al., 2014; Dixon & Verma, 2013; Fenwick, 2002; Frost & Robinson, 1999; Harnish et al., 2018; Harnish & Roster, 2019; Hung & Labroo, 2011; Karampournioti et al., 2018; Kashmiri et al., 2019; Kelting et al., 2019; Kirmani & Rao, 2000; Kramer et al., 2012; Kranzbühler et al., 2019; Lee & Tsai, 2014; Letiche & van Mens, 2002; Liu et al., 2018; Mcdonagh et al., 1982; Mogilner et al., 2008; Morse, 2006; Polman et al., 2018; Prelec & Loewenstein, 1998; Quispe-Torreblanca et al., 2019; Raghbir & Srivastava, 2009; Reimann et al., 2017; Rick et al., 2008; Scott et al., 2017; Sheehan & Van Ittersum, 2018; Shah et al., 2016; Shiv & Nowlis, 2004; Soman, 2003; Soster et al., 2014; Thomas et al., 2011; Thunström et al.,</p> | <p>Ackerman et al., 2020; Archey et al., 2019; Bastian et al., 2014; Bolger, 1999; Cleland et al., 2005; Craig, 2009; Gacs et al., 2020; Hanich et al., 2014; Higgins, 1997; Iyar et al., 2019; Kolb & Whishaw, 2018; Kugelmann, 2000; Leknes & Bastian, 2014; Leknes & Tracey, 2010; Lumley et al., 2011; MacDonald & Leary, 2005; Master et al., 2019; Mee et al., 2006; Mee et al., 2011; Meerwijk, E. L., & Weiss, 2011; Orbach et al., 2003; Ortony & Turner, 1990; Stolarski et al., 2018; Storm & Storm, 1987; Tesser et al., 1988</p> | <p>Bateson, 1991; Berridge & Kringelbach, 2013; Berridge et al., 2010; Boecker et al., 2008; Brena et al., 1990; Calignano et al., 1998; Cox & Wood, 2013; Crow et al., 2013; Dar et al., 1995; Das, 2015; Denk et al., 2014; Doyle et al., 1993; Dunkley et al., 2020; Eagle & Harsh, 1988; Gear et al., 1999; Hobara, 2005; Holden et al., 2005; Holden et al., 2001; Jensen et al., 1986; Kumar & Elavarasi, 2016; Leknes et al., 2013; Leknes et al., 2008; Mansour et al., 2014; Miaskowski, 2009; Miller & Newton, 2006; Moayedid & Davis, 2013; Newmahr, 2010; O'Connor et al., 2008; Quartana et al., 2009; Rahim-Williams et al., 2012; Riley III et al., 2002; Rozin et al., 2013; Sheridan & Gregoricka, 2020; Thornhill & Thornhill, 1990; Tracey & Mantyh, 2007; Villarruel & Ortiz de Montellano, 1992; Watkins & Mayer, 1982; Whipple & Komisaruk, 1988; Williams & Craig, 2016; Zubieta et al., 2016</p> |

| | | |
|--|--|--|
| 2018; Thunström & Jones Ritten 2019; Tsai & McGill, 2011; Weaver & Frederick, 2012; Weingarten et al., 2019; Xu et al., 2012; Zuzworsky et al., 2011 | | |
|--|--|--|

Table 3: Selected definitions on pain

| | |
|---------------------------|---|
| Pain | “An experience blending the material and the social, mind and body, and human and nonhuman elements as interwoven entities” (Scott et al., 2017, p. 24) |
| Physical pain | A state where severe discomfort and uncomfortable sensation is experienced (Miller et al., 1983, see also Kumar & Elavarasi, 2016) |
| | “A distressing experience associated with actual or potential tissue damage with sensory, emotional, cognitive and social components” (Williams & Craig, 2016, p. 2420). |
| Psychological pain | “A lasting, unsustainable, and unpleasant feeling resulting from negative appraisal of an inability or deficiency of the self” (Meerwijk & Weiss, 2011, p. 402). |
| | “A diffuse subjective experience ... differentiated from physical pain which is often localized and associated with noxious physical stimuli” (Mee et al., 2006, p. 681) |
| Mental pain | “A wide range of subjective experiences characterized as an awareness of negative changes in the self and in its functions accompanied by negative feelings” (Orbach et al., 2003, p. 228). |
| Emotional pain | “A feeling of brokenness resulting from a traumatic event, which suddenly shatters the external cover that represents a person’s identity and facilitates connection with others” (Bolger, 1999, p. 357). |

Table 4: Linking types of pain with specific types of pleasure.

| Types of pain | Examples |
|--|--|
| Transformed pain (pain is experienced as “not hurting” but instead is transformed almost instantly into pleasure) | Benign envy (pain and pleasure simultaneously) |
| Autotelic pain (pain hurts, but the hurt feels good) | Eating hot chili pepper (pain and pleasure simultaneously) |
| Sacrificial pain (a steadily undesirable sensation of suffering in the sacrifice, such as discipline) | Tattooing experience (pleasure as outcome) |
| Investment pain (an unpleasant stimulus that promises future rewards; reward comes from having withstood the pain, instead of pleasure being taken from pain itself) | Win the Olympic games after years of exhaustive practice (pleasure as outcome) |

