

Breaking Away from Dualisms: Exercise Habitus and Reflexivity are Embodied

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Abstract

Common Cartesian dualisms (e.g., mind vs. body) are misleading in understanding human action like physical activity. Therefore, in this paper, we will challenge the typical dualism habitus vs. reflexivity and showcase that exercise habitus and reflexivity are embodied encompassing familial, cultural, cognitive, emotional, and corporeal elements that inform exercise decisions. Exercise tradition is not lost in the modern globalized world; rather, it remains strong (e.g., instead of relying on screens, young people enjoy being active outdoors). Exercise habitus and reflexivity need to be studied together with emotions, which are embodied and constitute an integral part of them. The embodied nature of exercise habitus and reflexivity form human consciousness and can better explain physical activity choices than Cartesian dualisms, such as cognitive vs. bodily elements.

Key words: embodied exercise habitus and reflexivity, habitus vs. reflexivity, physical activity

Introduction

According to the 2017-2018 results from the National Health and Nutrition Examination Survey (NHANES), about 43% of US adults over 20 years old are obese and another 31% are overweight (Fryar et al., 2021). Participation in physical activity prevents and decreases obesity rates and its associated conditions, including heart disease, stroke, Type II diabetes, and certain cancers (U.S. Department of Health and Human Services, 2020).

In an attempt to curb high obesity rates, public institutions such as the National Institutes of Health and Centers for Disease Control and Prevention and private organizations such as the many weight loss centers and

programs have invested enormous resources in seeking to identify effective interventions in motivating people to lose weight (Tchang et al., 2021). These programs are cognitive in nature to convince people to reduce caloric consumption and/or increase exercise levels and energy expenditure (Trust for America's Health, 2020). These behavior-change programs are Cartesian, emphasizing the use of cognitive skills like positive intentions and attitudes as a means to increase physical activity participation and prevent or reduce obesity. It will be showcased in this paper that this Cartesian theorizing to promote physical activity reinforces dualisms (e.g., body vs. mind) and is ill equipped in explaining human action like physical activity.

A common dualism in understanding human action is habitus vs. reflexivity. Ultra-cognitivists argue that human action in modern society is based on cognitive

elements, such as internal conversations regarding a situation and how to act (reflexivity viewed as mainly cognitive) (Archer, 2003). At the other end of the spectrum, there are those who argue that human action is mainly based on bodily sensations and experiences (Dreyfus, H. L., 2007; Dreyfus, S. E., 2004). Instead of viewing habitus as entirely bodily in nature and reflexivity as entirely cognitive, we will showcase in this paper that exercise habitus and reflexivity are embodied, in that they encompass cognitive, bodily, emotional, and social-structural elements that guide human action. Habitus and exercise habitus will be examined and discussed in modern society and physical activity settings. Although the notion of habitus has been critiqued as nearly non-existent in modernity and should be replaced by cognitive reflexivity (Archer, 2003), we will highlight that habitus and reflexivity are embodied and maintain strong behavioral influences even within the modern globalized world. Cultural, familial, educational, and socio-economic structures form and transform exercise habitus and reflexivity (Bourdieu, 1977). Both cognitive elements and corporeal experiences influence physical activity behavior while emotions are also embodied within one's exercise habitus and reflexivity. Discussion about the embodied nature of exercise habitus and reflexivity can facilitate understanding of physical activity participation or not.

In conclusion, the major tenets of the paper will be summarized regarding the importance to study exercise habitus and reflexivity as embodied and not as two separate entities. Key implications in understanding physical activity will be proposed including future research pathways, such as taking into consideration one's habitus and how it can affect reflexivity in physical activity decisions.

Habitus vs Reflexivity – Erroneous Dualism

Following Cartesian theorizing in understanding human action, there has been a colossal mistake to

separate the body from the mind in the study of habitus and reflexivity (Sayer, 2010). Specifically, habitus has been misinterpreted as entirely corporeal without any cognitive essence, while reflexivity has been erroneously conceptualized as solely cognitive in nature (Decoteau, 2016). Although these views are detailed and analyzed in the sections below, we will provide here a brief summary of this Cartesian dichotomy, which sketches the flow of the paper.

Bourdieu's concept of habitus has been misinterpreted as mainly corporeal without conscious reflection about how to act and why to act (Decoteau, 2016). This misconception is strongly highlighted by Wacquant (1989: 45):

“Does the theory of habitus rule out strategic choice and conscious deliberation ... ? Bourdieu: Not at all ... Times of crises, in which the routine adjustment of subjective and objective structures is brutally disrupted, constitute a class of circumstances when indeed ‘rational choice’ often appears to take over. But, and this is a crucial proviso, it is habitus itself that commands this option. We can always say that individuals make choices, as long as we do not forget that they do not choose the principle of these choices.”

