Consumer escapism: Scale development, validation, and physiological associations

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**ABSTRACT**

The notion that individuals use consumption to escape unpleasant states is of great interest to both marketing researchers and managers, yet no measurement scale for consumer escapism exists. Moreover, escapism is theoretically linked to aversive physiological reactions that could be measured through smart devices, yet no empirical evidence backs up this claim. By integrating different theoretical perspectives on consumer escapism, we develop and validate a three-factor, nine-item Consumer Escapism Scale that consists of reality detachment, cognitive distraction, and anticipated relief. Six studies including two field studies provide scale purification tests, discriminant and nomological validity, experimental and predictive validity, and evidence for a significant association between the proposed measurement scale and aversive physiological reactions. Our findings equip managers with both self-report and physiological metrics to measure consumers’ desire to escape, and inform actionable strategies on when to market such escapes.

1. Introduction

In a world where war, climate change, and global pandemics are a harsh reality, people often use consumption to escape from worrisome thoughts and daily stress. From a consumer perspective, escapism defines any consumption behavior that distracts people away from a stressor (Mandel et al., 2017). The $234.9 billion global film and videogaming industry (Businesswire, 2021), the $220 billion global tourism industry (Statista, 2021), and the still thriving $1.3 trillion global videogaming industry (Games Industry, 2022), and the still thriving $1.3 trillion global videogaming industry (Businesswire, 2020) speak to the marketing relevance and economic impact of products and services that offer an escape. Consequently, firms offering such products and services are increasingly interested in knowing when people want to escape and through which consumption behaviors.

Despite its relevance, the measurement of escapism has received limited attention in marketing. The literature predominantly focuses on identifying whether a consumption behavior represents a form of escapism (Mandel et al., 2017, for a review), without measuring the actual motivation to escape. The few existing related instruments focus on sub-dimensions of coping (e.g., avoidant coping, Duhachek, 2005). However, conceptualizing escapism as a sub-dimension of coping foregoes the heterogeneous motivations that lead consumers to escapes. In reality, consumers do not just escape to avoid thinking about their problems (Duhachek, 2005), but also because they wish to detach from an unpleasant reality (Hirschman, 1983; Kubey, 1986), such as when binge watching or videogaming, and because they anticipate relief from the stressor (Cova et al., 2018), as is the case with holidays and indulgent eating. A more complete understanding of consumers’ motivations to escape, their interrelationship, and construct measurement is important to both marketing scholars and practitioners. Of particular relevance to practice is the notion that consumers’ motivation to escape through consumption may be measured at the physiological level (Mandel et al., 2017), which is increasingly feasible in an era of widespread wearable technology capable of unobtrusive biometric measurement (PR Newswire, 2020).

Against this background, we pursue two interrelated objectives. Our primary objective is to develop a consumer escapism scale as a set of interdependent measures of consumers’ conscious motivation to engage in escapism—namely cognitive distraction, reality detachment, and anticipated relief. We address our primary objective in studies 1–5, where we develop the Consumer Escapism Scale (CES) and demonstrate its convergent, discriminant, nomological, experimental, and predictive validity using both online and laboratory samples from the U.S., the United Kingdom, and Australia. Our secondary objective is to provide...
exploratory evidence for the association between the proposed scale and physiological metrics so to assist managers interested in the development of automated systems of detection of consumers’ motivation to escape through physiological data. The psychological and medical literatures point at reductions in heart-rate variability (HRV), or the time variation between consecutive heartbeats, as a reliable indicator of aversive physiological states commonly associated with stressors (O'Connor et al., 2021; Shaffer & Ginsberg, 2017). Consequently, if compensatory escapism is theoretically linked to aversive physiological states (Mandel et al., 2017), reductions in HRV should be significantly associated with increased scores in the CES. We address our secondary objective in Study 6.

Our findings provide several important contributions to marketing literature on consumption and escapism. First, extending the current conceptualization of escapism as a form of avoidant coping (Duhachek, 2005), we take a novel approach to develop consumer escapism as a set of independent yet conceptually related dimensions that capture motivations of cognitive distraction (Duhachek, 2005; Mandel et al., 2017), reality detachment (Hirschman, 1983; Kubey, 1986), and anticipated relief (Cova et al., 2018). In doing so, we situate the CES within its nomological network of likely antecedents, test its experimental and predictive validity across a range of situations, and examine its temporal stability across time of the day and day of the week. Second, we address calls for further research into the physiological associations of compensatory consumption behavior (Mandel et al., 2017) by demonstrating that reductions in HRV, which are a physiological indicator of an aversive state, are significantly associated with increases in CES scores.

The findings have relevant implications for marketing managers. We provide a robust psychometric measurement scale that can be used to assess individuals’ different motivations to escape through product or service consumption. Our experimental validity studies provide actionable evidence on the effects of both individual (i.e., self-discrepancies, Study 4) and environmental factors (i.e., time of the day, Study 5) likely to increase the desire to engage in such consumption activities. Second, our physiological study (Study 6) illuminates which HRV metrics can be used to identify consumers’ motivation to escape, providing unique insights at the intersection of marketing and wearable technology (Orazi & Nyilasy, 2019).

2. Conceptual development

While the exact origins of the word “escapism” have long been debated, the concept traditionally derives from the word escape and indicates the physical act of removing oneself from sources of distress and disaster (Heilman, 1975). In literary studies, Eliot (1921/1982) identified in poetry the means to escape into something more pleasant through imagination and immersion, and Ransom (1930) considered escapism the act of detaching from reality by engaging in fantasy. These earlier conceptualizations of escapism place emphasis on the act of mentally removing oneself from the qualms of daily life by accessing a more pleasant realm. In other words, they conceptualize escapism as a form of “reality detachment”.

Psychological research mainly considers escapism as a sub-dimension of coping, or how consumers deal with negative cognitions and emotions. In developing a measurement scale for different types of coping, Duhachek (2005) defines the sub-dimension of avoidant coping as consumers’ “attempt to take their mind off the problem and distract themselves by doing other things” (p. 46). Avoidant coping is however considered a form of ineffective coping, as it merely distances the individual from the stressor without addressing the source of stress (Duhachek, 2005; Roblee et al., 1990). In other words, the psychological literature predominantly conceptualizes escapism as an act of “cognitive distraction”.

In marketing, consumers’ motivation to escape through consumption is central to compensatory consumption behavioral theory (Mandel et al., 2017). Accordingly, individuals experiencing a discrepancy between their current and ideal selves suffer aversive reactions at the affective, cognitive, and physiological levels. These negative states in turn motivate consumers to engage in consumption behaviors aimed at compensating for the self-discrepancy or original cause of distress. Within this theoretical framework, escapism is one of five compensatory consumption strategies whereby individuals do not attempt to resolve the cause of distress but instead try to distract themselves from the self-discrepancy (Mandel et al., 2017), for instance by binge eating (Mandel & Smeesters, 2008) or listening to music (Kim & Rucker, 2012). In this sense, the conceptualization of escapism from a marketing perspective is similar to that of avoidant coping (Duhachek, 2005), in that it focuses exclusively on “cognitive distraction”.

While escapism is widely regarded as ineffective in solving the source of distress, it may still offer a moment of relief (Lišjak et al., 2015). The notion that escapism relies on detaching from an unsatisfactory reality and suppressing negative cognitions to get a moment of rest and recuperation is further elaborated by Cova and colleagues (2018), who identify in holidays abroad and immersion in nature a form of restorative escape. These authors focus on consuming escapes as a form of “anticipated relief”. Table 1 provides a summary of different conceptualization of escapism from literary, psychological, and marketing scholarship. In the next section, we combine different scholarships on escapism to advance a three-dimensional consumer escapism construct.

