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Experiential Avoidance Related to Leisure Time Physical Activity

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ABSTRACT

Although there is growing interest in the reasons for avoiding leisure-time physical activity (PA), the impact of past negative experiences on leisure-time PA has received scant attention in the research literature. This research explores the triggers of negative PA experiences, their impact on leisure-time PA, and the role of experiential avoidance in leisure-time PA. The analysis of rich interview data on adults' past PA experiences and their current emotions and behaviors related to leisure-time PA showed that past negative PA experiences can hinder, prevent—or occasionally even increase—leisure-time PA. Furthermore, the study provides a classification of distinct triggers for negative PA experiences and adds on the research on experiential avoidance by extending it to the context of leisure-time PA.

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negative emotion;
negative experience;
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Introduction

The importance of physical activity (PA) for subjective wellbeing and health has been widely acknowledged (for a review, see Marquez et al., 2020). Accordingly, past research has indicated that physically active leisure enhances individuals' quality of life by providing positive experiences (Gorrell et al., 2024; Sato et al., 2014). Nevertheless, PA participation is declining worldwide (Guthold et al., 2018).

There is growing interest in the reasons for avoiding leisure-time PA, and past studies show that, for instance, medical conditions (Satariano et al., 2000), weight stigma experiences (Ajibewa et al., 2024), lack of interest (Satariano et al., 2000), and lack of an exercise companion (Satariano et al., 2000) limit individuals' leisure-time PA. Additionally, individuals' past negative PA experiences may prevent them from participating in future PA (e.g. Ashdown-Franks et al., 2022; Buman et al., 2010; Burberg et al., 2024). For instance, past negative experiences in school sports and physical education classes have been shown to evoke negative memories and emotions concerning feeling foolish and inept, being bored and without options, and getting bad feedback from others—and thus, they decrease voluntary PA participation later in life (Coakley & White, 1992). Furthermore, negative experiences related to

individuals' skills or body weight, shape, or size in PA contexts have been shown to have lasting consequences for PA behaviors and emotions (Ashdown-Franks et al., 2022; Beltrán-Carrillo et al., 2012).

The impact of past negative experiences on avoidance behavior in general has been captured with the experiential avoidance concept, in which conscious effort is made to control or escape from experiences of unwanted private thoughts and sensations (Chawla & Ostafin, 2007; Hayes et al., 1996). Past research has focused primarily on experiential avoidance related to smoking (e.g. Farris et al., 2016), drug usage (e.g. Forsyth et al., 2003), and obesity (e.g. Lillis et al., 2011) related to the maintenance of unhealthy behaviors. Much less is known about experiential avoidance linked to avoiding healthy behaviors, even though it has been suggested that, for instance, when it comes to PA, avoiding psychological or physical discomfort (such as fear or fatigue) can result in avoidance behavior through missing out on opportunities to be active, such as going to the gym, for a run, or for a walk (Kangasniemi, 2015).

To address this research gap, we investigate the following research questions: (1) What are the triggers of negative PA experiences?, (2) How do the negative PA experiences impact leisure-time PA?, and (3) What is the role of experiential avoidance in leisure-time PA? We answer these questions by collecting and analyzing rich qualitative data (consisting of 104 interviews) on individual adults' past PA experiences and their current emotions and behaviors related to leisure-time PA.

This study makes three contributions to the research on leisure-time PA. First, by identifying and classifying the triggers of negative PA experiences, the complex formation of negative experiences can be better understood. Second, by demonstrating the different ways in which past negative PA experiences can impact an individual's later leisure-time PA, this paper contributes to the study of leisure-time PA. Third, by expanding the concept of the experiential avoidance of healthy behavior—leisure-time PA—we add to the body of research on contextual behavioral science.

This paper is organized as follows. The next section outlines the theoretical framework of the study and presents the key literature for understanding emotions related to negative PA experiences and experiential avoidance. The following section reports on the empirical research that was conducted, and then the findings are elaborated upon. The final sections discuss the findings and outline the study's theoretical and practical implications.

Theoretical background

Negative physical activity experiences and related emotions

Negative experiences can be defined as recalled experiences associated with negative emotions (cf. Cardinal et al., 2013). Following the cognitive appraisal perspective, emotion can be defined as “a mental state of (action) readiness that arises from cognitive appraisals of events, social interaction of thoughts. It has a phenomenological tone, is accompanied by physiological processes, and is often expressed physically” (Kusstatscher & Cooper, 2005, p. 48). Emotions can be triggered by, for instance, events, individuals, issues, or situations (Lazarus, 1991; Roseman et al., 1990), and it is noteworthy that an individual's evaluations and interpretations of triggers, rather than the triggers per se, determine the individual's specific emotional reactions; therefore, identical triggers can provoke different emotions in different individuals because of diverging interpretations of those triggers (Kranzbühler et al., 2020).

Discrete emotions can be analyzed through the division of basic emotions that are segregated based on various categorizations (see Laros & Steenkamp, 2005) and that tend to follow the division between positive and negative emotions—positive emotions being pleasant and agreeable, and negative emotions being unpleasant and disagreeable sensations (MacLean, 1980). In consumer behavior, distinct negative emotions are often grouped into four categories based on the most typical emotion in that category (i.e. anger, fear, sadness, and shame) (e.g. Laros & Steenkamp, 2005; see Figure 1).

Table 1 shows examples of past research on negative PA experiences and lists the variety of negative emotions detected in these articles, ranging from the individuals' own body image to the behaviors of teachers and coaches relating to a single traumatic accident. Furthermore, it demonstrates the diversity of associated distinct negative emotions, covering the subcategories of all basic negative emotions.

