Scientific Research Publishing

Self, Reality, Knowledge and Theory: Is Social Constructionism Antithetical to Sport and Exercise Psychology Research?

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Abstract

Sport and exercise psychology researchers produce research to help athletes, exercisers, coaches, and parents. This research, both qualitative and quantitative, is predicated on an implicit and at times explicit endorsement of a mind and an agentic self. For a discipline such as psychology, it cannot be over-stated that a belief in a mind, as well as all of the thoughts and feelings that are mind based, is critical. An agentic self is a person who has the ability to act independently, make choices, demonstrate free will and is conscious and self-aware. Unfortunately, social constructionists often minimize the mind or outright disavow a mind and, by extension, an agentic self that can understand reality. In the current paper, I provide a historical and philosophical overview and critique of social constructionism to sport and exercise psychology researchers and its mind-minimizing/denying philosophy. At the same time, I highlight research that clearly demonstrates the primacy of the mind (i.e., practical adequacy, conscious causation, the cognitive niche, and theory of mind). Researchers should consider if conducting research grounded in a philosophy of science that denies and/or minimizes an agentic self and supports moral relativism, is a defensible position.

Keywords

Research, Qualitative, Sport and Exercise Psychology, Post-Modernism

"Doing social science (sport and exercise psychology research) requires that we possess an account of knowledge that enables us to reasonably believe that truthful human knowledge about reality is possible. Otherwise, we are simply telling stories that we happen to like to one another and to our students".

1. Introduction

Sport and exercise psychology researchers produce research that helps people understand the sporting and exercise worlds. Helping athletes, exercisers, coaches, and parents is a major goal of sport and exercise psychology researchers, and it is predicated on an implicit or explicit endorsement of the opening quote and a belief in a mind—and, by extension, an agentic self. Hence, for a discipline such as psychology, it cannot be over-stated that a belief in a mind, as well as all of the thoughts and feelings that are mind based, is critical. An agentic self is a person who has the ability to act independently, make choices, demonstrate free will and is conscious and self-aware. Clearly, an agentic self is synonymous with having a "mind" and psychology as a discipline is the study of the mind (and behavior). Unfortunately, social constructionists often minimize the mind or outright disavow a mind and, by extension, an agentic self that can understand reality.

Social constructionists view knowledge and truth as created versus discovered. Social constructionists prioritize language, history, power, and the social cultural context. When these influences on behavior are presented as minor and indirect, particularly for the discipline of psychology, they have substantial merit. However, it is common to read social constructionist commentaries where language or culture are treated as being the *only* significant players in human existence (Gergen, 1991).

The purpose of the current paper is to provide a historical and philosophical overview and critique of social constructionism to sport and exercise psychology researchers and its mind-minimizing/denying philosophy. A complimentary purpose is to highlight research that clearly demonstrates the primacy of the mind. Readers will note this paper is a blend of a traditional research review, philosophical musings, commentary and opinion. As the reader will see over the following commentary, I believe social constructionism provides a shaky philosophical foundation for sport and exercise psychology given it denies and/or minimizes an agentic self. Before beginning an extensive commentary on social constructionism, I first discuss a plethora of research that simultaneously highlights the role of the mind and undermines social constructionism's minimization and denial of a mind (e.g., an agentic self) and our ability to know and evaluate reality. Understanding reality, creating and discovering knowledge by an agentic self are supported in at least three ways.

First, virtually all people demonstrate "practical adequacy." (Smith, 2011). Practical adequacy is experienced every day we live in many small (e.g., making a cup of coffee) and complex ways (e.g., writing a scholarly paper), and it means that we experience implicated successful outcomes based on what we anticipate will happen. My expectation that the park I ran in yesterday will be there to run in tomorrow is a trivial example. A more sophisticated example would be run-

ners who are rewarded with expected improvements in endurance as a function of scientifically based training and increased self-efficacy. Millions of research studies spread across chemistry, biology, psychology (e.g., neuroscience, evolutionary, cognitive), and anthropology all document evidence of practical adequacy. People could not experience practical adequacy without a mind, or an agentic self.

Second, a mind is needed too if an agentic self is to know and understand reality. There are at least three powerful, salient, and related lines of research that should leave no doubt that an agentic self can know and understand a reality that is both independent of their own existence and socially constructed. First, the authors of one review of the role of conscious thought concluded, "the evidence for conscious causation of behavior is profound, extensive, adaptive, multifaceted, and empirically strong" (Baumeister et al., 2011). In sport, the influence of imagery and cognition on a host of psychological states and performance is clear evidence of this cognitive capacity (Mann et al., 2007; Simonsmeier et al., 2020). Second, the cognitive niche refers to the human ability to cognitively construct cause-effect models that we use to anticipate what outcomes will stem from particular actions (Barrett et al., 2007; Pinker, 2009). Third, the theory of mind phenomena, evident in children as young as four years of age, indicates humans' ability to denote mental states (e.g., motivation, anxiety) in themselves and others that allow them, in part, to negotiate social relationships (Perner et al., 2002). I should emphasize that these conclusions apply to individuals and not inanimate objects or "relations" among people, as social constructionists claim. As with the conclusions of Baumeister et al. (2011) regarding the role of conscious thought, the research and the conclusions supporting the cognitive niche and theory of mind are substantial (Perner et al., 2002). None of these cognitive phenomena are ever presented as infallible mechanisms. Given the depth and breadth of the research noted above supporting an agentic self (i.e., having a mind), it is clear that people can reliably understand the reality that exists independent of the mind.

Third, my personal experiences and a lifetime of interactions with family and friends over the years have shown me that they possess a stable, enduring, and agentic self. Multiple conversations with colleagues, family, and friends leave me comfortable believing that I am not alone in coming to these conclusions. Research studies on personality have confirmed my experiential knowledge that the self exists and is relatively stable, endures over time and context, and has meaning. For instance, based on a meta-analysis of 152 longitudinal studies, Roberts & DelVecchio (2000) found mean within-person correlations of personality dimensions over time, as might be expected; increasing from 0.31 in childhood to 0.74 for those aged 50 - 70. The above findings mean the self is relatively stable, but can still evolve and change.