Table 5: Overview of research priorities to study the symbiotic relationship between pain and pleasure in consumption practices (source: the authors)

| Research direction | Research mechanisms | Exemplary research questions |
|---|--|--|
| Research direction 1: Pain Perceptions and Time Perspectives | Apply theoretical perspectives from psychology to explore consumption phenomena, in which pain and pleasure occur simultaneously | <ul style="list-style-type: none"> • How do different consumers (with different time perspectives) choose hedonic reversal activities? • Does time orientation affect the interaction between pain and pleasure in hedonic consumption experiences? • Should marketers communicate their products services or experiences differently across people’s time perspective? |
| Research direction 2: | Explore painful (but pleasurable) consumption experiences by | <ul style="list-style-type: none"> • How can the interaction between pain and pleasure in service offerings of luxury brands inform marketing strategy? |

| | | |
|--|---|---|
| <p>pain may be “consumed” as status symbol</p> | <p>conceptualizing pain as a status symbol to stimulate new knowledge</p> | <ul style="list-style-type: none"> • Do consumers perceive “earned” luxury differently than “paid” luxury? • How can new experiences be better designed so that pain (and pleasure) is co-created between the customer and the provider? • What are the boundary conditions in the relationship between pain and “status” in consumption experiences? • How can the pain of paying for luxury products be manipulated to faceplate pleasure in consumers? • How is “proof” of pain solidified and transferred for communication and/or gratification with friends and acquaintances? |
| <p>Research direction 3: types of pain and individuals’ prevention/promotion focus</p> | <p>Apply constructs from biology that have not been previously studied to explore consumption phenomena in which pain and pleasure occur simultaneously</p> | <ul style="list-style-type: none"> • Do consumers with a prevention (vs promotion) focus react to different types of pain when evaluating service offerings that combine pleasure and pain? • What other individual or contextual characteristics affect consumers’ response to products/services that involve a degree of pain? • Can experiences with small amounts of pain facilitate escapism for consumers and alleviate psychological pain? |
| <p>Further research questions.</p> | <ul style="list-style-type: none"> • Will the experience of the Covid-19 pandemic and increased mortality salience of consumers negatively affect the appeal of pain? • Can people become accustomed to pain and effectively build pain tolerance in the form of “pain reserves” or “pain capital”? • How can companies’ market activities that involve a level of physical and emotional pain responsibly? • Can consumers be segmented along a pain–pleasure continuum and other useful factors—for example, “pain seekers” vs. “pain avoiders” or “pain-indefferents”? • What are the underlying mechanisms of marketing placebo effects and how are linked to service offerings of pleasurable pain activities? • How companies that provide pleasurable painful activities pain affect trust and loyalty to them? • Are consumers more likely to select a (ppleasurable) pain activity when pain is experienced with other or when is experienced individually? | |

Figure 1: Our integrative framework of the aspects in the literature review (source: the authors)

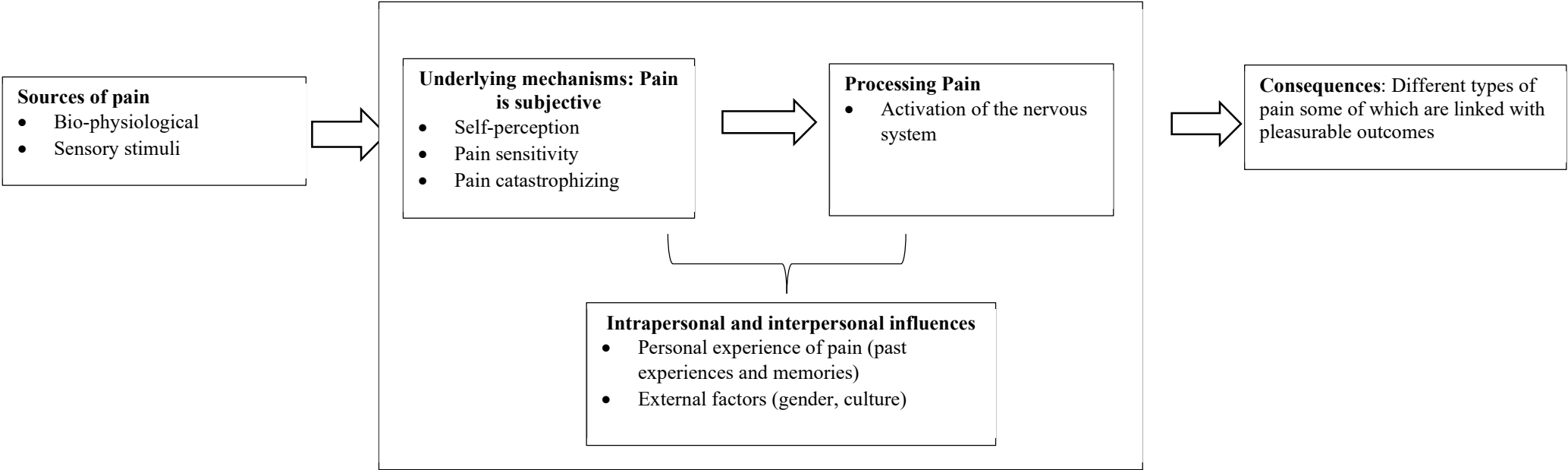


Figure 2. Factors that influence pain perception (source: the authors)