Experiential avoidance of physical activity behavior

The impact of avoidance behavior and methods to overcome rigid and narrow behavior repertoires have been studied in the field of contextual behavioral science, especially with acceptance and commitment therapy (ACT) (Hayes, 2004; Hayes et al., 2006).

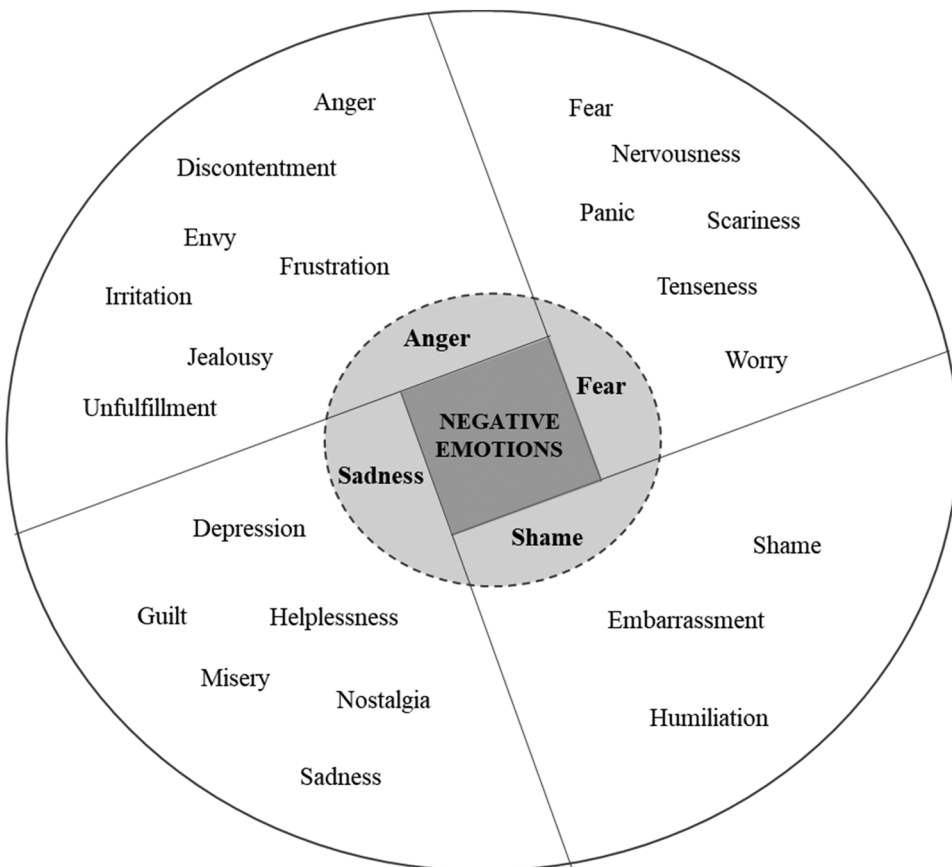


Figure 1. Categories of negative emotions (based on Laros & Steenkamp, 2005, p. 1441).

Table 1. Negative experiences and emotions related to physical activity.

Source	Negative experiences related to physical activity	Examples of negative emotions associated with the experience
Ashdown-Franks et al. (2022)	Women's negative experiences related to their body weight, shape, or size in physical activity contexts	Discontentment, embarrassment, fear, miserableness, panic, shame, worry
Beltrán-Carrillo et al. (2012)	Inactive adolescents' early negative experiences of rejection, exclusion, scolding, devaluation, contempt, and harassment by teachers and coaches	Discontentment, embarrassment, frustration, hate, sadness
Buman et al. (2010)	Past traumatic experiences (e.g. accidents and near-drowning experiences) during physical activities	Fear
Cardinal et al. (2013)	Negative experiences related to having been picked last for teams	Embarrassment, frustration, miserableness, sadness, shame
Costa et al. (2021)	Children's controlled form of motivation (i.e. behavior motivated by the desire for external rewards or fear of punishment)	Boredom, discontentment, frustration
Thompson et al. (2003)	Childhood and adolescent physical activity experiences related to team selection, unequal playing opportunities, a lack of skills taught in physical education, physically talented individuals receiving more attention than the less skilled, negative attitudes from teachers and coaches toward the less talented, increased competition, and very unpleasant clothes required to be worn during physical education classes in school	Embarrassment, fear, scariness, shame, worry

The aim of ACT is to increase adaptive behavior, called psychological flexibility, which refers to the ability to accept unwanted emotions or discomfort when striving for a meaningful life according to one's own values and important things in life (Hayes et al., 2013). ACT is a third-wave behavioral or contextual treatment in which, rather than changing psychological discomfort or symptoms directly, the aim is to change the function of these events and the individual's relationship to them through acceptance, mindfulness skills, and defusion (Kashdan & Rottenberg, 2010). ACT has been acknowledged as an evidence-based therapy in various domains and for various conditions (Gloster et al., 2020), including health and lifestyle behaviors (Yildiz, 2020) and PA (Manchón et al., 2020; Pears & Sutton, 2021). From the ACT perspective, psychological problems and unhealthy behavioral choices can emerge when cognitions (e.g. thoughts) and emotions, such as fear or shame, result in an inability or inflexibility where one behaves in a manner that does not serve one's own values. The maladaptive effects of cognitions on behavior are called cognitive fusion and experiential avoidance.