2.1. Multi-dimensionality of consumer escapism

Combining the contributions of different scholarships, we conceptualize consumer escapism as the individual motivation to engage in a consumption behavior for one or all of the following reasons: (a) removing oneself from a current, aversive reality (Hirschman, 1983; Kubey, 1986; Ransom, 1930), (b) avoid thinking about a stressor (Mandel et al., 2017), and/or (c) getting a moment of relief (Cova et al., 2018). Operationally, we view consumer escapism as a multi-

<table>
<thead>
<tr>
<th>Reference</th>
<th>Definition</th>
<th>Core function(s) of escapism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hirschman (1983)</td>
<td>“Escapism offers the individual an avenue to a more desirable state of being than the one presently experienced. Hence, an activity may be undertaken not for its intrinsic qualities, but rather for its utility as an anxiety reduction mechanism.” (p. 64)</td>
<td>• Getting away from problems and pressures</td>
</tr>
<tr>
<td>Kubey (1986)</td>
<td>“Escapism means that most people have, due to unsatisfying life circumstances, again and again cause to ‘leave’ the reality in which they live in a cognitive and emotional way.” (p. 313)</td>
<td>• A form of reality detachment and compensation for self-alienation, dissatisfaction due to deficits in close social interactions, and/or dissatisfaction due to deficits in work-related interactions</td>
</tr>
<tr>
<td>Duhachek (2005)</td>
<td>“Ineffective escapism consists of avoidant, helpless, passive, and reckless coping behaviours.” (Roblee et al. 1990, p. 506)</td>
<td>• A form of avoidant coping that motivates passive or reckless avoidance of stressors</td>
</tr>
<tr>
<td>Mandel et al. (2017)</td>
<td>“Escapism involves deliberately directing one’s thoughts away from a self-discrepancy by turning attention elsewhere; in the domain of consumer behaviour, escapism can manifest in focusing one’s attention to eating or shopping.” (p. 139)</td>
<td>• Motivator of compensatory consumption behaviors aimed at distracting from the source of self-discrepancy</td>
</tr>
</tbody>
</table>
dimensional construct reflective of three dimensions: reality detachment (Hirschman, 1983; Kubey, 1986), cognitive distraction (Duhachek, 2005; Mandel et al., 2017), and anticipated relief (Cova et al., 2018). These dimensions are conceptually distinct but part of the same motivational set. Consequently, we conceptualize them as first-order constructs of a higher-order construct (i.e., escapism), rather than independent dimensions with their own antecedents and consequences (Bartsch et al., 2022). Below, we discuss these dimensions in detail.

2.1. Reality detachment

We define reality detachment as consumers’ motivation to distance themselves from the domain in which the stressor originates (i.e., “I don’t want to be here”). Reality detachment refers to the need to temporarily withdraw from an unpleasant reality into a more desirable one through imagination and immersion (Eliot, 1921/1982; Kubey, 1986). At the core of reality detachment lies the notion of separation and distancing from a stressor, which can occur in different domains including the self, social interactions, and work-related interactions (Kubey, 1986). The detachment from reality consumers seek can take the form of a state of immersion, such as when listening to or playing music. Reality detachment can also be more literal when consumers access another world through fantasy (Ransom, 1930). Through novels, movies, and videogames, people are transported into a different place and time that helps them forget about the real world (Orazi & van Laer, 2022). Consumers can also detach from their everyday stressors by physically removing themselves from that domain, such as when taking a holiday abroad (Cova et al., 2018).

2.1.2. Cognitive distraction

We define cognitive distraction as consumers’ motivation to take their mind off undesirable or unpleasant thoughts originated by the stressor (i.e., “I don’t want to think about it”). Cognitive distraction refers to the need to avoid thinking about the stressor by directing their attention elsewhere (Mandel et al., 2017; Stenseng et al., 2012). In this sense, cognitive distraction is well captured by avoidant coping (Duhachek, 2005), whose items mainly measure consumers’ need to take their minds off a problem. At the core of cognitive distraction is the desire to redirect attentional resources from the stressor to an alternative product or activity to avoid rumination (Lisjak et al., 2015). Sudokus and other games that require cognitive resources can focus attention away from the stressor and on the activity at hand, leaving little room for focusing on aversive thoughts. Similarly, when watching a movie, consumers know that the on-screen events are not actually occurring, yet suspending disbelief is cognitively taxing and distracts them from the stressor.

2.1.3. Anticipated relief

We define anticipated relief as consumers’ motivation to get a moment of respite from the current stressor (i.e., “I need a break”). Anticipated relief reflects the expectation that consuming some products and engaging in certain activities offers a temporary break from the stressor (Lisjak et al., 2015; Rohde et al., 1990). At the core of anticipated relief is the notion that escapism is not an adaptive strategy—escapism does nothing to resolve the source of the stressor (Duhachek, 2005; Rhode et al., 1990). As Cova and colleagues (2018) elaborate when discussing the restorative effects of escapism as a consumer practice, escapism can help carve out a moment of rest and recuperation: holidays, immersion in natural environments, and meditation can all create a moment of respite from the self-discrepancy or stressor (Baumeister et al., 2000).

2.2. Physiological correlates of consumer escapism

Compensatory consumption strategies such as escapism are motivated by a desire to offset the negative outcomes that a stressor causes at the cognitive, affective, and physiological levels (Mandel et al., 2017). While aversive physiological outcomes are theoretically linked to compensatory consumption strategies such as escapism (Mandel et al., 2017), no empirical evidence to date supports this claim. Therefore, in developing a measurement scale for consumer escapism, we investigate whether it significantly correlates with physiological markers commonly associated with aversive reactions that are germane to our theory.

The proposed dimensionality of consumer escapism rests on a motivational pull for reality detachment, cognitive distraction, and anticipated relief. Research on ego depletion (Baumeister et al., 2008) and self-regulation (Chen & Pham, 2018) all suggest that embodied self-regulatory resources are limited and deplete over time in response to stressors. Could consumers who escape a stressor do so in an attempt to stop depleting their embodied, self-regulatory resources? One key physiological marker of systemic depletion is heart-rate variability (HRV), or the variation in time variance of each consecutive heartbeat (Shaffer & Ginsberg, 2017). Converging medical and psychological research identifies HRV as a general indicator of systemic wellbeing influenced by sympathetic activity (i.e., the fight and flight response) and parasympathetic activity (i.e., conservation of resources and restoration) (Nelson et al., 2020; Shaffer & Ginsberg, 2017). Optimal levels of HRV reflect an efficient functioning of the autonomic nervous system and the ability to cope with and recover from stressors. Conversely, reductions in HRV tend to indicate systemic depletion (McCraty & Shaffer, 2015). If optimal levels of HRV reflect an ideal state of self-regulatory capacity to cope and recover from aversive states (Shaffer & Ginsberg, 2017), then reductions in HRV may instead signal a need to distance from the stressor, distract from stressful cognitions, and seek relief. Consequently, consumers scoring high on the CES should display physiological reactions associated with states of stress and systemic depletion. We thus predict our proposed scale will be strongly associated with reductions in HRV.

3. Scale development and validation process

We developed the scale for measuring consumer escapism following Gerbing and Anderson’s (1988) recommendations as well as recent scale-development studies (Bartsch et al., 2022; Böttger et al., 2017). The scale development and validation process involved item generation (Study 1), scale purification and initial validation by means of confirmatory factor analysis (Study 2), discriminant validity from similar scales and nomological net (Study 3), experimental and predictive validity (Study 4), temporal stability (Study 5), and physiological association tests (Study 6). Fig. 1 summarizes our research program.