In other words, people's socialization process during their upbringing and within society and culture form their beliefs, meanings in life, behaviors, and tastes that become embodied schemas and influence their actions. Although this process can be thought of as unconscious (have a “feel for the game”), it is not mechanistic in nature; it also incorporates cognitive elements, such as the sport one chooses to adopt (Bourdieu, 1977).

Similarly, reflexivity has been misconceived as mainly cognitive in nature. One of the strongest advocates of this position is Archer, who argues that people engage in “internal conversations” regarding their situation within a certain and constantly changing social context (Archer, 2003, 2007). The internal conversations mediate between the social context (e.g., behavioral enablers and

barriers) and agency, which is driven mainly by self-reflection or reflexivity (Archer, 2003). In other words, in her view agency is entirely private arising from the individual domain and not from society:

“What I am looking for is a kind of mental activity which of its nature has to originate in the private domain... The only candidate which necessarily fits this bill, is reflexivity itself, as a second order activity in which the subject deliberates upon how some item, such as a belief, desire, idea or state of affairs pertains or relates to itself” (Archer, 2003: 25-26).

Similar to Giddens (1984, 1991), for Archer reflexivity is about cognitive knowledge, constant deliberation, self-reflection, and choice in relation to objective structures that guide agency. In her view, modernity does not allow embodied schemas to form and last, rendering habitus non-existent (Archer, 2003). Within modern society, the individual constantly deliberates how to act and needs to adjust their actions (e.g., my perfecting of sport skills is a necessity to receive college scholarship – an “opportunity” within the modern, capitalistic college era).

Although Archer acknowledges the unconscious within reflexivity, she believes that the “non-conscious can play no part in the conscious, reflexive deliberations of the active agent” (Archer, 2003: 25). Regarding the role of emotions, she claims that “our emotions are the main constituents of our inner lives” and that they are the “fuel of our inner conversations” (Archer, 2000: 194); however, for Archer “emotions largely figure in her work only as commentaries on our concerns” (e.g., feeling guilty or angry because we failed to meet our valued goal and not because of how others judge us or view our actions) (Burkitt, 2012: 463). This view will be critiqued in the sections below by showcasing that, like habitus, reflexivity is embodied and constitutes cognitions, emotions, and corporeal elements experienced during the socialization process.

Before embarking upon our critique of this

dichotomy, it is important to highlight the philosophical framework on which this paper is drawn. Contrary to this Cartesian theorizing, the concepts of habitus and reflexivity are discussed based on Merleau-Ponty’s philosophy of embodiment as outlined in his *Phenomenology of Perception* (1945/2014) and described in more detail below under the section of exercise habitus. According to his philosophy of embodiment, habitus and reflexivity are not a dichotomy; they are rather embodied in nature, in that they are formed and evolve on the basis of corporeal, cognitive, and emotional elements that develop within one’s socialization process (Burkitt, 2012; Decoteau, 2016; Merleau-Ponty, 1945/2014). Based on embodiment, there is mind in habitus and body in reflexivity. The body is not an object, inferior to the mind; rather, Merleau-Ponty (1945/2014) elevated the body to a subject that acts, the Lived Body, and informs the mind. Ever changing, context-dependent, and time sensitive practical life experiences during one’s upbringing and within society form embodied schemas that constitute corporeal, emotional, and cognitive elements, which ultimately guide decision making. These embodied schemas are part of habitus and reflexivity, which entail human consciousness.

Habitus is embodied

Based on Pierre Bourdieu (1977), habitus reflects a system of durable dispositions, which are structured within objective practices (e.g., religion, education, economy, society) and re-generate those structural systems. This restructuring of structures does not occur mechanically (i.e., based entirely on the actor’s conscious intentions) or entirely unconsciously. People can reflect on their situation and change the original habitus; however, their action is highly influenced by their structured dispositions, which entail their history and socialization process (Sayer, 2010). Human actions are not mechanically programmed to produce certain reactions (e.g., “individual A performing action a1., e.g.,

a gift or challenge, in order to make individual B produce action b1, a counter-gift or riposte, so as to be able to perform action a2, a stepped-up gift or challenge”; Bourdieu, 1977: 73). Although the structures of habitus are cognitive and motivating, they are also unconscious or sub-conscious, especially within a group of the same class habitus: e.g., participation in organized sports is part of life in affluent societies, whereas for working class families exercise is considered luxury (Bourdieu, 1978). As Bourdieu (1977: 82) puts it:

“In short, the habitus, the product of history, produces individual and collective practices, and hence history, in accordance with the schemes engendered by history. The system of dispositions... is the principle of the continuity and regularity which objectivism discerns in the social world without being able to give them a rational basis. And it is at the same time the principle of the transformations and regulated revolutions which neither the extrinsic and instantaneous determinisms of a mechanistic sociology nor the purely internal but equally punctual determination of voluntarist or spontaneist subjectivism are capable of accounting for.”