Given the above extensive support for the role of the mind (e.g., agentic self), I find it quite astonishing that I have yet to read a social constructionist paper that

acknowledges the above body of knowledge. The preceding short treatise on the self is shared because social constructionists[1] minimize (and at times outright deny) the self. The ability of people to reason, think, acquire knowledge, know reality, discern truth, understand the world, and act efficaciously is minimized by weak social constructionists and disavowed by strong social constructionists (Gergen, 1985; 2001a; 2001b; 2009a). One can wonder what readers are expected to conclude when social constructionists state: "…it was never assumed that experiential accounts, once rendered into narrative form, actually represented forms of truth" (Thorne, 2009).

In brief, and a critical point for sport and exercise psychology researchers, social constructionists either completely deny an agentic self or reduce the agentic self and people's ability to understand reality to a minor role (Smith, 2011). Although there are many examples supporting this position, Gergen (2001a) states it best when he asserts, "the postmodernist (a variant of social constructionism) proposes that arguments about what is really real are futile" (p. 806). In brief, a central premise of the current paper is that such a perspective is antithetical to a discipline such as sport and exercise psychology that regards the mind as paramount.

It is clear that sport and exercise psychology researchers are quite capable of producing reliable knowledge based on a knowable reality, which athletes and exercisers report on. The research I share in subsequent sections clearly supports this assertion. The minimization or denial of a self, the apparent failure to acknowledge the everyday experience of practical adequacy, the ubiquitous assertions of "multiple" realities, and the silence on the numerous commentaries criticizing social constructionism has prompted the delivery of the current paper to a sport and exercise psychology audience. There is a plethora of historical and current criticisms aimed at social constructionism, prominent in a variety of fields (e.g., sociology, psychology, philosophy) yet absent in sport and exercise psychology journals and textbooks, with rare exceptions (Wiltshire, 2018).

Hence, the major goal of the current paper is to share these historical and current criticisms with sport and exercise psychology researchers in the hope it

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[1]Researchers in sport and exercise psychology often ignore philosophy of science issues or state many different philosophical positions, some of which are closely linked whereas others are quite different. For instance, Poucher et al. (2020) reviewed 30 years of qualitative research in sport psychology and categorized the approaches as critical realist, interpretivism, constructivism, constructionism, pragmatism, postmodern, critical and feminist. In the current paper, I use social constructionism as an umbrella term that represents most of the philosophy of sciences that are positioned furthest away from positivism and post-positivism (constructionism, interpretivisim, constructivism, postmodern). I also present critical realism as a more balanced position that shares epistemological and ontological assumptions with both post-positivism and social constructionism as explained in the current paper. For instance, constructivists and constructionists are both branches of constructive theory and emphasize that reality and knowledge are subjective. Much of my criticism is focused on *strong* social constructionism which tends to reflect the influence of postmodern writers (e.g., Foucalt) from philosophy, the humanities, and psychology (e.g., Gergen) compared to more temperate commentaries originating from sociology (Smith, 2011). Finally, I am cognizant of the fact that when criticizing a philosophical orientation I am invariably criticizing a large number of authors who in varying degrees may or may not endorse all of the positions I have attributed to social constructionism.

will inform their work as scientists (Giardina, 2017). I especially hope this paper will cause qualitative researchers to question if they want to adopt a philosophy and a method that denies or minimizes a self and asserts multiple realities exist. For readers who may think my concerns are antiquated, I will note that Monforte & Smith (2021) promote post-qualitative (a variant of social constructionism) inquiry (PQI) to sport and exercise psychology researchers. Given that PQI, like strong social constructionism, also denies a self, it is puzzling why Monforte & Smith (2021) would advocate it for a discipline that values and prioritizes the self in multiple ways, in both qualitative and quantitative research.

I pursue the above agenda in nine ways. First, I provide a brief overview of the philosophy of science in sport and exercise psychology. Second, I define and provide a historical overview of social constructionism. Third, I provide an epistemology and ontological criticism of social constructionism. Fourth, the preceding introduction provides a brief overview of why social constructionism is antithetical to a self. However, given the central role of the mind in a discipline such as sport and exercise *psychology*, I elaborate more fully on the role of the mind and by extension undermine social constructionism. Fifth, I discuss the concepts of theory laden versus theory free knowledge. Sixth, I discuss the role of time, culture and universals. Seventh, I examine the role of language. Eighth, while an extension of language, I devote this section to a discussion of the term "multiple realities". Ninth, I conclude by presenting and discussing the most salient features and principles of critical realism (CR) as an alternative to both social constructionism and positivism.

2. Philosophy of Science in Sport and Exercise Psychology

Philosophy of science issues are troubling to a few qualitative researchers (e.g., Smith, 2010) but appear to be of little concern to the majority of quantitative and many qualitative researchers as they rarely mention philosophy of science issues in their writings (Martin, 2011). As an editor of two major journals in Kinesiology, spanning 11 years, I can also personally attest to these phenomena. For example, in a review paper Culver et al. (2012) reported that only 14% of 183 qualitative articles reported on their epistemology. Seven years later, McGannon et al. (2021) indicated that 39% of 351 qualitative articles declared an epistemology. In a 30-year review, 29% of 710 qualitative articles declared an epistemology (Poucher et al., 2020). Finally, in a recent review of 22 mixed methods research papers (MMR) only eight papers reported the philosophical assumptions of their research (Ryba et al., 2022). It appears that researchers, and by extensions reviewers and editors, mostly do not see a strong need to include statements about epistemology (i.e., the nature of knowledge) or ontology (i.e., the nature of being) in research articles.

There are likely many reasons for a lack of philosophy of science content in both qualitative and quantitative sport and exercise psychology research. For instance, the American Psychological Association (APA) journal reporting stan-

dards (JARS) do not explicitly require such pronouncements. It is also possible that many sports and exercise psychology researchers have a pragmatist (i.e., does the research help athletes) perspective (Giacobbi et al., 2005). Finally, authors are constrained by page limitations and may see philosophy of science content as a low priority. I offer another possible reason for readers to contemplate: That the conventional scientific (i.e., a reality that is knowable by an agentic self) perspective on epistemology and ontology is broadly accepted by virtually all researchers, so enunciating the obvious or defending it in a research paper is viewed as unnecessary. This perspective will likely resonate with quantitative researchers, and researchers who conduct qualitative research, such as codebook thematic analysis (TA) from a post-positivistic philosophy. Culver et al. (2003) indicate another reason: "Our data suggest that positivists/post-positivists have a privileged stance in sport psychology, which may lead them to disregard the need to identify their epistemology, it being assumed" (p. 278). I believe it is far less about adopting a privileged stance and much more about "it being assumed" as the correct stance, because so many researchers believe in and report on a knowable reality in their research. Research that, in turn, is used to better the lives of people involved in sport and exercise because it has revealed important truths about the sport and exercise worlds.