Cognitive fusion is defined as the tendency to be overly regulated and influenced by the content of one's mind, thoughts, memories, sensations, or feelings (Hayes et al., 2012), which can lead to a rigid, avoidant, and narrow behavioral repertoire that negatively impacts wellbeing. Cognitive fusion is a strong predictor of mental health

symptoms (Krafft et al., 2019) and of other health domains (Bodenlos et al., 2020), especially those associated with pain intensity (Özkan et al., 2017). With cognitive fusion, a person may think that having a particular emotion or sensation is a true appraisal given the situation, even when this emotional association occurred earlier in life. Therefore, an association with an unpleasant emotion can be felt at any point when thoughts, experienced through language and images, occur in one's mind, eliciting distress and suffering—for example, shame in the absence of a painful environmental stimulus (Hayes, 2004). Fusion patterns were found in PA experiences in Williams et al. (2008) study, where participants' emotional responses at baseline predicted the amount of PA they engaged in 12 months later, resulting in less pleasurable experiences leading to fewer PA minutes. Other studies have reported that fusion with barriers (e.g. being too busy, feeling too tired, or having a lack of time) can block people from engaging in PA (Kowal & Fortier, 2007; Salmon et al., 2003). Thus, a tendency to rigidly believe that one's own thoughts and emotions are “true” might be one phenomenon that explains or results in an inactive lifestyle.

Experiential avoidance refers to the avoidance or effort required to escape from private events that are experienced as aversive, even when behaving in that way leads to actions that are inconsistent with the things that are meaningful and important to oneself (Hayes et al., 2006). This is often a consequence of cognitive fusion, when the person does not have the skill to notice or observe and distance him- or herself from unwanted thoughts, emotions, or sensations. Substantial research evidence shows the maladaptive role of experiential avoidance in many psychological problems, health conditions, and task performance issues (e.g. Akbari et al., 2022; Hayes et al., 1996; Lillis et al., 2011). In relation to PA, avoidance of psychological or physical discomfort (e.g. anxiety, fear, or fatigue) can lead to avoidance behavior, such as skipping opportunities to be active by, for example, not going to the gym, or not going for a run or walk. Physical inactivity is also associated with being overweight and obese (Silveira et al., 2022), which may cause additional discomfort in situations involving PA due to weight stigmatization (Puhl & Heuer, 2009).

Methodology

We applied a qualitative approach to explore the interviewees' self-reported PA experiences. As part of a large research project, we conducted interviews with working-age individuals in three different workplaces (a primary school, a shopping mall, and a university) in two large cities in Finland. Even though Finland is situated on the northern ledge of Europe, outdoor recreation activities have traditionally been popular in all seasons in our culture, and for decades policy makers have emphasized the promotion of PA in the population as a whole (Ståhl et al., 2002; Suomalainen et al., 2024). Consequently, Finland has an active population in terms of leisure-time PA when compared to other countries (European Commission, 2018). Nevertheless, most Finns do not meet the national recommendations for PA (Bennie et al., 2017).

We used purposeful sampling of three different organizations to increase variations in data and add to the trustworthiness of the data and results (Campbell et al., 2020). First, the organizations were contacted and informed about the project, and agreement was sought for the interviews. All employees were informed and invited to take part

in the research. All volunteer participants were interviewed, resulting in 104 interviews: 24 from the school, 50 from the shopping mall, and 30 from the university.

The Ethics Committee for Human Sciences at the University of Turku, Finland approved data collection (ID: to 6/2019). Signed consent forms were obtained after participants were told both verbally and in writing about the research and their ability to withdraw at any time. We conducted semi-structured face-to-face interviews and used projective techniques (picture cards representing different PAs, including transport modes, recreational activities, exercise and sport activities, and active chores) to elicit interviewees' recall and self-reporting. The interview themes covered PA-related emotions, barriers, motives, and history, allowing interviewees to freely describe their experiences. We interviewed employees within their working hours, which was reflected in the length of the interviews being 40 min on average. The aggregate duration of the interviews was 23 h and 28 min. All interviews were recorded with the interviewees' permission and subsequently transcribed.

The data represent all working-age categories from 18 to 68 years old with different backgrounds. The majority of interviewees were female (approximately 70%), which caused some bias in the data and may have influenced the findings. However, it represents the typical gender division at these organizations, especially in the primary school and shopping mall.

The transcribed interview data were analyzed in QSR NVivo. We started by creating a general overview after reading the entire dataset. Next, we used a qualitative content analysis and an inductive coding approach to categorize the textual data into emergent themes and subthemes (cf. Brummett, 2018). We started by identifying the themes related to negative PA emotions, PA barriers, PA motives, and personal PA history. The data coded under these themes were reread several times, and using the Gioia approach (Corley & Gioia, 2004), we developed first-order concepts that were induced to second-order themes and finally to upper-level categories related to triggers and outcomes of negative experiences. The data structure is presented in Figure 2, and the same structure is utilized in the following Findings section.

Findings

Triggers for negative experiences related to physical activity

The data analysis revealed five main triggers for negative experiences: events, forced PA, social environment, physical environment, and personal factors. These main triggers could be further divided into more refined, distinct triggers. Table 2 shows some excerpts from the data on the identified main and distinct triggers. The triggers are elaborated on further in the following sections. In the exemplary citations each informant's age range and workplace is mentioned in parentheses as background information.