In other words, habitus reflects one’s history, culture, and upbringing which cannot be explained either by solely rational and predictable outcomes (objectivism) or only subjective experiences (subjectivism). Human action may necessitate both cognitive elements and unconscious or sub-conscious structures which are learned during one’s upbringing and socialization process. These combined structures of habitus reinforce its embodied nature as Bourdieu exemplified in his *“Outline of a Theory of Practice (1977)”*.

Embodied habitus transcends beyond consciousness, and it is not mechanistic in nature.

“The child imitates not “models” but other people’s actions. Body hexis speaks directly to the motor function, in the form of a pattern of postures...

charged with a host of social meanings and values: in all societies, children are particularly attentive to the gestures and postures which, in their eyes, express everything that goes to make an accomplished adult – a way of walking, a tilt of the head, facial expressions, ways of sitting and of using implements, always associated with a tone of voice, a style of speech, and (how could it be otherwise?) a certain subjective experience. But the fact that schemes are able to pass from practice to practice without going through discourse or consciousness does not mean that acquisition of the habitus come down to a question of mechanical learning by trial and error” (Bourdieu, 1977: 87-88).

The Kabyle child learns the social roles of their gender within the spatial structure and organization of their house and familial-cultural schemes. For example, “... the male world is the place of assembly, the fields, and the market... for the man, the house is not so much a place he enters as a place he comes out of, movement inwards properly befits the woman” (Bourdieu, 1977: 91). Similarly, psychologists agree that children establish clear distinctions between male and female functions early in life: “...the father is generally seen as more competent and more severe than the mother, who is regarded as ‘kinder’ and more affectionate than the father and is the object of a more emotional and more agreeable relationship” (Bourdieu, 1977: 93). Although gender roles may have evolved over time and seem to be somewhat different in current Western societies, embodied habitus is established early in life, encompassing unconscious, sub-conscious, and conscious (e.g., cognitive) elements within one’s upbringing, including familial and societal experiences. For example, it is mostly mothers who care for their young children by staying at home while fathers have external jobs to financially provide for their families (Cunha, 2015). Based on Pew Research Center, highly educated women become mothers later in life and tend to “spend more time in the labor force than in the past,

but also more time on child care... 77% of US adults believe that women face a lot of pressure to be an involved parent, while a significantly smaller share (49%) says the same about men” (Geiger et al., 2019: 1). Notwithstanding the significant differences in educational achievements and financial independence among women throughout history and across different cultures, the embodied habitus of the female role as the main childcare provider in the family remains strong throughout the centuries.

Exercise habitus is embodied

The fact that habitus is embodied indicates the connection between mind and body, which is especially evident in physical activity settings. Contrary to Cartesian theorists and the ultra-cognitivists that emphasize cognition in physical activity behavior (Sutton et al., 2011) or those who undermine the mind and emphasize only the body’s influence in movement (Dreyfus, H. L., 2007; Dreyfus, S. E., 2004), embodied exercise action signifies the unison of body and mind (Kosma & Erickson, 2020^a; Kosma et al., 2021^a, 2021^b; Montero, 2010). As Merleau-Ponty highlighted in his *Phenomenology of Perception* (1945/2014), in embodied action the body is elevated to a subject, the Lived body, that acts (walks, dances, climbs, swims) and informs the mind. He critiqued the Cartesian or Kantian mind vs. body dualism, where the body is objectified and consciousness is supposed to originate only from the mind as “the power of judging, a Cogito” (Merleau-Ponty, 1945/2014: 33). Although intention can facilitate outlining a goal in physical activity, it is the body that immerses itself in the unique movement experiences that can be repeated over time, while the actor may not be able to verbally describe those experiences (Kosma et al., 2021^a; Merleau-Ponty, 1945/2014). Contrary to the Cartesian Cogito, “I think, thus I am” Merleau-Ponty (1945/2014) emphasized “the importance of the existence (being) at first. Being must first exist in order to think. One needs to love, hate,