Even when researchers provide epistemology statements, they are often pithy and superficial, or they are of such an obvious or trivial nature that it is hard to classify them as epistemology. For instance, one group of qualitative researchers indicated, "Social constructivism ascertains that the nature of participants' experiences is shaped by their social, cultural, and institutional environment. This approach was used to better understand participants' adaptive snow sports experiences" (Mavritsakis et al., 2019). While this is a very reasonable statement that reflects a weak social constructionist approach, it could easily be used to support a social cognitive theory or ecological theory, or a post-positivist viewpoint, making it a somewhat trivial assertion.

When epistemological content is extensive, it appears to be by a very small number of ideologically committed and experienced qualitative researchers. Such researchers note the strengths of various forms of social constructionism or critical theory epistemologies (Smith, 2010). Rarely are the shortcomings of social constructionism ever discussed. At the same time, the authors of thousands of books and journal articles from a variety of disciplines (e.g., sociology, psychology, education) outside of sport and exercise psychology have been mild to scathingly critical of social constructionism. Some authors have even suggested that it has done "incalculable harm to social work research, education, and practice" (Caputo et al., 2015)

While sport and exercise psychology researchers have pointed out the flaws of positivism and post-positivism, e.g., (Brustad, 2002; Dewar & Horn, 1992), it is puzzling that, aside from a few exceptions, most of the critical commentary from other disciplines has failed to make its way into the sport and exercise psycholo-

gy literature (e.g., Martin, 2011; 2017; Ronkainen & Wiltshire, 2021; Wiltshire, 2018; Poucher et al., 2020). In summary, the current paper seeks to address this shortcoming with a critical analysis of social constructionism indicating it is often a flawed and incoherent theoretical perspective for sport and exercise psychology given its philosophical underpinnings[2].

3. A Definition and Historical Overview

As noted earlier, social constructionists prioritize language, history, power, and the social cultural context and deny or relegate the mind (e.g., feelings, thoughts), and related concepts (e.g., essentialism), as primary influences on human behavior. Hacking (1999) notes six variants of social constructionism. The most common view is that there are weak forms of social constructionism (also called mild and contextual) and strong (also called strict, radical and extreme) social constructionism, with the latter strong forms also being equated with postmodernism (Sayer, 1999; Smith, 2011). Weak social constructionists view a constructed reality as corresponding to a reality "out there" and endorse a subjective and objective reality. In contrast, strong social constructionists deny that constructed knowledge corresponds to a reality "out there." (Andrews, 2012). Hence, it is important for readers to know that my criticism of social constructionism is heavily focused on strong social constructionism but also not entirely irrelevant to weak social constructionism. My criticisms must also be contextualized to psychology—the study of the mind.

Some authors equate weak social constructionism as simply "sociology". Weak social constructionism is considered weak only in the sense that many of its assertions are considered more temperate and reasonable, and less extreme than those of strong social constructionism. Researchers adhering to weak social constructionism reasonably assert the value of language and understanding the historical, social, environmental, and cultural context within which people live. Psychologists have understood the value of the context for years, at least going back to Kurt Lewin's (1939) work. They also emphasize the critical importance of language and how language is used to construct their social worlds, and reasonably argue that much of reality is socially constructed. Unfortunately, the epistemology and ontology undergirding weak and strong social constructionism are often blurred because they vary in degree, share many similarities, and do not appear to be articulated by sport and exercise psychology researchers (Smith, 2011).

Strong social constructionists like Gergen (1991; 2009b) deny an independent reality. Weak social constructionists indicate that people's representations of

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[2]Some readers might wonder if I am attacking a strawman given some writers have declared postmodernism dead. A Google Scholar search of "postmodernism sport psychology" reveals almost 34,000 references and over 6000 since 2019. "Social constructionism and sport psychology produced almost 25,000 references" (e.g., Busanich & McGannon, 2010; Busanich et al. 2012). Scholars as recent as 2020 have also advocated for postmodernism to guide research (Stewart et al., 2020), that "data" should die (e.g., Denzin, 2013; 2019) or that "data" is an illusion (Koro-Ljungberg, 2013). The above suggests that postmodernism and social constructionism are far from dead.

facts are socially constructed whereas strong social constructionists argue that people's representations are socially constructed and, critically, that the entities to which those representations correspond are also socially constructed (Smith, 2011). Assertions such as the following completely avoid the question of reality: "Constructionism makes no denials concerning pollution, poverty, or death, for example; nor does it make any affirmations" (Gergen, 2009b). In staking this claim, Gergen initially declines denial of death as a reality, but then subsequently declines any affirmation of death as well, leaving the reader in a bit of a quandary. Extrapolating such non-assertions to sport and exercise would include a failure to deny or affirm the existence of cheating, discrimination, ableism, racism, sexism, ageism, or drug use. It is difficult to envision sport and exercise psychologists embracing such moral relativism if/when interested in the promotion of social justice and in making sport better through research and practice.

Gergen (2009b) also boldly claims that a commitment to self, truth, reason, and morality has led to cultural imperialism, the erosion of community, and the exploitation of nature. Like many social constructionists, Gergen (2009b) cites no research to substantiate these claims despite a significant knowledge base undergirding cultural degradation (Wolfe, 2006), and a reduced sense of community (Hunter & Riger, 1986), and deforestation (e.g., Barbosa, 1996)[3]. Ironically, in these commentaries, attributing these diverse societal problems to a commitment to an agentic self or truth and reality is rarely seen, as asserted by Gergen (2009b). Instead, it is precisely a commitment to an agentic self, truth, reality, and science that helps society address these social issues[4]. In sport, drug use, excessive violence, cheating, mental illness, and other societal concerns cannot be effectively addressed by denying they exist or taking a stance of moral relativism, as strong social constructionism does. The rationale for my critical stance is grounded in the belief that strong social constructionist and ambiguous statements about reality borne of social constructionism and postmodernism have influenced the thoughts and research of sport and exercise psychologists (e.g., Smith, 2010), which in turn have a profound influence on the knowledge base being created. As Poucher et al. (2020) have documented, 48% of the 710 qualitative papers published over a 30-year span were social constructionist or philosophically similar (e.g., constructivism).