Events

Regarding the events triggering negative PA experiences, two distinct triggers were highlighted: accidents and unpleasant first attempts. Accidents were often related to falling, for instance, with downhill skiing, and playing ball games, provoking fear of new injuries and the related experience of pain, resulting in ending certain types of

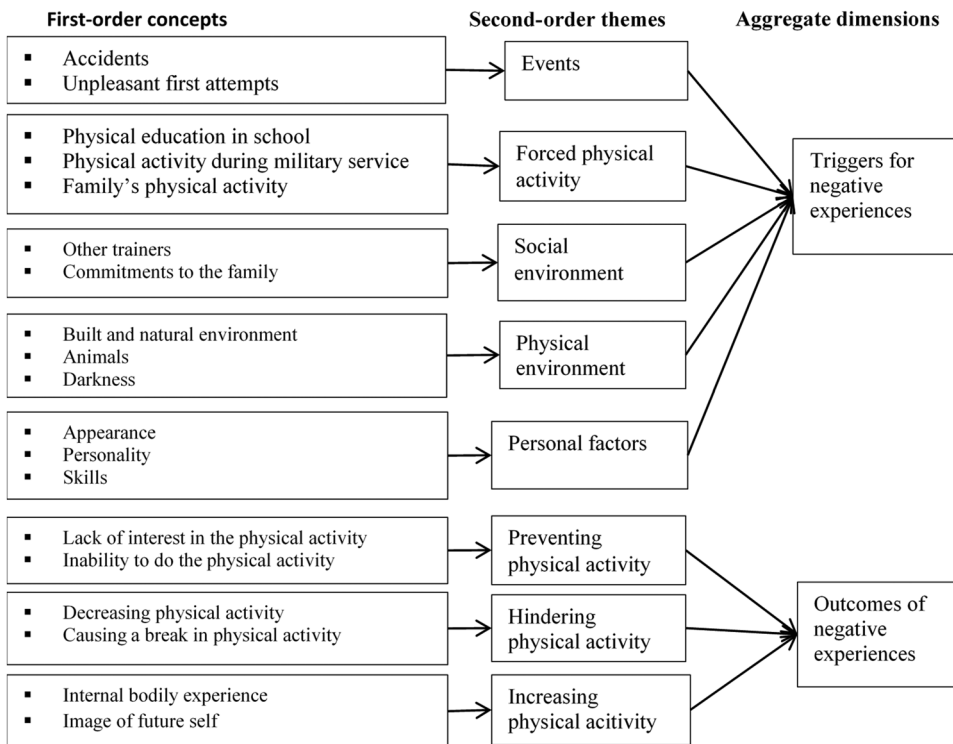


Figure 2. Data structure.

PA altogether. Furthermore, near-drowning experiences seem to leave a fear of drowning that prevents individuals from learning to swim, which, in turn, increases the fear of drowning even further. Sometimes accidents caused individuals to avoid PA in certain environments. This was expressed by Glenda (18–34 years, shopping mall), who described the origins of her fear of walking in the woods:

You won't get me going into the woods, no. [...] When I was a child, I once stepped into a hole or something, and something wrapped around my ankle. So, that has made me fearful, and it makes me anxious about going to the woods. I almost get a panic attack.

It is also noteworthy that the experienced accident causing PA avoidance does not even need to be real. In Jenny's (35–51 years, university) case, dreams were enough to make her scared of ice-swimming (which is a rather common PA in Finland): "I will definitely never go into a hole in the ice. When I was a teenager, I had so many nightmares of getting trapped under the ice."

Besides accidents, some first PA attempts were sometimes such an unpleasant experience that the interviewees expressed their unwillingness to ever try the activity again. This was especially true in cases where they felt that somebody had tricked them into trying something that proved to be awful. In Eric's (52–68 years, primary school) case, his wife had lured him into trying ballroom dancing:

When I met my wife, she said that she had engaged in competitive dancing and said, "It's so lovely. Let's participate in a course on competitive dancing!" I said no way; it's one of

Table 2. Illustrative examples of data supporting interpretations of triggers for negative experiences related to physical activity.

Main triggers	Distinct triggers	Quotes expressing negative emotions
Events	Accidents	<i>I played volleyball sometimes [during gym classes], but [...] once when I jumped, I kind of landed badly and was “seeing stars” for a week or so. [...] That was why I quit playing volleyball. I haven’t played, or jumped, ever since. (Daniel, 35–51 years, primary school) [Discontentment]</i>
	Unpleasant first attempts	<i>I won’t go into any hole ice-swimming. I did that once when I was around twenty. That was enough. I didn’t get that sense of feeling good afterward, which many claim to get. I was spooked. (Bill, 18–34 years, primary school) [Unfulfillment]</i>
Forced physical activity	Physical education in school	<i>It comes from childhood, a miserable feeling about being around sports fields. It felt like it was forced, and that feeling has remained. [...] It’s a reminder from the school world, the Cooper tests, and all, at school. I don’t even like to go anywhere on site to see any athletic stuff. It’s not for me at all. (Valerie, 18–34 years, shopping mall) [Misery]</i>
	Physical activity during military service	<i>Being in the woods. I got enough of it when I was a recruit in the army. Even then, it didn’t arouse any nice [feelings], like, “Oh, how tranquil.” (Glenn, 18–34 years, shopping mall) [Discontentment]</i>
	Family’s physical activity	<i>And soccer is like my absolute pet peeve. All my sisters played soccer, and I had to train alongside them, and I didn’t like it at all. [...] Yeah, I’ve been forced to play to some extent. And basketball, soccer, baseball. Everyone else in the family played them, so I had to hang around there. (Linda, 18–34 years, shopping mall) [Irritation]</i>
Social environment	Other trainers	<i>[In this city], it’s a bit difficult to ski. There are ski tracks, but... you need to be able to ski properly over there. Somehow, the skiing culture on those ski tracks is such that you cannot cause hassle over there; you just keep going. [...] For instance, if I go there with the kids, you get hit by a ski pole if you ski slowly. (Shirley, 35–51 years, university) [Worry]</i>
	Commitments to the family	<i>I try to go to the gym twice a week depending on the other half’s soccer training [...] And then I feel sorry because then my husband doesn’t get to go. I feel very selfish when I am the one who goes there. (Shirley, 35–51 years, university) [Guilt]</i>

(Continued)

Table 2. Continued.