and desire in order to have thoughts about loving, hating, and desiring” (Kosma et al., 2021^a: 174). Movement needs to first occur before it can be cognitively conceptualized. In soccer, the child first kicks the ball and then thinks about how to improve their skill. In the early stages of skill acquisition in aerial dancing (dancing in the air while holding onto two pieces of fabric-silk), the aerialist starts experiencing their movement with the silks before using analytical thinking about how to master different skills; sequentially, when various movement skills are mastered cognition is minimal and the body takes precedence (Kosma & Erickson, 2020^a; Kosma et al., 2021^a, 2021^b). It is as if the mind shuts down and the body leads without much thinking. Such corporeal knowledge is called *practognosia* and can be conscious or unconscious. Body and mind can act in unison and bring about a flow-like sensation, whereby the actor is completely absorbed in the task at hand without sensing the passage of time, external distractions, and personal responsibilities (Csikszentmihályi, 2008). The expert aerialist throws a performance without cogitating about how to move next; however, she is still aware of her actions (there is mindedness) and can improvise to make dancing more vibrant or win a gold medal (Kosma & Buchanan, 2021; Kosma & Erickson, 2020^a; Montero, 2010). The degree of interaction between body and mind when learning different movement skills varies. For example, during aerial silks learning and performance cognitive and corporeal elements interact in different ways, from analytically processing how and when to move, to sensing the silks, and being aware of poses and lines (Kosma & Erickson, 2020^a; Kosma et al., 2021^a, 2021^b).

Similar to the influences of history, culture, and society on the structuring of embodied habitus, there is class and cultural habitus in exercise that becomes embodied. Historically, sporting activities were initiated by the aristocracy, who had free time to participate in sports (Games) as an end in itself. Such activities were part of their education and leisure time (Bourdieu, 1978;

Huizinga, 1950). Similarly, in modern societies participation in sports can signify upward social mobility and/or class distinctions. Being a sports participant is common among people of high-income level (economic capital) and education level (cultural capital) (Bourdieu, 1978; Wilson, 2002). Low-status, working-class groups used to emphasize strength training and physical prowess, whereas high-status groups adopted lifestyle-based activities, such as aerobic sports and golf (Bourdieu, 1978, 1984; Stempel, 2005; Wade, 2006). Nowadays, though, this distinction is blurrier because people of all socio-economic strata participate in strength training and aerobic activities, including African American men and women of lower income and education levels (Kosma & Buchanan, 2018^a, 2019). In western upper-class societies, a larger body size characterizes physical domination for men, while a thin and firm physique signifies prestige, success, and beauty among women (Bourdieu, 1978; McLaren, 2007; McLaren & Kuh, 2004). Activity choices are also influenced by one's culture. For example, dancing is common among African American women and Latinas, whereas African American men are expected to excel at football and basketball (Kosma & Buchanan, 2018^a, 2019). Such preferred class-related, familial, and cultural sport activities become embodied and constitute one's habitus, assisting with understanding physical activity participation or not among men and women of different socio-economic strata.

Embodied exercise habitus and reflexivity in modern society

Sayer (2010) has argued that Bourdieu erroneously deflated the role of individual reflexivity on human action. Reflexivity is typically (rather erroneously) viewed as solely cognitive in nature, outlining engagement in internal conversations and reflections regarding one's current situation and how it affects them and their life decisions (e.g., which college to attend)

(Sayer, 2010). Although Sayer underscores that Bourdieu did not completely omit the importance of individual reflexivity, he argues that he did not spend enough attention to the matter, emphasizing that habitus and reflexivity can work in tandem (Sayer, 2010). Nevertheless, Bourdieu (1977) did provide an analysis of embodied habitus (like exercise habitus), which naturally signifies the unison between body and mind during life experiences within one's cultural upbringing and society. Although at times human action occurs unconsciously via a type of osmosis, attention, awareness, and conscious processes do take place as well (Sayer, 2010). For example, Sayer (2010: 110) states:

“The tennis player can do remarkably skillful things without thinking much about the details of what she is doing, through ‘protension’ rather than calculation; the player does not decide how to return the ball but is already moving to return it before she can think about it. No two games are the same, so it requires attentiveness and responsiveness; even an automatic pilot is continually making adjustments. The player can also strategize and try out new tactics”