The recent controversy over seven fabricated papers that were published in prestigious journals, illustrating the authors' criticism of postmodernism-grounded "grievance studies" clearly indicates that social constructionism continues to be

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[3]It is exceedingly rare to find any research evidence behind most social constructionism writings that supports the claims being made by the authors. While this might be somewhat understandable when the authors are philosophers, it is less understandable when the authors are not philosophers.

[4]People writing on these social issues do not deny that issues of power (e.g., corporate interests) also play a role as claimed by weak social constructionists. Reviewing the research in these diverse fields is beyond the scope of this paper but it is inconceivable that no research exists that supports Gergen's claims that he could use. As a result, his scholarship comes across as lacking rigor. In fact, for the whole text, *An Invitation to Social Constructionism*, only (approximately) 12 of 291 references were journal articles suggesting a deliberate intent to eschew scientific work that might refute or support his claims.

controversial in the 21st century (Pluckrose & Lindsay, 2020). Furthermore, according to Pluckrose & Lindsay (2020) postmodernism (a form of strong social constructionism) is responsible for "militant social justice activism" which has subverted the honorable goals of social justice into the promotion of dogmatism, the cancel culture, the idea that words represent a form of violence, and that people, particularly students, are fragile (Haidt & Lukianoff, 2015; 2017).

Social constructionism has a number of historical roots but there appear to be five major influences. First, books by sociologists Berger & Luckmann (1966), a number of French philosophers (e.g., Derrida, Latour), and American social psychologist Kenneth Gergen (1991; 2001a; 2001b; 2009b) all figure prominently in the rise of social constructionism in the academy. Two other events thrust postmodernism into the academy and the public spotlight. Postmodernism was a featured player in the "Science Wars" debate that reached prominence as a result of a book in which Gross & Levitt (1997) argued that postmodernism was anti-science. Postmodernism also gained significant notoriety in the popular press as well as academic circles when Sokal published a 1996 parody/hoax paper (Transgressing the Boundaries: Toward a Transformative Hermeneutics of Quantum Gravity) in a leading cultural studies journal called *Social Text*. Sokal, a physics professor, wanted to test the intellectual rigor of *Social Text* by constructing a fabricated paper representative of writings from French postmodern philosophers including those noted earlier (Sokal & Bricmont, 1999).

In a book explaining his hoax paper, Sokal & Bricmont (1999) viewed the French philosophers as providing postmodern interpretations of physics that were absurd, nonsensical, non-sequiturs, or simply wrong according to accepted principles of physics (Sokal & Bricmont, 1999). An example of Sokal's purloined writing was his nonsensical conclusion: "the [Pi] of Euclid and the *G* of Newton, formerly thought to be constant and universal, are now perceived in their ineluctable historicity; and the putative observer becomes fatally de-centered, disconnected from any epistemic link to a space-time point that can no longer be defined by geometry alone."

In summary, writers from philosophy, sociology, the humanities and psychology have all contributed to the rise of social constructionism now seen in qualitative sport and exercise psychology research. These historical considerations are provided to illustrate that my commentary, while likely new too many sport and exercise psychology audiences, is consistent with a long history of prior critical thought. These writings have prompted a number of the subsequent criticisms that I share next.

4. Epistemology and Ontology

It is challenging to criticize social constructionism epistemology and ontology, given its multiple variations (Rosenau, 1992) and the nuances and personal preferences that have appeared in discussions across many different authors over many years in a host of disciplines. Within sport and physical activity, Giardina

(2017) has noted 14 different types of ethnography, a method grounded in social constructionism, as well as other philosophical perspectives (Hammersley, 1992). In other cases, authors write in ways that are virtually impenetrable, and therefore difficult to understand and comment upon (e.g., Lacan, Latour, Lyotard). I should note here that my criticisms are directed mostly at philosophy of science issues and not methods per se, although the two are often closely linked. Like Smith (2011), I do not endorse qualitative research grounded in positivism but I also do not believe qualitative research has to be framed in social constructionist philosophy, particularly a strong social constructionist position. Many researchers associate positivism and post-positivism with quantitative research and social constructionism (and related variants) with qualitative research. However, while most quantitative researchers are not likely to endorse social constructionism, many post-positivists conduct qualitative research (much to the chagrin of some social constructionists). For instance, one of the most popular qualitative approaches is thematic analysis (TA). It was originally framed independent of epistemology (Braun & Clarke, 2019), despite the commonly accepted notion that all researchers have either an implicit or explicit set of beliefs about ontology and epistemology. Braun & Clarke (2019) have asserted that their version is a reflexive TA philosophically that is opposed to codebook TA with its post-positivist underpinnings. I next discuss a philosophically fundamental self-defeating flaw in social constructionism.

"This is the classic paradox: If his theory is true, it is false" (Smith, 2011). The above quote by Smith (2011) is made after concluding that Gergen (1985), and I would add all social constructionists, asserts that social constructionism is true (i.e., it would be incoherent to argue for something you believe is false), but the heart of social constructionism denies such "truth" statements. Framed slightly differently, Halling & Lawrence (1999) assert that social constructionists deny there is any universally valid truth while simultaneously arguing for the universal truth that all knowledge is socially constructed. A third variation is offered by Walsh (2017) who indicates that social constructionism asserts truth as something that is relative, but if that perspective is itself taken as absolute truth, then the proposition that truth is relative is contradicted. Finally, Wight (2018) indicates that one of the oldest philosophical paradoxes is that in denying truth we affirm it, "is it true that there is no such thing as truth" (p. 17).

In brief, Halling and Lawrence conclude social constructionism is self-contradictory, Burr concludes it contains implicit hypocrisy, Smith concludes it is simply incoherent, and Wight indicts it is an "ontological disaster zone" (Wight, 2018). I provide these four slightly different versions of the same argument to enhance reader's understanding and make an important point about a significant and critical false start for social constructionism.

Historically social constructionism has prioritized epistemology (how we know reality) and ignored ontology (what is reality) or ignored the complexity of reality (Smith, 2011). According to Smith (2011), the culprit in the above lays in the flawed view of language in social constructionism. Language is discussed

more fully later but, briefly, social constructionists claim language does not refer to its referent and words have no intrinsic meaning. For example, if we watch a soccer player and indicate she is "skilled", according to social constructionism, the word "skilled" has nothing to do with anything about that athlete that informs our opinion of "skilled" like watching her dribble around 3 players and bending a shot into the top corner. Rather social constructionists argue that the word "skilled" only has meaning relative to contrasts with other words like "unskilled, novice, clumsy". Social constructionists also argue but never explain how, that language creates reality (Gergen, 1985; 1991). Social constructionism is particularly inimical to sport and exercise psychology research that prioritizes the mind and an agentic self, because it either subordinates or eliminates the self, as discussed next.