3.1. Study 1: Item generation

In Study 1, we developed multiple potential items that could capture the three proposed dimensions of reality detachment, cognitive distraction, and anticipated relief. We relied on existing literature on escapism (Cova et al., 2018; Hirschman, 1983; Kubey, 1986; Mandel et al., 2017) to create an initial list of items. Following Böttger et al. (2017), we then expanded this initial pool of items by asking 200 MTurkers to recall the last activity they engaged in to escape unwanted thoughts or situations, and to deliberately state why they engaged in such an activity. The combined initial pool (available in the Web Appendix A) included 63 potential scale items for measuring consumer escapism. As a third step, and following established procedures (Böttger et al., 2017; Churchill, 1979), we submitted the scale items list to a panel of five senior marketing academics who evaluated each item on a 5-point scale from 1 = very bad fit to 5 = very good fit (M = 3.10, SD = 0.99). Expert evaluations are available in Web Appendix A. We retained all items whose average score was above the scale mid-point (>3.0). This preliminary content validation reduced the list to 30
items ($M = 3.71, SD = 0.97$).

We then conducted a sorting task to refine face and content validity. An independent sample of 50 raters recruited from MTurk was given the proposed definition of consumer escapism and its dimensions of reality detachment, cognitive distraction, and anticipated relief. They were then asked to group items according to each of the three dimensions, with the option of marking an item as unrelated to any of the three dimensions. We only retained items that were assigned to one of the three dimensions by at least 60% of the raters (see Böttger et al., 2017, for a similar cut-off). This procedure led to the elimination of 9 items, reducing the pool to 21 items: 8 for cognitive distraction, 8 for reality detachment, and 5 for anticipated relief (Table 2).

3.2. Study 2: Scale purification and confirmatory factor analysis

Study 2 administered the initial list of 21 items to 291 MTurkers ($M_{age} = 38.11; 39.2\%$ female) with the aim of purifying the scale and provide initial validation. Participants were randomly assigned to a writing task in either a control or escapism condition. In the control condition, participants were instructed to:

Please recall the most recent time you engaged in a consumption activity.

By consumption activity we mean any activity in which you consumed something, being it a product, a service, or an experience. Please describe this activity—what did you do, why did you do it, how you felt, etc.

In the escapism condition, participants were instructed to:

Please recall the most recent time you engaged in an escapist consumption activity.

By escapist consumption activity we mean any activity in which you consumed something, being it a product, a service, or an experience, to deliberately distract yourself from problems or unwanted thoughts. Please describe this activity—what did you do, why did you do it, how you felt, etc.

After completing the writing task, they rated the 21 scale items on a 7-point scale from 1 = strongly disagree to 7 = strongly agree. All items were presented in random order.

3.2.1. Iterative confirmatory factor analysis

Reliability and convergent validity of the scale were assessed following several rounds of iterative confirmatory factor analysis (CFA, see Bartsch et al., 2022, for a similar procedure). The first model specified was a three-factor confirmatory model with 8 items for cognitive distraction, 8 for reality detachment, and 5 for anticipated relief. CFA analyses were conducted using maximum likelihood estimation (software: AMOS 26). Fit indices of this first model did not meet the threshold values set by Hu and Bentler (1999) (CFI = 0.90; TLI = 0.87; RMSEA = 0.110; SRMR = 0.050). Consequently, as a first scale purification step, we identified and eliminated 4 items with low reliabilities ($<0.55$). A second CFA on a purified 17-item scale returned improved fit indices which still missed acceptable threshold values (CFI = 0.95; TLI = 0.94; RMSEA = 0.093; SRMR = 0.050). We then moved to inspecting items with high modification indices ($>20$) and consolidated redundant items with high error term shared variance (Arnold & Reynolds, 2003), eliminating 5 additional items. As a final step, we inspected the remaining 12 items for face validity and retained a three-factor, nine-item scale with three items for each dimension. A third CFA returned acceptable model fit (CFI = 0.98; TLI = 0.98; RMSEA = 0.071; SRMR =...
To what extent did you engage in the activity to...”

Cognitive distraction items
1. …not think about my problems
2. …direct my thoughts away
3. …distract myself from bad thoughts
4. …direct my thoughts away from bad thoughts
5. …keep my mind off things that are bothering me
6. …take my mind off a problem
7. …put off thinking about a problem
8. …think about my problems later

Reality detachment items
1. …escape from reality
2. …distract myself from reality
3. …forget about the real world for a while
4. …escape into a world of my own
5. …get lost in a fantasy world
6. …go to a place I can control
7. …take control in a different environment
8. …imagine a different role for me in the world

Anticipated relief items
1. …get a moment of relaxation
2. …get relief from my day-to-day activities
3. …get relief from everyday worries
4. …get a break
5. …relieve stress

Purification logic
Elimination of low reliability items (RD 6, RD7, RD8, AR1)
Inspection of high modification indexes and high shared variance across sub-dimensions (CD2, CD3, CD7, RD2)
Semantic inspection aimed at improving generalizability (CD8 implied too contextual in defining the source of the escape)

Model fit
- CFI = 0.90
- TLI = 0.89
- RMSEA = 0.107
- SRMR = 0.048
- CFI = 0.95
- TLI = 0.94
- RMSEA = 0.094
- SRMR = 0.035
- CFI = 0.98
- TLI = 0.97
- RMSEA = 0.070
- SRMR = 0.029

Table 2: Scale purification and iterative rounds of confirmatory factor analysis.

For the 21-item CES scale, the items were: “To what extent did you engage in the activity to...”

<table>
<thead>
<tr>
<th>Cognitive distraction items</th>
<th>Reality detachment items</th>
<th>Anticipated relief items</th>
<th>Purification logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. …not think about my problems</td>
<td>1. …escape from reality</td>
<td>1. …get a moment of relaxation</td>
<td>Elimination of low reliability items (RD 6, RD7, RD8, AR1)</td>
</tr>
<tr>
<td>2. …direct my thoughts away</td>
<td>2. …distract myself from reality</td>
<td>2. …get relief from my day-to-day activities</td>
<td>Inspection of high modification indexes and high shared variance across sub-dimensions (CD2, CD3, CD7, RD2)</td>
</tr>
<tr>
<td>3. …distract myself from bad thoughts</td>
<td>3. …forget about the real world for a while</td>
<td>3. …get relief from everyday worries</td>
<td>Semantic inspection aimed at improving generalizability (CD8 implied too contextual in defining the source of the escape)</td>
</tr>
<tr>
<td>4. …direct my thoughts away from bad thoughts</td>
<td>4. …escape into a world of my own</td>
<td>4. …get a break</td>
<td></td>
</tr>
<tr>
<td>5. …keep my mind off things that are bothering me</td>
<td>5. …get lost in a fantasy world</td>
<td>5. …relieve stress</td>
<td></td>
</tr>
<tr>
<td>6. …take my mind off a problem</td>
<td>6. …go to a place I can control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. …put off thinking about a problem</td>
<td>7. …take control in a different environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. …think about my problems later</td>
<td>8. …imagine a different role for me in the world</td>
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</table>

For the 17-item CES scale, the items were: “To what extent did you engage in the activity to...”

<table>
<thead>
<tr>
<th>Cognitive distraction items</th>
<th>Reality detachment items</th>
<th>Anticipated relief items</th>
<th>Purification logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. …not think about my problems</td>
<td>1. …escape from reality</td>
<td>1. …get a moment of relaxation</td>
<td>Elimination of low reliability items (RD 6, RD7, RD8, AR1)</td>
</tr>
<tr>
<td>2. …direct my thoughts away</td>
<td>2. …distract myself from reality</td>
<td>2. …get relief from my day-to-day activities</td>
<td>Inspection of high modification indexes and high shared variance across sub-dimensions (CD2, CD3, CD7, RD2)</td>
</tr>
<tr>
<td>3. …distract myself from bad thoughts</td>
<td>3. …forget about the real world for a while</td>
<td>3. …get relief from everyday worries</td>
<td>Semantic inspection aimed at improving generalizability (CD8 implied too contextual in defining the source of the escape)</td>
</tr>
<tr>
<td>4. …direct my thoughts away from bad thoughts</td>
<td>4. …escape into a world of my own</td>
<td>4. …get a break</td>
<td></td>
</tr>
<tr>
<td>5. …keep my mind off things that are bothering me</td>
<td>5. …get lost in a fantasy world</td>
<td>5. …relieve stress</td>
<td></td>
</tr>
<tr>
<td>6. …take my mind off a problem</td>
<td>6. …go to a place I can control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. …put off thinking about a problem</td>
<td>7. …take control in a different environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. …think about my problems later</td>
<td>8. …imagine a different role for me in the world</td>
<td></td>
<td></td>
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</tbody>
</table>

For the 12-item CES scale, the items were: “To what extent did you engage in the activity to...”