Archer (2010), who emphasizes cognitive reflexivity over habitus, argues that Bourdieu's habitus is outdated and nearly non-existent in modern, neo-liberal capitalistic societies where success translates into the ability to detect and grasp different opportunities that appear in the current open job market. She argues that parental cultural capital is not an “external or capital good”; “it is not negotiable on the job market and accounting as a significant element in the patrimony of offspring” (Archer, 2010: 136). In other words, given the limited opportunities in this contemporary, open-market, and technology-driven world to remain in a particular position long enough to develop a habitus that passes down through generations, it seems that people need to continually reflect and discursively decide how to act (Sayer, 2010). In agreement with

Sayer (2010), we also think that Archer's claim about the death of habitus in modernity is quite strong and needs to be moderated. People may cognitively reflect on their circumstances, but such reflections do not necessarily change their actions. These reflections are influenced by one's embodied habitus (their dispositions), meaning that one may resist or embrace situations before even reflecting on them or reflection alone is not strong enough to make a difference (Sayer, 2010). For example, an intelligent and competent working-class student, who thought and re-thought her upcoming interview to join an elite university, felt out of place and quite uncomfortable during the interview process because her habitus was not attuned to her interview situation. In other words, her cognitive reflexivity was not enough to change her habitus and give her a feel for the game of the elite world. Regardless how cognitively prepared was she, she felt reserved during the interview without confidence (Reay et al., 2005; Sayer, 2010).

Regarding exercise in this contemporary world, the traditional embodied exercise habitus learned in the parks and alleys can be endangered because of the massive promotion of technological exercise settings controlled by the highly profitable digitized fitness industry (Kosma, 2021). For example, there has been a push for the instrumental and engineered exergaming, which are active video games played in front of a screen (Kosma, 2021; Kosma & Buchanan, 2021). Players individually or in groups need to move their body to the directions of the screen to play or win the game (Benzing & Schmidt, 2018). Exergames typically require highly specialized equipment like exercise bikes connected to computer games, dance pad mats for *Dance Dance Revolution*, or motion sensors for *Nintendo Wii* (Benzing & Schmidt, 2018). Exergames are marketed to all age groups – in fitness centers and clubs – by the video gaming industry, including Nintendo, Microsoft's Xbox, and Sony's PlayStation consoles (Handrigan, 2013; Resnick, 2012). Although the proponents of exergaming marketed a supposedly

fun and playful way to increase exercise participation and obesity reduction (Sall & Grinter, 2007), exergames have not met their ostensible goal (Kosma, 2021). In fact, major concerns have emerged since their inception that reinforce the strong influence of traditional embodied exercise habitus. Exergames have failed to capture the diverse and complex experiences (e.g., skill, fitness, and interactions) that can be afforded within a real play setting like in tennis and physical education (O'Leary et al., 2011; Pedersen et al., 2017). Other concerns include exergame boredom and failure to sustain fun and playful long-term physical activity participation (Baranowski, 2017; LeBlanc et al., 2013; Paw et al., 2008; Staiano et al., 2017). Although not directly linked to exergaming, screen addiction is more common for gaming than professional work and links to high anxiety levels (Khalili-Mahani et al., 2019).

Taken together, the aforementioned showcase that contemporary technological and globalized attempts to change the way people sense movement have not succeeded in altering traditional embodied exercise habitus. The initial excitement, for example, to participate in active video games does not seem to coincide with a comfortable sense of movement experienced since birth like rocking back and forth, crawling, standing, walking, and running. Initial exergame enthusiasm fades away over time and does not translate into true play and long-term physical activity participation (Kosma, 2021; Kosma & Buchanan, 2021). People would rather go for a bike ride at their nearby neighborhoods than exerbiking in front of a screen. That said, globalized and highly technological societies can threaten the very existence of cultural and parental capital. The belief that neoliberal capitalism (e.g., purchasing the latest technological gadgets to be active) is the pathway forward in the 21st century is the reason for the development of sick-care and not health-care societies, jeopardizing wise decisions regarding lifestyle choices and well-being (Buchanan, 2016; Kosma & Buchanan, 2018^b; Marvasti & Stafford, 2012). Therefore, it is

important to maintain traditional ways of being active by emphasizing, for example, playful activities at the parks, tennis courts, and basketball fields vs. being glued behind screens. Reflexivity is influenced by one's habitus; therefore, maintaining a strong traditional exercise habitus via community-based activities within supportive and truly playful settings – vs. artificial environments that are foreign to embodied habitus, though constantly promoted in the modern world – can link to health and well-being (Kosma, 2021; Kosma & Buchanan, 2018^b).