5. The Self

The first line in the American Psychological Association's definition of psychology is: "Psychology: The study of the mind and behavior". While there are various sub-fields within psychology (e.g., cognitive) the common thread throughout them all is the role of the mind (DeWall & Myers, 2014). Yet, as Lovlie (1992) states if we take social constructionism literally it would "…eliminate a basic presupposition of psychology and education: the idea of an autonomous and intentional agent."

Sport and exercise psychology is typically defined as the psychological study of people (e.g., athletes) in sport and exercise contexts or settings (e.g., practice, game) and, like the APA definition, the mind is paramount. While this assertion may seem self-evident, I emphasize it here because some authors of commentaries (Monforte & Smith, 2021; Smith, 2011) in sport and exercise psychology appear to overlook this critical fact. Psychologists, in general, believe in essentialism or universals such as personality. Both qualitative and quantitative researchers in sport and exercise psychology who study the three basic needs of self-determination theory are implicitly endorsing essentialism. In contrast, social constructionists take an anti-essentialism position, which denies people have a mind and therefore psychological qualities, like the basic needs that transcend time and culture and exert causal influence (Burr, 2003). In explaining why so many researchers and laypeople believe in a self, Gergen (1991) simply asserts that we are socialized to believe so, with no research support for his assertion.

Researchers in sport psychology examines a host of psychological factors that originate in the mind such as the role of affect (e.g., fun), cognition (e.g., mental toughness), and personality (e.g., Big Five Factor model). The number of publications examining these and related constructs likely numbers in the tens of thousands. There is quantitative as well as qualitative research on hundreds of different cognitive and affective traits and states in sport and exercise psychology (Anshel et al., 2019). It would be inconceivable to think that the researchers conducting all of these studies did not believe in mind-based qualities (e.g., af-

fect, thoughts) and that causation (e.g., agency) did not originate in the mind and drive behavior.

Clearly, quantitative and qualitative sport and exercise psychology researchers believe in the mind and some form (even if mild) of essentialism, even if they do not articulate it. Therefore, it is understandable if many qualitative researchers fail to endorse epistemologies like social constructionism given its anti-essentialism stance, or if they produce qualitative research that is post-positivism orientated and avoid epistemological statements. Statements aligned with social constructionism declare their position that mind based qualities do not exist through quotes, taken from inside and outside of sport and exercise psychology over the last 20 years, and as recent as 2021, as follows:

"We may envision the elimination of psychological states and conditions as explanations for action and the reconstitution of psychological predicates within the sphere of social process" (Gergen, 1997).

"What people have called 'selves' are, by and large, produced discursively, that is in dialogue… Selves are not entities" (Harré, 1976).

"We should begin with the assumption that the primary location (in both a temporal and logical sense) of psychological processes is collective rather than individuals" (Harré, 1984).

"…the focus of psychological study and its philosophical commitments from the space inside the head to the space between people…" (Kenwood, 1996).

"…find the locus of psychological action outside the individual body and in the interpersonal, discursive space…" (Kenwood, 1996).

"…there is no present, conscious, coherent individual who knows who she is, says what she means and means what she says" (Mazzei, 2013).

"…it means to lack an independent, self-contained existence" (Monforte & Smith, 2021).

"thought, emotion, action and future behavior… are not things that emerge from inside individual minds, but rather social relations" (Smith, 2013).

"Our subjective lives… within relations not inside us" (Smith, 2013).

"Notwithstanding the many problems with cognitivism (the questionable idea that psychological processes uniquely take place in 'the mind' of individuals)" (Smith & Sparkes, 2016).

The authors of the above quotes do not specifically explain or describe how thoughts, intentions, or emotions reside in social relations, or in some obfuscating term like "entanglement" (Mazzei, 2013). Adding to the confusion are recent posthumanist (a form of social constructionism) writings where the agency is attributed not only to people, but also to inanimate objects:

"First, not only is agency attributed to humans, but also to non-humans and matter" (Monforte et al., 2021).

Similar to situating agency in relations versus in individuals, it is never ex-

plained how inanimate objects, like wheel-chairs, can exert agency, as it is typically understood in social science (i.e., consciousness, free will). It invites incredulity from readers to suggest objects (e.g., hockey sticks) can act on their own. Writers who make such strong assertions that defy conventional thinking might educate and persuade readers if they described what the mechanisms might be that allow thoughts and feelings to exist outside of individuals in relation or material objects. For instance, there is a healthy debate about the existence of extended cognition (e.g., shared intentionality) with arguments for (Lyre, 2018) and against it (Adams & Aizawa, 2008), that social constructionists might use to support their position, although that would entail believing in a mind that is extended. Additionally, the work of authors like Markus and Kitayama (1991) clearly articulate that in some cultures self is seen as independent (e.g., USA) whereas other cultures have an interdependent view of self (e.g., Japan), but the self is not eliminated. Authors denying a self and championing social relations provide no empirical evidence supporting their declarations and the only clue about a potential mechanism is that somehow language is involved. As Rychlak (1999) asserts, the above remarks can only have merit if some sort of group mind exists.

It is difficult to understand where thoughts and feelings emerge from if not individuals or how our subjective lives are not inside us given that relationships involve individuals. Sugarman & Martin (2011) indicate: "Relations require participants. They cannot function without them. It is persons, not relations, who act in the world" (p. 285). In addition to the above commentary, social constructionists seem to eschew acknowledging or commenting on the thousands of studies on language, cognition, and personality that clearly document a self with agentic properties (e.g., Pinker, 2009).

There are certainly more tempered commentaries on the self, representing weak social constructionism (e.g., Smith, 2010), but they are often blurred with strong social constructionism. Smith (2010) starts off with a seemingly strong social constructivist approach to the self by stating that narrative researcher, "Departing from, and troubling traditional views of the self, the self is not treated as a measurable psychological invariant thing, to be found within the caverns of the mind and discovered through methods." It is not clear what is "troubling" about the self. However, he later (Smith, 2010) seems to present a weak social constructionist position by appearing to acknowledge that the self has social, cultural, historical, contextual, and bodily influences, all elements of a more balanced approach.