Main triggers	Distinct triggers	Quotes expressing negative emotions
Physical environment	Built and natural environment	<i>I used to go to Pilates ... but the place where I exercised closed and now I haven't found an equivalent place where it would be easy to go to and where no membership would be required. (Susan, 35–51 years, shopping mall) [Discontentment]</i>
	Animals	<i>We do have a forest right there [...] but for some reason I don't currently bother going there alone. Bears and all that, so... My husband has even seen [a bear] over there. So, it's possible in that sense. (Sarah, 52–68 years, shopping mall) [Fear]</i>
	Darkness	<i>I get a bit tense when I think of going for a walk in the dark and hearing all those crackles and everything. [...] since there are no streetlights over there. I can wear a headlamp and all, but I do get nervous. (Grace, 35–51 years, university) [Nervousness]</i>
Personal factors	Appearance	<i>Sometimes I've gone there to look around, and it [the gym] has been really packed. And I was wondering if I'd want to swing my flabby arms over there in the middle of all those super-fit students. (Maribel, 35–51 years, university) [Embarrassment]</i>
	Personality	<i>I've been saying that the only place where I lose my nerve is a minigolf course, so I don't expect the actual golf course to be any better. I somehow lose my nerve over the putting stuff, sort of. I don't know why. (Carla, 35–51 years, university) [Anger]</i>
	Skills	<i>I hate yoga above everything else ... I've always been, like, stiff. [...] I have tried it several times, but it's just not my thing. (Kristen, 18–34 years, shopping mall) [Anger]</i>

the last things I could do. And she just said, “Yes, yes, but when you try it, you’ll get excited.” [...] I went there to please her, and I felt it was awful. I mean, it was at least as awful as I had imagined it to be, and maybe even more so.

Many also mentioned school as a place where they tried various PAs for the first time. Introducing new PAs to students is one of the physical education (PE) tasks in schools, but if the experiences were negative, they occasionally seemed to result in avoidance later in life.

Forced physical activity

Negative experiences were often triggered by forced PA. The interviewees mentioned three actors that had forced them to undertake PA, resulting in negative experiences:

school, military service, and family. The impact of PE in school was particularly highlighted, consisting of activities such as athletics, Cooper run tests, and ball games, evoking fear and dislike. In particular, cross-country skiing tended to evoke a large variety of negative emotions, ranging from anger and frustration to scariness and misery. This was practiced regularly in the winter, as described by Tina (18–34 years, shopping mall): “In the elementary school, we did nothing else but ski around the school neighborhood. [...] That’s the reason. [...] The forced feeling that I experienced during my school years, of ‘Not again, no.’”

Negative school experiences also had a prolonged impact on self-confidence and self-image. This was seen, for instance, in the interview with Karen (18–34 years, primary school) regarding experiences from ball games:

I’ve always been terribly bad at ball games. [...] So, when you only play them during school PE lessons, you don’t have enough time to develop skills in them. [...] Back in those days, a team was composed by picking the students [the captains were named, and they picked the team members one by one]. I belonged to those who were labeled as not very good players, so I was like, “Well, maybe I’m not good then.”

Besides school, military service was also mentioned as a trigger for negative PA experiences. In Finland, military service is mandatory for men and voluntary for women. The interviewees mentioned, for example, unpleasant experiences related to long stays in the woods and in the cold, which reflect their current PA behaviors.

Some also noted that their families of origin forced them to participate in PAs that they themselves did not enjoy. They noted that it was particularly distressing when all the other family members seemed to enjoy certain activities, such as ball games, that they disliked. Furthermore, some mentioned that they did not like to walk in the woods because, as children, they were forced to pick berries. Eric (52–68 years, primary school) described these memories as follows: “There probably was some kind of a ‘piecework’ goal where you needed to pick fruit to fill a jar, and then you would be free to go. [...] Or at least there were comparisons like, ‘Dad has picked this much, and oh, you have that much.’”

Social environment

Regarding the social environment triggering negative PA experiences, two distinct triggers were identified: other trainers and family commitments. Other trainers’ behavior was sometimes experienced as too aggressive, or their fitness level and skills were regarded as too high, as described by Shirley (35–51 years, university), who quit Gym Aerobics: “Of course, if there are like those really fit aerobics exercisers, in their twenties, the threshold to go there is higher—to go there and move in the wrong direction.” Furthermore, one interviewee also commented that the need to consider other trainers’ feelings during ball games made her uncomfortable.

Negative experiences related to family commitments were often related to guilt felt when practicing PA was seen as a time away from the children or as forcing the other parent to take care of the children. In the following, Nancy (18–34 years, university) expresses the guilt felt by a mother of a toddler:

And still, it always feels like I'm taking time for myself. And it's always away from something else. Either from work, when I leave early to go to gymnastics, which starts at 3 pm or 3.30 pm. Or it's away from the family.

Furthermore, those with many children also felt that it was difficult to practice PA that would suit all the children.

Physical environment

In the physical environment, negative PA experiences were triggered by three factors: the built and natural environment in general, and animals and darkness in particular. Referring to the built and natural environment in general, interviewees highlighted changes in the environment: closing down old facilities or moving to a new town evoked discontent or caused difficulties in practicing PA. Sometimes, losing an old PA environment caused deep sorrow, as described by Nancy (18–34 years, university), who lost the forest in which she used to walk:

It was a huge shock this autumn when I went there, and they had ruined my soulscape! They had taken down everything, and I was, like, in tears when I couldn't recognize the places I had visited for 34 years. [...] I went there once, but haven't been able to go again ever since. It was so terrible. [...] It was shocking.