<table>
<thead>
<tr>
<th>Cognitive distraction items</th>
<th>Reality detachment items</th>
<th>Anticipated relief items</th>
<th>Purification logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. …not think about my problems</td>
<td>1. …escape from reality</td>
<td>1. …get a moment of relaxation</td>
<td>Elimination of low reliability items (RD 6, RD7, RD8, AR1)</td>
</tr>
<tr>
<td>2. …direct my thoughts away</td>
<td>2. …distract myself from reality</td>
<td>2. …get relief from my day-to-day activities</td>
<td>Inspection of high modification indexes and high shared variance across sub-dimensions (CD2, CD3, CD7, RD2)</td>
</tr>
<tr>
<td>3. …distract myself from bad thoughts</td>
<td>3. …forget about the real world for a while</td>
<td>3. …get relief from everyday worries</td>
<td>Semantic inspection aimed at improving generalizability (CD8 implied too contextual in defining the source of the escape)</td>
</tr>
<tr>
<td>4. …direct my thoughts away from bad thoughts</td>
<td>4. …escape into a world of my own</td>
<td>4. …get a break</td>
<td></td>
</tr>
<tr>
<td>5. …keep my mind off things that are bothering me</td>
<td>5. …get lost in a fantasy world</td>
<td>5. …relieve stress</td>
<td></td>
</tr>
<tr>
<td>6. …take my mind off a problem</td>
<td>6. …go to a place I can control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. …put off thinking about a problem</td>
<td>7. …take control in a different environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. …think about my problems later</td>
<td>8. …imagine a different role for me in the world</td>
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</tbody>
</table>

0.023. Items eliminated across each round of iterative CFA and the rationale for their elimination are displayed in Table 2.

3.2.2. Convergent and discriminant validity

We conducted instrument validity tests to ensure convergent and discriminant validity. All items loaded significantly on their respective factors, with loadings ranging from 0.74 to 0.92. All individual item reliabilities were above 0.50, ranging from 0.55 to 0.85. The composite reliability (CR) and average variance extracted (AVE) of cognitive distraction (CR = 0.93; AVE = 0.82), reality detachment (CR = 0.91; AVE = 0.77), and anticipated relief (CR = 0.88; AVE = 0.71) were above the recommended cut-off values, providing evidence of convergent validity (Bagozzi & Yi, 1988). The AVE of each latent factor was greater than its shared variance with any other construct, providing evidence for discriminant validity (Fornell & Larcker, 1981). The “Study 2” column in Table 3 provides a detailed summary for these results. A contrast test between the final three-factor model (χ² [24] = 58.91) and a one-factor alternative (χ² [27] = 280.65) supported the three-factor alternative (Δχ² [3] = 221.74).

3.2.3. Preliminary experimental validity test

As a final step, we conducted a preliminary test of experimental validity by testing the scale mean difference between the control and escapism condition to which participants were randomly assigned. We conducted t-tests on separate indexes obtained by averaging the corresponding 3 items for each dimension. Participants assigned to the escapism condition reported higher levels of reality detachment (Mescapism = 5.44, SD = 1.33 vs. Mcontrol = 3.68, SD = 1.95, t(291) = 8.97, p < .001), cognitive distraction (Mescapism = 5.57, SD = 1.36 vs. Mcontrol = 3.70, SD = 1.92, t(291) = 9.56, p < .001), and anticipated relief (Mescapism = 5.77, SD = 1.21 vs. Mcontrol = 4.54, SD = 1.72, t(291) = 7.04, p < .001).

Next, we assess the position and discriminant validity of the proposed escapism scale within its broader nomological net.

3.3. Study 3: Discriminant validity and nomological net

The objective of Study 3 was to test the discriminant validity of the nine-item consumer escapism scale and its relationship within the nomological network of related measures and likely antecedents. We conducted t-tests on separate indexes obtained by averaging the corresponding 3 items for each dimension. Participants assigned to the escapism condition reported higher levels of reality detachment (Mescapism = 5.44, SD = 1.33 vs. Mcontrol = 3.68, SD = 1.95, t(291) = 8.97, p < .001), cognitive distraction (Mescapism = 5.57, SD = 1.36 vs. Mcontrol = 3.70, SD = 1.92, t(291) = 9.56, p < .001), and anticipated relief (Mescapism = 5.77, SD = 1.21 vs. Mcontrol = 4.54, SD = 1.72, t(291) = 7.04, p < .001).

Next, we assess the position and discriminant validity of the proposed escapism scale within its broader nomological net.
the need to distance from a stressor and suppress thoughts that are detachment and cognitive distraction sub-dimensions, which capture reaction. In contrast, escapism is about avoiding the stressor altogether. Since NFC influences how consumers cognitively react and process different situations, we expect that it will also be positively correlated with the proposed emotion regulation scale (Gross and John, 2003). Scale items are included in Web Appendix B.

3.3.2. Results

Preliminary analyses. Replicating the results of Study 2, the nine-item scale displayed an acceptable model fit (CFI = 0.96, TLI = 0.97, RMSEA = 0.09, SRMR = 0.043). All items loaded significantly onto each other with all loadings scoring above 0.7 with the exception of “...get a break” (0.65). The AVE from the three sub-dimensions ranged from 0.63 to 0.86, confirming the convergent validity of the scale (Baggozzi & Yi, 1988). The “Study 3” column in Table 3 provides a detailed summary for these results.

Discriminant validity. To establish discriminant validity from five related constructs, we compared the AVE of the three sub-dimensions of consumer escapism against the squared multiple correlations of all constructs in the nomological network (Fornell & Larcker, 1981). Results confirmed that the squared multiple correlations between each pair of constructs were lower than the AVE of each latent construct (Table 4). We conclude that the proposed scale exhibits discriminant validity from alternative measures.

Nomological validity. To establish nomological validity, we compared the three sub-dimensions of the proposed consumer escapism scale with the alternative scale and the related constructs we previously identified (Nenkov et al., 2008). Table 5 displays the nomological net.

With regard to individual differences as antecedents, as expected, NFC only correlated with the cognitive distraction component of the proposed scale. Individuals high in NFC, which by disposition tend to engage in more effortful thinking (Cacioppo & Petty, 1982), are thus more likely to engage in escapism as a means to stop thinking. Emotional

Table 3

<table>
<thead>
<tr>
<th>Item</th>
<th>Study 2</th>
<th>Study 3</th>
<th>Study 4</th>
<th>Study 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipated relief (CR;AVE)</td>
<td>0.88</td>
<td>0.83</td>
<td>0.84</td>
<td>0.78</td>
</tr>
<tr>
<td>get relief from my day-to-day activities</td>
<td>0.85</td>
<td>0.80</td>
<td>0.81</td>
<td>0.79</td>
</tr>
<tr>
<td>…get relief from everyday worries</td>
<td>0.92</td>
<td>0.91</td>
<td>0.83</td>
<td>0.80</td>
</tr>
<tr>
<td>…get a break</td>
<td>0.74</td>
<td>0.65</td>
<td>0.77</td>
<td>0.74</td>
</tr>
<tr>
<td>Observations</td>
<td>n = 291</td>
<td>n = 249</td>
<td>n = 200</td>
<td>n = 82</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>0.99</td>
<td>0.96</td>
<td>0.98</td>
<td>0.97</td>
</tr>
<tr>
<td>Tucker-Lewis index (TLI)</td>
<td>0.98</td>
<td>0.97</td>
<td>0.97</td>
<td>0.96</td>
</tr>
<tr>
<td>Root mean square error of approximation (RMSEA)</td>
<td>0.07</td>
<td>0.09</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Standardised root mean squared residual (SRMR)</td>
<td>0.03</td>
<td>0.043</td>
<td>0.046</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Notes: CR = composite reliability; AVE = average variance extracted. All factor loadings are significant at p < 0.001.
nomological validity of the proposed scale. The following studies extend (see Table 4), demonstrating that consumer escapism and avoidant coping was still well below the AVE of cognitive distraction. The squared multiple correlation between cognitive distraction and avoidant coping mainly refers to the avoidance of negative cognitions (Duhachek, 2005). This result was expected as the avoidant coping scale items reflect on the self-regulation of emotional expression by focusing on the stressor (Gross & John, 2003), whereas escapism is about avoiding the stressor.