Reflexivity is embodied in physical activity

Although shifting away from traditions in modern society may increase uncertainty within unfamiliar situations, viewing reflexivity as solely a cognitive calculation to achieve certain outcomes is unfeasible (Holmes, 2010). Embodied exercise habitus influences reflections and decisions regarding leading the good life (Kosma & Buchanan, 2018^b). Tradition within modernity is not entirely lost. Familial and cultural background constitutes history and forms ethical dispositions regarding life priorities for one's well-being (Aristotle, 350 B.C.E/1962; Flyvbjerg, 2001, 2004; Kosma & Buchanan, 2018^a; Kosma et al., 2015; Sayer, 2010). People make decisions about their life choices (e.g., being active or following a healthy diet) based on their value system which is consciously and sub-consciously formed during their upbringing and within society (Bourdieu, 1977, 1994; Kosma & Buchanan, 2018^b). In other words, people's familial and cultural habitus affects their decisions in life, including the frequency, duration, and intensity of any self-chosen exercise program (Kosma & Buchanan, 2018^b; Kosma et al., 2015). Wise decisions about lifestyle choices like exercising or not are informed based on embodied habitus and reflections regarding current circumstances like work and school responsibilities (Kosma & Buchanan, 2018^a, 2018^b; Kosma et al., 2017). For

example, children who are raised to be active together with their parents and/or other children should have a strong embodied exercise habitus to maintain the behavior when they become adults. However, priority shifting during adulthood because of family and work responsibilities may change one's embodied habitus, leading to diminished exercise participation or importance, especially among people of lower SES and women (Kosma & Buchanan, 2018^b, 2019). People of higher SES who have strong cultural capital (e.g., access to quality education) and economic capital (high income) can maintain a robust embodied exercise habitus because they have plenty of leisure time to appreciate an active lifestyle. However, those of lower SES may not have enough leisure time or energy – due to excessive work and family responsibilities – to exercise, even though they may maintain positive reflections regarding the importance of exercise (Bourdieu, 1978; Kosma & Buchanan, 2018^b, 2019; Wilson, 2002). Similarly, many women in the Middle East region of Qatar are expected to prioritize household and family responsibilities, rather than exercising (Donnelly et al., 2018). Although they may reflect on the importance of movement (e.g., for health reasons), their strong embodied cultural habitus to be mainly mothers taking care of the household influences their reflections, priorities, and actions. In a recent study, most of them highlighted the strong cultural viewpoint that exercise is for young men and not mothers (Donnelly et al., 2018). Even in Western cultures or Black cultures in the USA, whose cultural habitus is affected by western ideals, women tend to be less active than men because they are the main caretakers in the family (Kosma & Buchanan, 2018^b; Kosma et al., 2017). Policy changes and increased awareness of the importance to share family responsibilities (e.g., provision of fully paid maternity and paternity leave; fathers assuming childcare responsibilities) can free time for women to be active (Kosma & Buchanan, 2018^b). It is well-known that high levels of autonomy link to high levels of well-being (Buchanan, 2016).

Provision for quality education, financial independence, flexible work schedules, and respect for one another – e.g., sharing childcare responsibilities and participating in family-based recreational activities – can strengthen the embodied exercise habitus of both genders leading to wise decisions regarding how to spend their leisure time. Instead of being trapped in a room behind screens, families may enjoy going for a walk in the woods, playing soccer, swimming, or going for a bike ride (Kosma & Buchanan, 2018^a).

Emotions are part of embodied exercise habitus and reflexivity

Overlooking the study of emotions within embodied exercise habitus and reflexivity would be considered a major omission (Sayer, 2010). Emotions are embodied because they are evoked by both body and mind within different settings, including artistic performances like music and dancing, sports, and physical expression (Kosma & Erickson, 2020^a, 2020^b; Merleau-Ponty, 1945/2014). Emotions affect well-being or ill-being, decisions in leading the good life, motivations, and actions (Archer, 2000; Nussbaum, 2011; Sayer, 2010). Emotions “form, reproduce, and transform” habitus by for example feeling “valued and loved or ashamed and despised” (Sayer, 2010). As Bourdieu mentioned, if there were no emotions, then people’s struggles, resistance, and efforts would make no sense (Bourdieu, 1998).