Furthermore, past experiences and encounters with wild animals caused some to avoid practicing PA in forests. The animals that caused fear or discontent ranged from big bears to small mosquitos or spiders. Molly (35–51 years, shopping mall) described her fear of spiders as follows: "I have a problem as I really fear spiders, and there are so many of those [in the woods] in the autumn time that I can't go there ... because I'm constantly looking around to see if there are spiders or not. It's not awfully nice."

In addition to animals, darkness also caused experiences of fear and discontentment, which discouraged interviewees from walking or cycling at night or in the morning. Although darkness was highlighted in the countryside and forests, it was also noted in city centers, especially in street construction surroundings, as Craig (18–34 years, university) noted:

The lighting is bad, though. So, at night, it's a bit ... especially around the building sites, right? ... Because of the way they demolished the old market square [...], they don't have lighting there during the night. [...] I'm not afraid of it, because there's plenty of people and it's Finland, so there's nothing to be afraid of. It's that I can't see. Because it's pitch black [...] So I tend to avoid that.

Personal factors

Regarding the personal factors triggering negative PA experiences, three types of distinct triggers were highlighted: appearance, personality, and skills. Interviewees mentioned that their own appearance evoked embarrassment and shame. Negative experiences were emphasized, especially for PAs where one's body shape was exposed to others (gyms and swimming pools).

Interviewees also mentioned that their own personality did not match a particular type of PA, creating negative experiences, such as PAs that required tranquility and

focus, for example, golf and yoga. Paul (35–51 years, university) expressed the difficulties he had had with yoga: “Doing yoga ... It’s an interesting idea as such, just to think freely and let thoughts come into your mind, but ... And I’ve probably sometimes even tried it, but I just lose my temper ... I’m just like, I cannot do this!”

Furthermore, inadequate skills were also frequently mentioned in terms of negative experiences. For example, a lack of swimming skills created fear and helplessness, a lack of rhythmic skills created embarrassment in Zumba classes, a lack of knowledge of the rules created anxiety in ball games, a lack of body flexibility caused anger in yoga, and a lack of breathing skills created discontentment in running. Interestingly, a lack of skills was often regarded as an insurmountable barrier: “I cannot play golf; I’ve tried it. I’ve been on a course. I never completed the green card because it became evident during the course that I couldn’t hit the ball and I lost my nerve at that point” (Vanessa, 35–51 years, university).

To conclude, the variety of triggers seems to evoke negative emotions related to all the basic negative emotions. The occurrence of negative experiences ranged from recurring experiences (such as habits from one’s childhood family) to one-time experiences (such as unpleasant initial attempts), and many of the negative experiences reported by the interviewees that were still influencing their behaviors had occurred decades ago. The impact of these experiences is elaborated on in the following section.

Outcomes of negative experiences on leisure-time physical activity

Three main outcomes of negative experiences on leisure-time PA were identified: preventing PA, hindering PA, and increasing PA. These main outcomes can be further divided into more refined, distinct outcomes. A few data excerpts on the identified main and distinct outcomes are presented in [Table 3](#). The outcomes are expounded upon in more detail in the subsequent sections.

Preventing physical activity

Negative experiences prevented certain types of PA altogether. The interviewees used expressions such as “never again,” “no way,” or “by no means.” Prevention manifested in a lack of interest in or an inability to do PA. Lack of interest was expressed directly, and sometimes it related to a lack of ability, as in Sofia’s (52–68 years, shopping mall) case: “I’m not a swimming pool person at all. [...] I don’t even swim in lakes during summertime. [...] Like, I actually can’t swim very well, and I’m sort of afraid of the water ... It’s not my thing. [...] And I’m actually not even interested in it. I’m more of a landlubber.”

However, this interviewee was not even interested in learning the skill. In many other cases, interviewees wanted to practice a certain activity, but their physical condition or mental barriers prevented it. In the former case, their physical condition was insufficient due to an earlier sports injury; in the latter cases, mental barriers arose because of earlier bad experiences. A mental barrier is illustrated by Jennifer (35–51 years, primary school), who even bought the necessary equipment but was not able to resume skiing:

Table 3. Illustrative examples of data supporting interpretations of the outcomes of negative experiences on leisure-time physical activity.

Main outcomes	Distinct outcomes	Quotes expressing the outcomes on leisure-time physical activity
Preventing physical activity	Lack of interest in the physical activity	<i>I've sometimes tried it [golfing] and I can't say why, but I'm just not interested in it at all. Maybe I feel that more sensible ways of being outdoors and in nature exist. (Abbie, 35–51 years, university)</i>
	Inability to do the physical activity	<i>I had an accident when I was downhill skiing. Haven't done it ever since. The anterior cruciate ligament snapped. (April, 35–51 years, shopping mall)</i>
Hindering physical activity	Decreasing physical activity	<i>I did try to do yoga, but it's boring, I suppose. I mean, I can do it; it's not a problem. (Craig, 18–34 years, university)</i>
	Causing a break in physical activity	<i>It [swimming in a hole in the ice] could be the kind of thing, if I could fit it into my routines, that would be nice and a good experience. [...] I've once been into a hole in the ice, but it was at a bachelor's party, being very drunk. It was maybe not the best experience in that situation, so it might be good to give it a try now. (Adam, 35–51 years, university)</i>
Increasing physical activity	Internal bodily experience	<i>I purposefully pick those that are quite intense [forms of exercise], like, I go to spinning, where there are interval exercises, and I torment myself on purpose, because my relationship to sports is such that "If it's not painful, it's not sports." (Blanche, 35–51 years, university)</i>
	Image of future self	<i>I won't do physical activity for fun. [...] The drivers of my physical activity are fear and obligation. Fear of getting ill, above all, and the Lutheran thinking that has been internalized regarding that. I don't hate it, but I've never been a sporty type. I have maybe been more of a lazy and chubby type. (Norris, 35–51 years, university)</i>

I have a love–hate relationship with skiing. I'd like to ... when my child was small, I purchased skis, but there's something about skiing that I don't know ... maybe a trauma from school or something. [...] It's like, I'd like to ski. It would be nice to ski in Lapland or on a frozen lake in nice weather, but being in someone's way on a skiing track makes me feel anxious. So, I don't put on those skies.