With regard to negative states as antecedents, all sub-dimensions of the consumer escapism scale significantly correlated with the negative affect items of PANAS. Moving to depression, both cognitive distraction and reality detachment were significantly correlated with the SDHS scale (Joseph et al., 2004), with the correlation to anticipated relief being marginally significant (p = .080). Overall, these results align theoretically with the notion that negative cognitive and affective states are antecedents of consumers’ motivation to escape (Mandel et al., 2017).

With regard to related measures, avoidant coping significantly correlated with all three sub-dimensions, in particular cognitive distraction. This result was expected as the avoidant coping scale items mainly refers to the avoidance of negative cognitions (Duhachek, 2005). The squared multiple correlation between cognitive distraction and avoidant coping was still well below the AVE of cognitive distraction (see Table 4), demonstrating that consumer escapism and avoidant coping are different constructs.

### Table 4
Correlations, Shared Variance, and Average Variance Extracted (Study 3).

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cognitive distraction</th>
<th>Reality detachment</th>
<th>Anticipated relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive distraction</td>
<td>0.84</td>
<td>0.54</td>
<td>0.49</td>
</tr>
<tr>
<td>Reality detachment</td>
<td>0.73</td>
<td>0.76</td>
<td>0.50</td>
</tr>
<tr>
<td>Anticipated relief</td>
<td>0.70</td>
<td>0.71</td>
<td>0.64</td>
</tr>
<tr>
<td>Avoidant coping</td>
<td>0.72</td>
<td>0.60</td>
<td>0.57</td>
</tr>
<tr>
<td>NFC</td>
<td>0.15</td>
<td>0.07</td>
<td>0.05</td>
</tr>
<tr>
<td>Negative affect</td>
<td>0.23</td>
<td>0.25</td>
<td>0.12</td>
</tr>
<tr>
<td>Depression</td>
<td>0.18</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>Need for cognition</td>
<td>0.13</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Emotional suppression</td>
<td>0.06</td>
<td>0.01</td>
<td>0.01</td>
</tr>
</tbody>
</table>

r = below the diagonal, $r^2$ = above the diagonal in italic, AVE = on the diagonal in bold.

### Table 5
Nomological net: Correlations with related constructs and antecedents (Study 3).

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cognitive distraction</th>
<th>Reality detachment</th>
<th>Anticipated relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidant coping</td>
<td>0.68**</td>
<td>0.60**</td>
<td>0.55**</td>
</tr>
<tr>
<td>Negative affect</td>
<td>0.22**</td>
<td>0.24**</td>
<td>0.11**</td>
</tr>
<tr>
<td>Depression</td>
<td>0.15**</td>
<td>0.11*</td>
<td>0.09</td>
</tr>
<tr>
<td>Need for cognition</td>
<td>0.13*</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Emotional suppression</td>
<td>0.06</td>
<td>0.03</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* p < 0.01; ** p < 0.05.

Emotional suppression was not significantly correlated with any of the three dimensions. Consistent with our theorizing, emotional suppression is based on self-regulation of emotional expression by focusing on the stressor (Gross & John, 2003), whereas escapism is about avoiding the stressor.

With regard to negative states as antecedents, all sub-dimensions of the consumer escapism scale significantly correlated with the negative affect items of PANAS. Moving to depression, both cognitive distraction and reality detachment were significantly correlated with the SDHS scale (Joseph et al., 2004), with the correlation to anticipated relief being marginally significant (p = .080). Overall, these results align theoretically with the notion that negative cognitive and affective states are antecedents of consumers’ motivation to escape (Mandel et al., 2017).

With regard to related measures, avoidant coping significantly correlated with all three sub-dimensions, in particular cognitive distraction. This result was expected as the avoidant coping scale items mainly refers to the avoidance of negative cognitions (Duhachek, 2005). The squared multiple correlation between cognitive distraction and avoidant coping was still well below the AVE of cognitive distraction (see Table 4), demonstrating that consumer escapism and avoidant coping are different constructs.

3.3.3. Discussion

Overall, the findings of Study 3 support the discriminant and nomological validity of the proposed escapism scale. The significant correlations between cognitive distraction and avoidant coping support the notion that existing measures, while valid, may capture only one key nuance of consumers’ motivations to escape. Supporting this intuition, the correlations between avoidant coping and both reality detachment and anticipated relief were lower. These results lend credence to the need to better dimensionalize consumer escapism. Taken together, the results of the first three studies converge toward a reliable instrument to assess consumers’ desire to escape.

4. Scale experimental and predictive validity

The results reported so far support the convergent, discriminant, and nomological validity of the proposed scale. The following studies extend the psychometric robustness of the proposed scale while providing evidence for its usefulness for marketers. One way to prove such usefulness is to measure consumers’ conscious desire to engage in escapism activities under different circumstances, for instance when experiencing a self-discrepancy (Study 4) or at different times of the day (Study 5). A second way to do so is to demonstrate predictive validity by understanding the instrumentality of different products and activities in matching consumers’ motivation to escape (Study 5). A third way is to demonstrate how the proposed scale is significantly associated to physiological signals to pave the way for the automated measurement of consumer escapism (Study 6). Following Hulland and Houston (2021) recommendations, we thus engage in both the “creative measurement of proxy behaviors” (p. 438) through a momentary assessment study (Study 5) as well as the measurement of unconscious physical manifestations such as heart rate and its variability (Study 6).

4.1. Study 4: Effects of Self-discrepancies on CES scores

We designed Study 4 to test the experimental and predictive validity of the proposed scale. Prior work has recognised escapism as a strategy to reduce the salience of self-discrepancies (Mandel et al., 2017). For example, Mandel and Smeesters (2008) found that mortality salience increases escapism through food overconsumption. Along the same lines, Kim and Rucker (2012) found that threats to intelligence created via false feedback on a math test led consumers to listen to music longer. Building on this prior work, we expect that manipulating a self-discrepancy (e.g., dissatisfaction vs. satisfaction with current self) should produce a significant variation in the proposed scale score, which in turn should significantly predict the anticipated enjoyment for consuming a product that affords an escape.

4.1.1. Method

Study 4 followed a single factor (self-discrepancy: control vs. prime) between-subjects design. Two hundred U.S. residents were recruited from Prolific participated in this study in exchange for £0.65. Two participants providing nonsensical answers to the priming task were removed from the sample, leaving 198 responses (Mage = 30.90, 46% female). To manipulate self-discrepancy, we developed a writing task where participants were asked to recall the last time they were not satisfied (vs. satisfied) with an aspect of themselves. In the dissatisfied condition, participants were instructed to:

- Please think about the last time you were not satisfied with an aspect of yourself. What was that specific aspect(s) and why were you not satisfied with yourself? Describe this in detail in the box below.

In the satisfied condition, participants were instructed to:

- Please think about the last time you were satisfied with an aspect of your identity or personality. What was that specific aspect(s) and why were you satisfied with yourself? Describe this in detail in the box below.