Emotions are not just felt sensations; they are also cognitive, evaluative, and intelligent (Sayer, 2010; Nussbaum, 2011). “While the rationalistic tendencies common in social science incline many to ignore emotions, to do so is extraordinarily irrational” (Sayer, 2010: 114). “Simply emotions matter because if we did not have them nothing else would matter. Creatures without emotion would have no reason for living, nor, for that matter, for committing suicide. Emotions are the stuff of life” (Sayer, 2010: 114). They may not be entirely within our control, but people can reflect upon

them: “why do I feel so angry? Why do I feel ashamed?... such reflections can modify our emotions, either calming or accentuating them, according to how we assess the import of the situation” (Sayer, 2010: 114).

Some argue that highlighting only the influence of reflexivity on emotions can be considered Cartesian in nature. In this perspective, reflexivity is viewed only cognitively; a way to monitor and alter emotions (Burkitt, 2012; Holmes, 2010). However, even some of the most vivid advocates for the internal cognitive elements of reflexivity, understand that such cognitive deliberations entail emotions.

“The long running internal conversation that shapes our life projects is one that is an emotional matter of finding the particular project attractive enough to see it through and to hear the costs of subordinating other interests to it... it would be a serious error to see the internal conversations as purely cognitive” (Archer, 2003: 101-102).

Although the knowledge of the situation, which can be fluid, and personal reflections are important to emotion regulation, emotions also influence cognitive reflexivity and internal conversations. Emotions are not formed in an individualistic manner but via our relationship with others and the world – family members, friends, co-workers (Burkitt, 2012, 2018; Holmes, 2010). For example, people can feel confident, fearful, relaxed, ashamed, or proud based on their relationships with others and own reflections (Burkitt, 2012). In other words, internal conversations about how to act in a certain situation are influenced by personal relations with others (which evoke and change emotions), one’s upbringing, and the language people learned to use (language is a medium for those conversations with oneself and others). Emotions are an integral part of reflexivity within the socialization process that forms habitus and consciousness (Burkitt, 2012, 2018; Holmes 2010; Sartre, 1943/2003).

Instead of reinforcing certain dualisms like mind vs.

body or values vs. facts, reflexivity and emotions are inseparable and constitute habitus and consciousness. The mix of rational and sense-based processes in decision making emphasizes the embodied nature of emotions and reflexivity. Such embodied processes are common in exercise settings like in artistic expression, physical theater, and dancing. (Kosma & Erickson, 2020^a, 2020^b). Aerialists who use music during aerial dancing tend to experience strong emotions that affect their entire performance, decisions regarding their expressions, and connection with the audience (Kosma & Erickson, 2020^a). They may experience a sense of flow, elation, and fulfillment while they are completely absorbed in the task at hand (Kosma & Erickson, 2020^b). In artistic expressions, emotions can be evoked with or without accompanying intentions. For example, music can induce pleasant and unpleasant emotions, such as joy, strength, transcendence, love, and sadness (Zentner et al., 2008) with or without cognitive reflections. Such emotions reflect interactions with the performer's intentions, motivation, affective states, interpretive and technical skills, the culture and emotional states of the audience, and context, such as event, lights, and space (Scherer & Zentner, 2001). Bodily expressions – which can also be evaluative – may indicate the existence of certain emotions, such as greater arm movements and upward stretch of the torso to express happiness or smaller amount of movement and forward tilt of the torso to express sadness (Burger et al., 2013; Dael et al., 2012).

Summary and conclusion

In this paper, we challenged the erroneous dualism, habitus vs. reflexivity, and exemplified that they are embodied in nature within and outside physical activity settings. Based on Bourdieu (1977) habitus is embodied because it encompasses cognitive, bodily, and socio-structural elements within one's culture and society. Habitus is not mechanical or purely conscious.

It is structured within certain societal systems and involves conscious, unconscious, and sub-conscious elements (Bourdieu, 1977). Gender roles are learned within societies in an embodied fashion. Many mothers in the modern world may be well-educated and financially independent; however, they take motherhood very seriously and tend to be the main caretakers of their children (Geiger et al., 2019). This behavior is not entirely conscious; it is also sub-conscious or unconscious.