Hindering physical activity

On many occasions, negative PA experiences hindered PA, either by decreasing participation in the long run or by causing a long and complete break in participation. In the former cases, the interviewees highlighted that they could—and sometimes they

did—practice a certain activity even though it still evoked negative emotions in them, and they would rather do something else. Glenn (18–34 years, shopping mall), who did not like to go to forests after his military training experience, commented, “There are some occasions ... I can be in the woods and feel like it’s nicely tranquil. [...] But it’s just boring, and I have better things to do.”

Several interviewees also noted that earlier negative experiences had caused them to evade certain PAs, but that they would be willing to start—or at least try—them again. However, surpassing the threshold of negative emotions related to past experiences may require plenty of time. The following quote displays how Carla (35–51 years, university) thought about skiing:

What if it’s not as miserable as it used to be, and the ski technology [the quality] has developed so much that it’s not, like, slippery when going uphill and sticky when going downhill? [...] Should I dare to try? [...] I’m just afraid that it could turn out that I still have the same feelings that I had as a child—that I don’t like it. Then, I’d have those skis worth a few hundred, and my husband would keep nagging: “They are always in the corner of the garage. What a useless purchase.” [...] Would I dare to go? Or, if there was like an inexpensive ski set that I could begin with, then maybe it wouldn’t bother me so much if it still wasn’t my thing.

Carla’s thoughts show the insecurities in restarting a PA and also bring to the fore the mental preparation and monetary investments required.

Increasing physical activity

It is noteworthy that, on some occasions, negative experiences and emotions during PA actually increased PA. These cases were related to either internal bodily experiences or images of future selves. Internal bodily experiences were highlighted when the informants expressed how, for them, “real” exercise was always painful, and they sought to push themselves to a certain level of discomfort during PA. This was explained by Shirley (35–51 years, university), who also contemplated the role of her background as an athlete in this kind of behavior:

I have a difficult relationship with physical activity in the sense that I’m a former competitive swimmer. [...] If I think about physical activity, it’s about sweat; it’s about the pulse; it’s about a certain kind of strain and agony. It’s like pushing oneself to the limit. I find it awfully difficult to take it easy, which is why it has often happened that ... for instance, I don’t go swimming because I can’t swim at a normal pace. Then, I’m somewhere having some injection [a painkiller] when it crosses the line. It doesn’t make any sense. I don’t have a competitive instinct, but a need to torment myself, I do have.

In these cases, the pain was experienced as rewarding. However, some also noted that their past PA experiences were negative, but their current PA engagement was driven by their image of their future selves. They were striving to stay fit and healthy in the future for their own or for their family’s sake. The following quote shows Allison’s (35–51 years, university) reasoning:

I wanted to restrengthen my core muscles so that I could really lift him up. [...] So just to ... get back into shape. Because a kid needs a happy mother in order to be happy ... Not just a mother—parents. So, if I’m ill, if I can’t run after him, if I can’t play with him, it affects his life as well.

Discussion

Our research addresses calls to understand what triggers negative PA experiences (e.g. Buman et al., 2010; Ekkekakis et al., 2021). Past research on negative experiences has largely focused on negative experiences in school sports and PE classes (e.g. Beltrán-Carrillo et al., 2012; Cardinal et al., 2013; Coakley & White, 1992). Our inductive analysis supports the notion of these negative experiences, but expands it by showing a variety of triggers for negative experiences. We identified five main triggers (events, forced PA, social environment, physical environment, and personal factors), which were further divided into more refined triggers. These main triggers can be detected also in studies conducted in other contexts (e.g. Ashdown-Franks et al., 2022; Beltrán-Carrillo et al., 2012; Buman et al., 2010), whereas some of the more refined triggers (such as military service, commitments to a family or weather conditions) may be context specific. The identification of diverse, distinct triggers is important for understanding the multifaceted and complex formation of negative experiences. Whereas event-related triggers may be mitigated by certain precise measures, the other identified triggers may be much more difficult and time-consuming to modify.

Furthermore, our research extends the understanding of leisure-time PA by highlighting the impact of past negative experiences. Past research on leisure-time PA has mainly focused on how it influences health (e.g. Zelenović et al., 2022), whereas less attention has been paid to what triggers or hinders it. Studies that have brought these factors to the fore tend to focus on certain factors, often experiences in PE (e.g. Cardinal et al., 2013), or on practical barriers; however, without analyzing the emotions related to these barriers (Leino et al., 2023). Our research shows a variety of past negative experiences. Additionally, our research advances the understanding of the role of negative past experiences on leisure-time PA by showing how negative emotions experienced during PA may, for some individuals, also increase the activity. Furthermore, our study also reveals the diversity in the occurrence of the experiences. Long-lasting evasion of leisure-time PA can be triggered by one particular negative peak experience or by several recurring experiences (see Figure 3). This increased understanding of the variety and roles of experiences and the diversity in their occurrence is important for a more comprehensive understanding of leisure-time PA.

In addition, our study adds to the research on experiential avoidance, which has largely concentrated on the maintenance of unhealthy behaviors (e.g. Farris et al., 2016; Forsyth et al., 2003; Lillis et al., 2011). By focusing on experiential avoidance related to healthy behavior, we were able to increase the understanding of cognitive fusion and the resulting avoidance behavior on leisure-time PA, thus contributing to contextual behavioral science. Furthermore, our analysis revealed how imagined experiences can even cause experiential avoidance.