After completing the writing task, participants were presented with the CES, preceded by the introductory statement “Right now, to what extent would you like to engage in an activity to...”. We measured the
CES before the dependent variable as exposure to an escapist option could have compensatory effects and reduce the subsequent desire to escape. Next, we measured anticipated enjoyment to engage in escapist consumption as the dependent variable. Participants were provided with a description of the game “Escape Room in a Box: The Werewolf Experiment,” which was presented as a game simulating an escape room. Images of the game content were provided. Participants were then asked to rate the likelihood they would enjoy such a game (1 = not at all; 7 = a lot). Last, participants completed manipulation checks for self-discrepancy on a bipolar scale (“Think about how you view yourself right now. Using the scale below, please indicate if you feel more distant or closer to your ideal self”, 1 = distant from my ideal self; 7 = close to my ideal self) and provided socio-demographic information.

4.1.2. Results

Preliminary analyses. Replicating the CFA from previous studies, the CES demonstrated good model fit (CFI = 0.98, TLI = 0.97, RMSEA = 0.07, SRMR = 0.046) and reasonable discriminant validity, with the AVEs for all three dimensions (cognitive distraction = 0.77; reality detachment = 0.72; anticipated relief = 0.64), equalling or exceeding the shared variance between factors.

Manipulation checks. The self-discrepancy manipulation was successful. Participants assigned to the control condition reported feeling closer to their ideal self (M = 5.29, SD = 1.41), as compared to participants assigned to the self-discrepancy condition (M = 4.85, SD = 1.72; t(198) = 1.98, p < .049).

Experimental validity tests. An independent t-test analysis revealed a significant main effect of self-discrepancy on escapism (t(198) = 3.60, p < .001). Supporting our prediction, participants in the self-discrepancy condition reported a higher need for escapism (M = 5.46, SD = 0.97) compared to the control condition (M = 4.91, SD = 1.18). This result supports the experimental validity of the proposed scale.

Predictive validity tests. We conducted a series of hierarchical regressions to assess the predictive validity of the proposed scale. We first regressed anticipated enjoyment onto the nine-item scale, finding a positive significant effect (t(198) = 2.51, β = 0.176, p < .013). Next, we tested a mediation model with PROCESS Model 4 with the self-discrepancy as the independent variable (X), the CES scale as the mediating variable (M), and anticipated enjoyment as the dependent variable (Y). Results confirmed the significance of the indirect effect (β = 0.07, SE = 0.04, 95% CI [0.01, 0.17]).

4.1.3. Discussion

Study 4 provides evidence for both the experimental and predictive validity of the proposed consumer escapist scale. Inducing self-dissatisfaction led to higher escapism scores, providing evidence of experimental validity. Higher escapism scores in turn significantly predicted anticipated enjoyment from consumption, confirming the predictive validity of the scale.

4.2. Study 5: Time of the day effects and temporal stability

Study 5 aimed at understanding the susceptibility to time of the day effects and the test–retest reliability of the CES (Bartsch et al., 2022). As consumers navigate the day from morning to evening and the working week from Monday to Friday, they face a number of stressors. We expect that time of the day (morning vs. evening) will have an effect on CES scores, with higher CES scores in the evening rather than the morning. We predict a similar effect for day of the working week (beginning vs. end), with higher CES scores towards the end of the week. To verify these claims, we employ an experiential sampling design (Koval et al., 2019) and, by accessing consumers phones, we record consumers’ motivation to escape at different times of the day and at different days of the week.

4.2.1. Method

Study 5 was an interval-contingent ecological momentary assessment employing a mixed design, with time of the day (morning: 9am vs. evening: 6 pm) as the between-subject factor and day of the week as the within-subject factor. The smartphone app SEMA3 (Smartphone Ecological Momentary Assessment: Koval et al., 2019) was used to administer the study. SEMA3 delivers smartphone surveys at specific time intervals for a pre-defined period of time, in our case, either in the morning or in the evening, at two different days of the week.

Two-hundred undergraduate students from a major Australian university were invited to participate in exchange for course credit. Participants downloaded SEMA3 prior to commencing the study and were randomly assigned by the researchers to either the morning or the evening condition, in which they remained for the duration of the study. On Monday and Wednesday, at times differing based on the assigned condition, SEMA3 prompted an experimental survey measuring participants’ motivation to escape and the appeal of different consumption options. Participants assigned to mornings (evenings) received the experimental survey in the mornings (evenings) of both days. We only analysed data from participants who managed to complete the experimental survey both days (N = 95), allowing us to measure both the nomothetic variation (i.e., between-subject time of the day) as well as the idiographic variation (i.e., within-subject day of the week) of the CES. For each day, participants completed the nine-item CES, preceded by the introductory statement “Right now, to what extent would you like to engage in an activity to…” All items were randomized.

4.2.2. Results

A repeated measures MANOVA on CES scores for both days revealed a significant main effect of time of the day (F(1, 93) = 6.05, p < .016) and no significant interaction between time of the day and day of the week (F(1, 93) = 0.031, p = .860), confirming that the depleting effects of time of the day and time of the week are additive. Participants assigned to the evening (vs. morning) condition on Day 1 reported significantly higher motivations to engage in an escape (M_{Day1\_evening} = 4.96, SD = 1.20 vs. M_{Day1\_morning} = 4.25, SD = 1.81), and this difference increased in magnitude but remained significant on Day 3 (M_{Day3\_evening} = 5.33, SD = 1.40 vs. M_{Day3\_morning} = 4.68, SD = 1.55; F(1, 93) = 6.86, p = .01). Result followed the same pattern when using individual items of the CES.

Reality detachment. The main effect of time of the day was significant (F(1, 93) = 5.29, p < .024) and the interaction term with day of the week was not (p = .276), [M_{Day1\_evening} = 4.89, SD = 1.32 vs. M_{Day1\_morning} = 4.01, SD = 2.00; M_{Day3\_evening} = 5.12, SD = 1.52 vs. M_{Day3\_morning} = 4.67, SD = 1.65; F(1, 93) = 5.85, p = .017].

Cognitive distraction. We found a significant main effect of time of the day (F(1, 93) = 8.10, p < .005) and no significant interaction with day of the week (p = .580), [M_{Day1\_evening} = 4.77, SD = 1.44 vs. M_{Day1\_morning} = 4.26, SD = 1.88; M_{Day3\_evening} = 5.34, SD = 1.50 vs. M_{Day3\_morning} = 4.64, SD = 1.57; F(1, 93) = 4.52, p = .036].

Anticipated relief. We found an overall marginally significant main effect of time of the day (F(1, 93) = 2.64, p < .107) and no significant interaction with day of the week (p = .868), [M_{Day1\_evening} = 5.20, SD = 1.24 vs. M_{Day1\_morning} = 4.47, SD = 1.86; M_{Day3\_evening} = 5.54, SD = 1.50 vs. M_{Day3\_morning} = 4.74, SD = 1.72; F(1, 93) = 8.42, p = .005]. We note how the anticipation of relief was strongly significant on Day 3, as this sub-dimension is tied to getting a break from stressors which are likely to increase over the week.

Overall, these results provide converging evidence for the experimental validity of the CES scale, and demonstrate its overall temporal stability. Zooming into each sub-dimension, our results show that while

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2 Researchers interested in this method and application can avail themselves of a comprehensive set of video tutorial available at: https://sema3.com/manual.html.
reality detachment and cognitive distraction are temporally stable over the week, the motivational pull of anticipated relief increases over the week, consistent with self-regulation theory (Baumeister et al., 2008).