Sport and exercise psychology researchers who study constructs originating in the mind should think carefully about grounding their research in epistemology, like social constructionism, that denies or minimizes the mind. I believe it is important for researchers to keep in mind that the parent discipline of sport and exercise psychology is psychology, not sociology, cultural studies, critical studies, or communication. Furthermore, the other commonly recognized parent discipline is kinesiology, and social constructionism has little to say about the influ-

ence of physiology, biomechanics, and motor control mechanisms on cognitive and affective states that help exercisers and athletes develop knowledge and understand reality.

Despite social constructionism's minimization and/or denial of the mind, many researchers (including those who endorse social constructionism) inexplicably and at times incoherently fall back on discussions of mind generated qualities like values, beliefs (e.g., self-efficacy), and attitudes when they assert that knowledge creation is impossible. This contradiction is easily seen in many qualitative research reports when the researchers invariably report on the results obtained from individuals and speak of feelings and cognitions (e.g., Drew felt proud, whereas Shay expressed confidence that…) and not on results that are somehow a function of "relations" or that reside only in "language".

Finally, social constructionists appear to have little to say about behavior and feelings and their links to thought. Evidence of an agentic self, such as the close correspondence between mental constructs and observable behavioral manifestations (e.g., facial expressions of joy) appears to be ignored. Emotional experiences, so important to athletes, are often the result of thoughts (Uphill & Jones, 2007) and such assertions do not deny socially generated emotions (van Kleef et al., 2019) or the value of the context (Araújo et al., 2020). In summary, exercise and sports psychologists submitting research under a social constructionism umbrella should be cognizant of the potential for incoherency. For instance, if researchers are clearly examining the role of mind-based qualities (e.g., self-efficacy, fun) in sport, yet framing the study under a philosophy of science that minimizes or denies a mind one might view such a study as examining research questions that are inconsistent with their philosophical paradigm.

6. Theory Free or Theory Laden?

The idea that research observations (e.g., assessing emotion in sport) are theory laden is a ubiquitous point made by many social constructionists. Exercise and sport psychology authors (e.g., Smith & McGannon, 2018), who refer to theory free or theory laden knowledge rarely explain what it is or what it means, resulting in an impoverished discussion of it, that I attempt to rectify next. The term "theory" does not just refer narrowly to a researcher's psychological theory (e.g., self-efficacy theory) that might predispose them to test hypotheses developed from self-efficacy theory. In a conceptual sense of the word, within a research context, refers to a scientist's values, beliefs, expectations, attitudes, and those qualities (i.e., theory) can influence their research question, results, and interpretations. The above position and argument should resonate with many researchers as we often investigate topics in which we find meaning and interest us—and from the perspective that makes the most sense to us. Qualitative researchers are aware of, acknowledge, and account for this dynamic more so than quantitative researchers, as judged by their written accounts and quantitative researchers' lack of written commentary on the topic. Quantitative researchers

can likely learn from qualitative researchers who discuss this and apply it to their own work. I have no doubt that all researchers operate under a naïve theory that influences the interpretations they make of their data and how they discuss it. However, there is more to "theory free or theory laden" than the notion that researchers' own naïve psychology will influence how they conduct and report on research as discussed next.

I, and I suspect most researchers, are not troubled by a "weak" social constructionist version of the theory laden observation position. However, social constructionists often make assertions that seem to reflect a strong social constructionism position by framing observations as "always" being theory laden. For instance, Smith (2010) and Smith & McGannon (2018), state "theory free knowledge cannot be achieved" (or variations) multiple times in their paper on achieving rigor in sport and exercise psychology research. Such terse and short declarative statements do little for reader edification. Smith (2010) asks: "Is theory free knowledge achievable, and is knowledge 'discovered', 'found', and 'collected' (realist epistemology)? Or is, as most narrative researchers believe, theory-free knowledge a chimera, and knowledge is 'constructed' and always fallible (constructionist epistemology)"?

Framing the topic as we either can or cannot obtain theory free knowledge takes a continuous process, forces it into a false dichotomy, and artificially simplifies a complex topic in a number of ways. As Freedman & Smith (1996) state: "philosophical accounts of the theory-observation distinction are simplistic and miscast; especially problematic is the philosophical notion that theory-ladeness of observation is an all or none affair." I next elaborate on five points that shed additional light on the theory free versus theory laden topic.

First, claiming that observations or data are always theory laden seems to be presented as support for social constructionist epistemology, a criticism of quantitative research, and support for the ubiquitous and equally ambiguous "multiple realities". Readers will note that I qualified the previous statement with "seems" because as noted above the notion that theory free knowledge cannot be achieved is presented as a fact with no elaboration. An extreme interpretation of "theory free knowledge cannot be achieved" is that a researcher's experiences, theory, or knowledge undermines or colors the research findings. Research on confirmation bias indicates there is merit to this position (Greenwald et al., 1986). However, to suggest that researcher's knowledge is always detrimental to the research process ignores that researcher's theory or beliefs may have minimal impact in a specific study (e.g., double blind research design) or, ironically, result in a more accurate understanding of the data (Wright & Murphy, 1984).

Many authors who emphasize that theory free knowledge is impossible, publish data based research suggesting a more reasonable interpretation is that research findings are somehow colored. Insider research, particularly "self-ethnography" is the epitome of research that is "theory laden" suggesting that theory laden work is

acceptable if it is qualitative in nature. Clearly, "insider knowledge", a form of theory ladeness, can provide incredible insights into research phenomena whether such research is qualitative or quantitative (Brannick & Coghlan, 2007). This suggests that theory laden can, at times, be a strength and not a weakness, and that applies to both qualitative and quantitative research.

Second, most commentaries headlined by "no theory free knowledge" suggests a negative one-way path of influence: theory colors data or the knowledge derived from data, but commentaries on how data can influence theory are usually absent, suggesting they attach minimal importance to this path of influence (Freedman & Smith, 1996; Wright & Murphy, 1984). Data (i.e., research findings) clearly have the power to influence traditional psychological theory and subsequent iterations of that theory. Debates about the usefulness of the theory of planned behavior (TPB) in sport and exercise psychology are clear evidence of this dynamic interplay between scientists' beliefs about the theory and research findings that both support and fail to support key principles of the theory (Sniehotta et al., 2014). Stated differently, accepting that observations are theory laden does not mean such observations cannot provide valuable knowledge.