Practical implications

It is important to acknowledge that negative emotions and the related experiential avoidance are natural psychological phenomena. An increased understanding of this could give practitioners new perspectives on handling avoidance. From the perspective

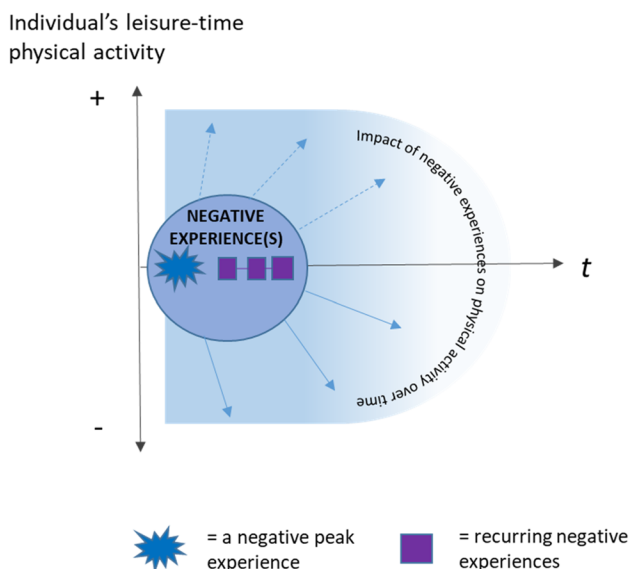


Figure 3. Impact of negative experiences on physical activity over time.

of ACT (acceptance and commitment therapy), practitioners may help individuals recognize and accept their negative PA emotions and thus support their psychological flexibility related to leisure-time PA. In the context of cognitive behavioral therapy, it is widely acknowledged that exposure is a gold standard treatment for different conditions and anxiety-related disorders, including eating disorders (Butler & Heimberg, 2020), specific phobias (Wolitzky-Taylor et al., 2008), and social anxiety disorder (Kaplan et al., 2018). Thus, exposing oneself to PA that evokes negative emotions and experiences may in fact decrease negative experiences and experiential avoidance in the future. Furthermore, noting that one is able to live through negative experiences may also create pleasure and feelings of survival. Thus, at best, negative experiences and emotions may also be utilized as reserves of strength when making behavioral changes.

Understanding negative PA experiences and their impact on leisure-time PA may help practitioners (such as PA counselors) in planning the introduction of PAs and designing interventions aimed at promoting engagement in PA. Since PE in schools plays a pivotal role in introducing different kinds of activities, schools also have a considerable responsibility to create positive experiences during their first PA attempts. Furthermore, since many informants expressed a willingness to try a certain type of PA that they had avoided due to their negative experiences, they would benefit from low-threshold trial opportunities and also acceptance skills related to negative emotions.

Identifying negative-experience triggers can help with the creation of preventative measures. For example, actions may be taken to lessen the impact of unpleasant experiences by tailoring interventions individually through increasing the acceptance of emotions and understanding that negative emotions may not have anything to do with current circumstances. Instead of avoiding a certain behavior, which may result from a single or several past negative experiences, we can create contexts where individuals

can safely expose themselves to PA, accept all the feelings that may arise, and finally, gain new learning experiences. Based on psychological flexibility, the motivation to overcome and tolerate aversive feelings is easier if we can strengthen the personal meanings and values related to PA behavior.

Limitations and suggestions for further research

There are inherent limits to this exploratory work, which creates opportunities for further research. First, our research was conducted in the Finnish context. The sub-categories of the main triggers may differ in other contexts. Hence, extending the research to other countries would expand our understanding of the triggers and their role in leisure-time PA.

Second, our study did not recognize differences in the triggers and experiential avoidance between male and female informants. However, since the share of female interviewees was dominating in our data, further studies are needed to examine the impact of gender on the triggers and experiential avoidance.

Third, past research (e.g. Anderson & Brice, 2011; Babel, 2016) has shown that PA-related experiences are typically not well remembered (and, at least in part, tend to be “reconstructive”). However, even if memories are skewed or unreliable, recollections of experiences are linked to later emotional reactions to PA and may be used to encourage future PA (Biondolillo & Pillemer, 2015). In particular, it would be interesting to study further how the intensity of past negative experiences and the passage of time impact future leisure-time PA.

Fourth, we focused on the impact of individuals’ negative experiences on their PA, but noted that the impact may also extend to the behavior of others. For instance, parents with negative experiences with a particular type of PA may discourage their children from engaging in the activity. Further research is needed to understand the extended impacts of negative experiences and experiential avoidance. Fifth, this study involved working-age informants, and it was carried out in two Finnish cities. Therefore, to corroborate the findings, more research needs to be conducted in other settings. Sixth, this study was exploratory in nature and relied on qualitative data; more research utilizing quantitative analysis would be beneficial to provide more generalizable and replicable results.

Conclusion

This study explored experiential avoidance related to leisure-time PA. Based on the analysis of rich qualitative data, we make three main contributions to the literature. First, we contribute to the PA literature by detecting and classifying the distinct triggers of negative PA experiences and emotions. Second, we contribute to the research on leisure-time PA by revealing how past negative PA experiences can hinder, prevent—or occasionally even increase—leisure-time PA. Third, we contribute to the research on experiential avoidance by extending it to the context of leisure-time PA. Cognitive fusion and its consequence, experiential avoidance, are common phenomena that also explain PA behavior. Based on our knowledge of psychological flexibility, we can learn acceptance skills that enable the behavior in which we want to engage instead of

avoiding it. We further suggest that this knowledge is central to designing interventions aimed at promoting engagement in leisure-time PA.

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Data availability statement

Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data are not openly available.

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