4.2.3. Discussion

Study 5 uses an ecologically valid design to understand the effects of time of the day on CES scores over time. These results converge with research on ego depletion and the notion that consumers’ self-regulatory resources are limited and deplete over time (Baumeister et al., 2008), increasing the motivation to seek consumption experience that can afford an escape. In addition to confirming the experimental validity of the CES in yet another context, this longitudinal observation yields actionable insights on when to best market products and services that afford an escape. In our last study, we provide a final test of validity by testing whether the proposed scale is significantly associated with aversive physiological reactions, as captured by reductions in heart-rate variability (Nelson et al., 2020; Shaffer & Ginsberg, 2017).

4.3. Study 6: Physiological validity

After developing a sound measure of consumer escapism, our secondary objective was to understand its associations with a relevant physiological marker, in our context heart-rate variability (HRV). Reductions in HRV have been linked to systemic depletion and the inability to cope with or recover from stressors (Nelson et al., 2020; Shaffer & Ginsberg, 2017). Similarly, low HRV values are employed in the medical literature to diagnose non-clinical depression (Kemp et al. 2012). While previous literature demonstrates the link between aversive psychological states and escapism (Mandel et al., 2017), and uses low HRV values to identify aversive psychological states (Shaffer & Ginsberg, 2017), no prior study illuminates the link between low HRV values and escapism. We do so by showing how low HRV baseline values in the general population, which are linked to an aversive state, lead to higher scores in the CES.

4.3.1. Method

Sample size estimation and recruitment. Absent clear guidance on determining sample size, we conducted a power analysis using G*Power. With five known regressors (i.e., escapism scale plus four common controls in HRV analyses, Shaffer & Ginsberg, 2017), a significance level of $\alpha = 0.05$, and a target power of 1-\beta $= 0.80$, detecting medium effect sizes would require a sample of 92 (details available in Web Appendix C). Cognizant of potential issues related to equipment failure, we recruited 100 participants over a three-month period. Participants were recruited in waves from the subject pool of a major Australian university in return for either partial course credit (N = 75) or $20 (N = 25)$. Eighteen participants were removed either due to equipment failure resulting in no recordings (N = 9) or because the time series contained an amount of noise that caused >10% of artefact correction and rendered the data unreliable (N = 9). This left 82 usable profiles for analysis ($M_{age} = 20.77$, 59.8% female).

Procedure. Participants approached the behavioral laboratory and sat in a waiting room where they read the explanatory statement before being invited in the laboratory. A research assistant welcomed the participants, ensured they had read the explanatory statement, and explained the study procedure before recording informed consent. Participants were told they would participate in two unrelated studies. In the first, participants were asked to complete several measures including the focal scale, all scales included in Study 2, as well as several unrelated questions. In the second, they were asked to provide a baseline recording of their HRV during resting conditions. The research assistant explained how to attach a portable electrocardiogram device below the left pectoral muscle through pre-gelled foam electrodes and accompanied participants to a changing room. After attaching the device and turning it on, participants returned to the laboratory. They were instructed to sit in an upright position and breath normally without moving for six minutes, after which they turned off the device, returned to the changing room, and were debriefed and excused.

Heart-rate variability. The raw ECG data was processed using Kubios HRV Premium v3.5.0 (Kubios, 2020). We used the absolute power of the low-frequency (LF) band (LF: 0.04–0.15 Hz) of HRV recordings as the main dependent variable for two reasons. First, reductions in the LF band (0.04–0.15 Hz) have also been associated with stress and systemic depletion (O’Connor et al., 2021), making it the ideal physiological measure to associate to higher escapism scores. Second, and unlike the high-frequency band, the LF band is less sensitive to paced breathing and is considered more reliable for 5-minute recording segments (Shaffer & Ginsberg, 2017).

Covariates. Several covariates with proven effects on cardiac tone were included in the model: age, gender, consumption of cardioactive substances prior to the study, and body-mass index (BMI = (weight in kg/(height)$^2$)). Kubios also allows for the automatic correction of noise due to technical and physiological artefacts which can undermine the reliability of a time series (Kubios, 2020). We thus included the percentage of corrected artefacts as a covariate.

4.3.2. Results

Preliminary analyses. Similar to studies 2–4, the proposed scale achieved good model fit ($CFI = 0.97$, $TLI = 0.96$, $RMSEA = 0.07$, $SRMR = 0.047$). The scale exhibited good discriminant validity, with the AVEs for all three dimensions (cognitive distraction $= 0.60$; reality detachment $= 0.63$; anticipated relief $= 0.60$) equal to or exceeding the shared variance between factors. Results are summarized in the “Study 6” column in Table 3. Correlations are available in Web Appendix C.

Full scale model. We used hierarchical regression to test the association between the proposed scale and physiological reductions in the absolute power of the LF band (LF ms$^2$). Model 1 (baseline) includes all the control variables ($R^2 = 0.09$, $p < .299$). Model 2 includes the full consumer escapism scale ($R^2 = 0.22$, $p < .011$) and shows a significant, negative association between escapism and LF ms$^2$ ($B = -255.91$ ($\beta = -0.38$), $SE = 75.84$, $p < .011$), such that increased consumer escapism scores are linked to reductions in LF ms$^2$. This finding supports Mandel et al. (2017) claim that escapism as a consumer consumption behaviour can have aversive physiological manifestations. Specifically, we demonstrate that an increase in the desire to escape is associated with reduced LF ms$^2$.

Sub-scale models. We also sought to observe how each scale dimension performed individually. Model 3 captures the association of cognitive distraction only ($R^2 = 0.28$, $p < .001$), Model 4 of reality detachment only ($R^2 = 0.16$, $p < .018$) and Model 5 of anticipated relief only ($R^2 = 0.13$, $p < .079$). Table 6 summarizes these results.

4.3.3. Discussion

The aim of Study 6 was to illustrate that the proposed CES is significantly associated with aversive physiological outcomes. Results confirm a significant positive association between reductions in HRV (absolute power of the LF band) and a desire to escape. These findings corroborate the link between aversive psychological states and HRV metrics identified in the medical literature (Kemp et al., 2012; Koenig et al., 2016; Shaffer & Ginsberg, 2017), while offering novel insights on the link between escapism and its aversive physiological antecedents (cf. Mandel et al., 2017). Crucially, this study provides important insight into the physiological underpinnings of escapism and illustrates the potential of a physiological metric that is increasingly available on common consumer wearable devices.

5. General discussion

Consumers often escape through consumption. Despite the popularity of escapism as a compensatory consumption strategy, previous research has not provided a measurement scale for consumer escapism. In this research, we develop and validate a nine-item, three-factor
Consumer Escapism Scale (CES) whose three dimensions of reality detachment, cognitive distraction, and anticipated relief are related but significantly different from each other. The CES combines different aspects of escapism as a strategy to temporarily remove oneself from the reality where the stressor originates (Hirschman, 1983) and distract one’s own attention from the source of distress (Mandel et al., 2017; Stenseng et al., 2012) with the anticipation of temporary relief (Cova et al., 2018; Chen & Pham, 2016). Our combined findings satisfy all criteria for the development of new psychometric instruments and provide key insights into the dimensionality, relationships, and measurement of consumer escapism.

5.1. Theoretical contributions

Our research offers two important contributions to marketing literature. First, we contribute to the escapism literature by developing a novel consumer escapism scale whose multi-dimensionality captures different motivations to escape through consumption. Building on Duahachek (2005), we conceptualize consumer escapism as a set of independent yet related motivations to be detached from reality (Hirschman, 1983), cognitively distracted (Duahachek, 2005), and relieved from a stressor (Cova et al., 2018). After providing evidence for its convergent and discriminant validity (Study 2), we situate the CES within its broader nomological network (Study 3). We demonstrate how the CES is related but distinct from avoidant coping, and then map its relationship within a broader nomological network (Study 3). We demonstrate how the CES is a valid measure of positive stress management (Study 3), specifically reductions in HRV tied to systemic deple- tion (Shaffer & Ginsberg, 2017). Theories of affect regulation (Chen & Pham, 2018) and compensatory consumption (Mandel et al., 2017) acknowledge that many of the aversive states that consumers seek to regulate or compensate have physiological manifestations. However, to this day evidence for the link between self-reported and physiological aversive states remained absent for what concerns escapism. By providing this evidence, the findings of Study 6 offer a substantive contribution to compensatory consumption models that include a physiological component (Mandel et al., 2017).