Breaking away from the common dualism mind vs. body, exercise habitus is also embodied, whereby body and mind can act in unison when learning and performing different skills (Bourdieu, 1977; Merleau-Ponty, 1945/2014). People first exist (there is being) and then they think about and sense their existence within and outside exercise settings (Kosma et al., 2021^a, 2021^b; Merleau-Ponty, 1945/2014). The mind is not superior to the body. People learn via practice, *practognosia*, and the active (*Lived*) body is a subject and not an object like other objects in the world (Merleau-Ponty, 1945/2014). Mind and body interact during the early and later stages of skill acquisition, in that an expert dancer during performance does not have to cogitate about how to move next. Regular practice makes the act feel as if the mind stops to exist; yet there is awareness and mindedness in the action (Kosma & Buchanan, 2021; Kosma, & Erickson, 2020^a; Montero, 2010). Body and mind can act in unison and be absorbed in the task at hand without thinking about time and any other distractions (Csíkszentmihályi, 2008). Similar to habitus, exercise habitus is formed within one's upbringing and socio-economic status. Participation in exercise and sports are common in affluent societies, whereas people of lower cultural and economic capital do not have enough leisure time to be active (Bourdieu, 1978; Wilson, 2002). For women, maintaining a firm and slim physique showcases prestige, success, and beauty in western upper-class societies, whereas physical prowess is expected among men (Bourdieu, 1978; McLaren,

2007; McLaren & Kuh, 2004).

Although certain authors (e.g., Archer, 2010) argue that in globalized and technological societies human action is based solely on reflexivity (strictly viewed as a cognitive process), embodied habitus and exercise habitus are not lost within modernity (e.g., Sayer, 2010; Holmes, 2010). An intelligent and well-educated student may perfectly practice and reflect on an upcoming interview for an elite college, but her working-class habitus can make her feel uncomfortable during the interview process. She may sense lack of confidence in entering an elite education setting (Reay et al., 2005; Sayer, 2010). In other words, her reflexivity did not alter her habitus; on the contrary, her habitus probably affected her reflexivity by not having a feel for the game of the elite world. Similarly, in exercise settings exergaming does not replace traditional movement sensations experienced since birth. Instead of being trapped in a room behind a screen, people enjoy running in the woods, biking at the park with friends, swimming in the sea, or playing tag as children (Kosma & Buchanan, 2021). Modernity did not manage to eradicate the strong impact of tradition on human action. Exergames cannot capture the complex and diverse movement, emotional, and social experiences that can be afforded within real play exercise settings (Kosma, 2021; Kosma & Buchanan, 2018^a, 2021; O'Leary et al., 2011; Pedersen et al., 2017).

Typically, reflexivity is erroneously viewed as solely cognitive and calculative to achieve certain outcomes (Holmes, 2010). However, reflexivity is embodied encompassing bodily, cultural, emotional, and cognitive elements that affect one's decisions about leading the good life. Most people may view exercise as important; however, they may be inactive because of their cultural and societal habitus (Kosma & Buchanan, 2018^b, 2019; Kosma et al., 2015, 2017). In a recent study, Middle East women viewed their roles as mainly mothers taking care of the household, while exercise was considered an activity for young men (Donnelly et al., 2018). People's embodied experiences within culture and

society are embedded into one's reflexivity. Dancing is part of the African American female culture, while football and basketball are highly endorsed among African American men (Kosma & Buchanan, 2018^b, 2019).

Emotions are part of habitus and reflexivity. Although the cognitive aspects of reflexivity can regulate and monitor emotions (e.g., why do I feel upset or scared? How can I control my anger? How can I calm myself down?), there is emotionality in reflexivity, in that people's relationships with others form and change emotions that affect life decisions (Burkitt, 2012). Emotions are an integral part of reflexivity within the socialization process that forms habitus and consciousness (Burkitt, 2012, 2018; Holmes, 2010; Sartre, 1943/2003). Emotions are embodied because they are evoked by both the mind and body (Kosma & Erickson, 2020^b). During artistic expressions like dancing and physical theater, emotions are expressed bodily, mentally, and cognitively within a community setting – with other artists and the audience (Kosma & Erickson, 2020^b; Scherer & Zentner, 2001). Emotions are not necessarily expressed verbally; at times, they can be better understood when they encompass bodily movements like arm, torso, and facial expressions (Burger et al., 2013; Dael et al., 2012).

In conclusion, instead of emphasizing dualisms in physical activity education, such as body vs. mind or habitus vs. reflexivity, educators need to understand the embodied nature of exercise habitus and reflexivity that affect decisions regarding physical activity choices. Habitus is not entirely bodily, and reflexivity is not solely cognitive; their embodied nature is formed within society, culture, and familial relationships. Emotions are also embodied within one's habitus and reflexivity influencing decision making. Although people are willing to try out new things within this highly technological and globalized economy, their habitus can remain strong: cricket seems to be interesting, but I feel more comfortable with playing basketball or soccer. As a female who values exercise, how can I balance family

responsibilities, a career, and time to be active? In future studies, such questions need to be addressed by examining habitus, reflexivity, and emotions as embodied that form consciousness.

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