Third, the degree to which observations are theory free, theory laden, or somewhere in the middle likely varies according to the nature of the observations. For instance, consider interviewing participants about a socially grounded emotion (e.g., social physique anxiety) in response to exercise intensity as assessed by lactate threshold, and judging such a study on a continuum of theory free to theory laden. My guess is most researchers are willing to endorse a position further away from the theory free end point for the socially generated emotion part of the study (given the social construction influence on social physique anxiety), and a position much closer (but not 100% theory free) to the theory free continuum end for the assessment of lactate from blood (given the biological nature of lactate and blood). A bodily and sensory derived and culturally influenced emotional experience (e.g., effort, fatigue, pain) might be seen somewhere in the middle and a function of culture, prior experience, socialization, perception and physiology.

Fourth, advocates of no theory free knowledge typically make philosophical arguments and little to no research is presented to support their arguments. Hence, in the remainder of this section, I review research evidence that simultaneously illustrates the complexity of this topic and shows that, contrary to social constructionists, theory can help understand data, not just color it. Wright & Murphy (1984) examined the role of possessing prior theory in understanding data and found that it helped their participants understand the data relative to their participants who were classified as "objective" (i.e., had no prior theory). Having a theory helped participants understand their data and not give undue influence to atypical scores. Freedman & Smith (1996) found that both theory and data influenced participants understanding of data. In support of theory laden observations participants knowledge of prior theory influenced how they processed data and at the same time data exerted its own influence. For example,

when presented with data inconsistent with theory, participants did not change their minds to favor prior theory. In conclusion, the results of Freedman & Smith (1996) indicate that observations are neither theory laden or theory free, negating both social constructionism and positivists positions, respectively.

Fifth, the "there is no theory free knowledge" criticisms of quantitative approaches often use examples to support their position that are heavily focused on the role of perception and ignores other important factors such as cognition and memory. For instance, the examples (e.g., reversible figures, ambiguous pictures) often used to illustrate the theory laden position rely heavily on perception. In the Freedman & Smith (1996) study for theory to have an influence, time for retrieval was needed demonstrating that cognition played an important role. In brief, while naïve theory influences all researchers' work, it is a complex topic that warrants more than a pithy "theory free knowledge cannot be achieved" statement. I have yet to read any research evidence documenting how "theory" has invalidated a particular research study or body of knowledge generated by, for example, meta-analyses. In summary, exercise and sport psychology researchers, should be aware of and question their philosophical stance on the theory laden—theory free debate.

7. Time, Culture and Universals

Linked to the notion of theory free or theory laden observations are the claim by many social constructionists that all knowledge is specific to time, context, and culture, although rarely is research presented to support this assertion. Hence, the purpose of this section is to provide evidence that all knowledge is *not* time, context, and culture specific. For example, there are hundreds of qualitative studies, grounded in some version of social constructionism on athlete's thoughts and feelings. Rarely do the authors provide any insight on the role of culture or context. This is understandable because typically the researchers do not ask their participants to comment on such topics or their influence, but instead focus on their personal experiences in sport or exercise.

It is clear that people differ over time and among cultures, suggesting there is merit to recognizing this as social constructionists point out (Hofstede, 1991). Haslam's (2016) work and recent commentaries (Furedi, 2016) on concept creep clearly show how people have socially constructed and reconstructed how we view concepts such as bullying, abuse, prejudice and trauma, and importantly, how socially constructed definitions can change over a short period of time. However, that is not tantamount to claiming that there are no similarities among cultures. Using Hofstede's (1991) cultural dimensions we know that cultures differ in degree on the same six different dimensions illustrating a far more nuanced picture compared to a simple assertion that all knowledge is culturally and historically bound. Other evidence of the similarity among people from various cultures can be found in work by Brown (2004) who asserts that:

"Human universals—of which hundreds have been identified—consist of

those features of culture, society, language, behavior, and mind that, so far as the record has been examined, are found among all peoples known to ethnography and history".

Human universals cut across culture (e.g., myths), language (e.g., grammar), social (e.g., play), behavior (e.g., aggression) and mental (e.g., emotions). Many human universals apply to more than one category. For instance, aggressive physical retaliation in sport is both social and behavioral and when angry insults are used against sport opponents, it is linguistic. According to Brown (2004) there are hundreds of universal traits, and most can be linked back to an evolving agentic mind. Expressions of emotion are universal as can be seen in the joy athletes from a host of different cultures exhibit upon winning medals at the Olympics and Paralympics, although culture also plays a clear role in their expression (Martin, 2017; Markus & Kitayama, 1991). In brief, contrary to social constructionism, human universals suggest there is some degree of essentialism (i.e., there are characteristics to people that are inherent) to the human condition that transcends time and culture (Donald, 1991). Self-determination theory is well known to many sport and exercise psychology researchers and posits "psychological essentialism" by arguing that all people have three basic needs. Contrary to a social constructionist perspective, researchers have found the three basic universal needs are universally valuable for life satisfaction and well-being (Church et al., 2013).

Individuals are thought to lack agency and are somehow unduly influenced by cultural and historical forces situated in particular contexts, and the direction of influence is typically posited in one direction. Yet contrary to a social constructionist explanation of culture is the notion that culture is a product of the individual as evidenced in the following quote; "…culture is the manufactured product of evolved psychological mechanisms situation in individuals living in groups" (Tooby & Cosmides, 1992). The notion that people are not always victims of oppressive power dynamics and that individual can shift culture by single acts or in groups over time is rarely acknowledged. Sport psychologists and sociologists only have to look at figures such as Tommie Smith and John Carlos (1968 Olympics) or Colin Kapernick (NFL) for evidence of how individual acts can lead to significant cultural change. Consistent with social constructionist's heavy emphasis on language, identity, and power both examples illustrate the role of language and identity politics (i.e., race). At the same time, all three individuals noted above have suffered harm because of the political and social justice positions they have taken, supporting the destructive power dynamics that postmodernism should be credited with shining light on. Both examples also illustrate how non-verbal communication, often ignored by social constructionists when discussing the power of language, is critical to how these individuals spearheaded culture change.

Finally, the social constructionists' emphasis on the context certainly has merit. The replication crisis (Martin & Martin, 2021) can partly be seen as evidence that research results are sample specific because of their context dependency.

However, when research results show evidence of replication, it suggests that mind based qualities such as resilience can transcend context specific influences such as the sport type or country (Atkinson & Martin, 2020; Martin et al., 2015; Martin et al., 2022). In summary, contrary to social constructionist claims, research findings (e.g., universals) suggest that knowledge is not completely context or culture specific and people are not dupes to cultural and contextual influences.