5.2. Managerial implications

Our findings are of interest to practitioners interested in how to measure consumers’ desire to escape through both self-reported scales as well as physiological proxies (i.e., heart-rate variability). In addition to measurement, we also provide actionable guidelines on when to target consumers with products and services that offer an escape. Our recommendations are summarized in Fig. 2.

Measuring Desire to Escape using the CES. Practically, the CES is a useful metric that marketing managers can use to assess the likelihood to engage in consumption activities that distance, distract, and promise a moment of relief from the stresses and worries of daily life. The heterogeneity in associations between the three sub-dimensions and related constructs (Study 3), consumption behaviors (Study 4), and physiologically aversive states (Study 6) suggests a degree of adaptability that allows academics and practitioners to use the individual sub-dimensions that best relate to the phenomena investigated.

Measuring Desire to Escape using Physiological Values (HRV). That the CES is significantly associated to reductions in HRV is particularly relevant to marketing managers in light of the rise of wearable technology. With the global wearable devices market expected to reach $62.82 billion by 2025 (PR Newswire, 2020), more individuals will be able to record, access, and supply heart-rate variability data in real time. The application of HRV data to marketing activities suggest an emerging opportunity for marketers interested in audience profiling and segmentation. If physiological data can provide a real-time indication that customers are experiencing an aversive state and are more motivated to escape it, then marketers can leverage an unprecedented opportunity to target audiences at the right time to maximize ad effectiveness. Being able to identify those consumers in greater need for an escape through reductions in HRV recorded by wearables such as an Apple Watch paves the way for more timely and effective targeting strategies (Orazi & Nyilasy, 2019).

When to Target. Our findings provide evidence on the circumstances in which consumers are likely more receptive to products and services offering an escape. Study 4 shows that individuals who are dissatisfied with themselves or otherwise suffer from self-discrepancies (e.g., feeling powerless, not intelligent, not good looking …) are more likely to score...
high on the CES. Incidentally, these people tend to share their feelings on social media (Reece & Danforth, 2017), and this information can be extracted through text-mining (Ludwig et al., 2013) and image-mining (Reece & Danforth, 2017), facilitating the identification of the profiles to target. The findings of Study 5 also provide insights on the temporality of escapism: consumers report higher CES scores in the evening rather than in the morning, and these scores significantly predict desire to engage in escapes. These scores tend to increase linearly over the week, consistent with the notion that stressors increase during the day and the week. We thus recommend “marketers of escapes” to reach consumers during the evenings, ideally in the second half of the working week.

5.3. Avenues for future research

Our research has limitations that provide opportunities for further research. Our tests of experimental and predictive validity focus on two manipulations and one consumption behavior. Future research is warranted to investigate the experimental validity of the CES beyond self-discrepancies and time of the day effects. We expect self-discrepancies such as not feeling intelligent (Kim & Rucker, 2012), mortality salience (Mandel & Smeesters, 2008), and powerlessness (Rucker & Galinsky, 2008) to increase self-reported scores of consumer escapism. It is also possible that broad aversive states—such as general states of stress triggered by societal events, socio-economic circumstances or political events—may load on all three sub-dimensions of the CES, given that stressed consumers want to distance themselves from the stressor and not think about it, and stress has proven effects in reducing HRV (O’Connor et al., 2021). Other states may significantly load on only one sub-dimension.

Following the same logic, some compensatory consumption behaviors may be predicted by some dimensions but not others. Table 7 provides a non-exhaustive list of consumption behaviors that scholars have associated with escapism. Which behaviors are best explained by the CES scale? Are there sub-dimensions of the CES scale that predict some consumption behaviors better than others? And what boundary conditions amplify or attenuate the predictive power of the overall CES and its sub-dimensions? These are questions worthy of further research. For example, researchers in the field of narrative consumption may be interested in explaining how different types of immersive media (book vs. movie) influence consumers’ motivation to escape. They may also be interested in understanding whether, holding media format, constant, differences in narrative genre increase or decrease motivation to escape. Metaverse consumption is another fruitful area of application for the CES. As a class of virtual game worlds where consumers can create, interact, and transact (Belk et al., 2022), metaverses configure “realms alternative to the everyday” (Orazi & van Laer, 2022) where consumers can escape to distract and recover. What sub-dimensions of the CES are more strongly associated to different metaverse activities and consumption behaviors? Does the CES reliably associate with motivation to access and purchase assets in the metaverse? While metaverse

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Table 7

<table>
<thead>
<tr>
<th>Context</th>
<th>Consumption contexts for future research.</th>
<th>Key references</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dating</td>
<td>Online dating, Sexual play</td>
<td>Piha et al. (2020)</td>
</tr>
<tr>
<td>Exercising &amp; Eating</td>
<td>Sport &amp; fitness, Unhealthy eating, Cooking</td>
<td>Astakhova et al. (2022); Heatherton &amp; Baumeister (1991); Hepburn (2019)</td>
</tr>
<tr>
<td>Gaming &amp; Role-playing</td>
<td>Playing boardgames, Tabletop role-playing, Live-action role-playing</td>
<td>Orazi &amp; van Laer (2022)</td>
</tr>
<tr>
<td>Metaverse &amp; Web 3.0</td>
<td>AR, VR, XR, Metaverse immersion, NFTs purchase</td>
<td>Belk et al. (2022)</td>
</tr>
<tr>
<td>Narrative consumption</td>
<td>Reading books, Watching movies, Social media</td>
<td>Feierreisen et al. (2021); Kircaburn &amp; Griffiths (2019)</td>
</tr>
<tr>
<td>Recreational substances</td>
<td>Alcohol use, Drug use</td>
<td>Jouhki &amp; Oksanen (2022)</td>
</tr>
<tr>
<td>Shopping</td>
<td>Impulsive shopping, Compulsive shopping, Materialism as a trait</td>
<td>Darrat et al. (2016)</td>
</tr>
<tr>
<td>Travelling</td>
<td>Holidays and tourism, Cultural re-entry</td>
<td>Ponsignon et al. (2021)</td>
</tr>
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</table>
consumption is often invoked as unitary concept, consumers can shop, game, learn, and much more. Future research is warranted to understand which sub-dimensions of the CES predict this diverse range of consumption behaviors.

Lastly, recent advances in wearable technology open up promising avenues for furthering our knowledge on the association between specific cognitive states and their physiological manifestation. Our findings that reduced HRV is associated with increases in the desire to escape, its physiological correlates, and compensatory consumption behaviors. Because wearable technology with in-built HRV recording capability (e.g., an Apple Watch) is already compatible with mobile phones, our findings suggest that measurement scales whose physiological associations have been established could substitute self-report measures in experiential sampling studies (we offer a demonstration of both methods in our studies 6 and 5, respectively). This paradigm shift would require respondents to only indicate their consumption behaviors at given time point (as opposed to the additional step of completing psychological inventories). Such a design could revolutionize the study of specific consumption behaviors by providing researchers with time series data that link HRV metrics with consumption behaviors.

CRediT authorship contribution statement

Davide C. Orazi: Visualization, Validation, Supervision, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization, Funding acquisition, Writing – original draft, Writing – review & editing. Kit Yi Mah: Visualization, Methodology, Investigation, Formal analysis, Conceptualization, Writing – original draft. Tim Derksen: Methodology, Formal analysis, Writing – review & editing. Kyle B. Murray: Supervision, Formal analysis, Resources, Validation, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jbusres.2023.113805.

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Kubioc (2020), Kubios HRV Premium
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