8. Language

Social constructionists argue that people construct reality via social processes, in particular through language and conversation. Examples of people constructing reality through language occur daily. For instance, if a number of athletes criticize their coach amongst themselves after a workout, new members to the team may develop a negative picture (i.e., a subjective reality) of the coach. Unfortunately, the social constructionist view of language constructing reality is typically presented with no acknowledgment of any reality that is independent of language. The use of and the role of language by social constructionists can be criticized scientifically and pragmatically as described next.

Scientifically, social constructionist commentaries are strikingly absent of any discussion of the years of research into cognition, perception and language, resulting in an impoverished presentation of language. It is specious to conclude that because humans do not have direct access to reality (i.e., naïve realism) then we cannot know reality. Counter to social constructionist's claims, language is not the same as thought and language does not always determine thought, although it can certainly, at times, influence thought. Additionally, a critical analysis of these two claims suggests they are contradictory; how can language determine thought if they are identical?

Contrary to the social constructionist's view that language determines thought, the direction of influence is much stronger from thought to language. Language communicates thought and the evidence for this is profound (Pinker, 2012). For instance, thought exists in the form of categories (e.g., cause and effect, space, objects) well before language emerges in infants and primates. Knowledge is not stored in words and sentences but in semantic memory. People remember content and not just words. Athletes store images, motor programs, and logical propositions as the varied theories of how imagery and positive self-talk explain. Readers who are authors and struggle with capturing a thought accurately and finding themselves rewriting a sentence repeatedly are prime examples of how thought creates language. Finally, as (Pinker, 2012) states, "language could not function if did not sit atop a vast infrastructure of tacit knowledge". Ambiguous sentences, a double entendre, locker room banter, interpreting body language in sport, and deciphering tone during athlete interviews, all point to the role of cognition and the subservience of language to cognition. Another way to think of the relative value of language and thought is that people can communicate

without the spoken language (e.g., deaf athletes). However, people cannot use language intelligently (e.g., babies) without thought. This is not to deny that language does not influence cognition. The sports psychology literature is resplendent with examples of the value of language, and how language can influence thoughts. For instance, athletes' who are encouraged and persuaded of their capabilities by well-liked and respected coaches gain self-efficacy (Martin, 2002), but the direction of influence from thought to language is much stronger than from language to thought as argued by social constructionists.

Pragmatically, the extreme strong social constructionists or postmodernists (e.g., Jacques Lacan, Bruno Latour) often write in indecipherable jargon and make extreme declarations that defy commonsense. As a result, it is difficult to analyze and critique their arguments when the authors appear to write to "not" be understood. For instance, Bruner writes, "…contrary to common sense; there is no unique 'real world' that preexists and is independent of human mental activity…" (Bruner, 1986). The fact that the world predated human existence by billions of years seems of little consequence to Bruner (1986). To readers that think these types of quotes are rare I direct them to Table 1, which is just a small sampling of the most extreme comments. The impenetrable writing, patently false declarations, and the lack of any empirical research support for their numerous claims make it challenging for researchers to be receptive to their more reasonable assertions.

One example from Guattari as noted in Sokal & Bricomont (1999) is noted next:

> "We can clearly see that there is no bi-univocal correspondence between linear signifying links or archi-writing, depending on the author, and this multireferential, multi-dimensional machinic catalysis. The symmetry of scale, the transversality, the pathic non-discursive character of their expansion: all these dimensions remove us from the logic of the excluded middle and reinforce us in our dismissal of the ontological binarism we criticised previously."

Indecipherable writing is not limited to French philosophers as renowned American scholar Judith Butler won the 1998 Philosophy and Literature journal's "Bad Writing Contest" for her indecipherable writing.

The creative ways in which some authors defend inaccessible writing is quite surprising as the following quote indicates:

> "not being easily understood might be an ethical imperative because any call for transparency, clarity, or accessibility is always already a call for consensus or a call to reinforce status quo. In other words, accessible language and clarity always already rely upon the taken-for-granted or common sense meanings and common sense beliefs that are persuasive precisely because they do not present themselves as ideology or try to win consent" (Berbary, 2017).

Table 1. Examples of the most extreme epistemology declarations.

Citation	Quote
Nietzsche, Kaufmann, & Hollingdale, 1968	There are no facts, only interpretations.
Derrida, 1976: p. 156	The text is all and nothing exists outside of it.
Goodman, 1978: p. 97	We are not speaking in terms of multiple possible alternatives to a single actual world but of multiple actual worlds.
Nietzsche, Kaufmann, & Hollingdale, 1968	There exists neither "spirit", nor reason, nor thinking, nor consciousness, nor soul, nor will, nor truth.
Bruner, 1986: p. 96	…contrary to common sense, there is no unique "real world" that preexists and is independent of human mental activity…
Latour & Woolgar, 1979: p. 237	Reality is a consequence rather than the cause of this construction (referring to science)… a scientist's activity is directed not toward "reality" but towards operations on statements.
Mehan & Wood, 1975: p. 328	I do not wish to call one or another reality paramount. It is my contention that every reality is equally real.
Hoffman, 1992: p. 19	…there are no incontrovertible social truths, only stories about the world that we tell ourselves and others.
Clapham, 2002	…language and knowledge are not copies of reality, but constitute reality.
Gergen, 1986: p. 143	There are no independently identifiable, real-world referents to which the language of social description are cemented.
Derrida, 1979: p. 103	There is no such thing as truth itself.
Gergen, 2000: p. 28	Rationality, then, is not a foundation for anything.
von Foerster, 1984: p. 42	The environment as we perceive it is our invention.
von Glaserfeld, 1995: p. 24	Knowledge does not reflect an objective ontological reality.
Pinter, 2012: p. 114	There are no hard distinctions between what is real and what is unreal, nor between what is true and what is false. A thing is not necessarily either true or false; it can be both true and false.

Other authors defending deeply inaccessible prose argue it is necessary to achieve ideological goals although how writing gibberish can do that is not explained (Culler & Lamb, 2003). The apparent subversion of scientific and educational goals for ideological goals suggests framing such writing as trying to advance science is contraindicated. As Pluckrose and Lindsay (2020) assert, advocates of social constructionism are frequently far more concerned with political and identity grounded goals, and science becomes a secondary, or at times irrelevant, consideration. The multitude of papers on social constructionism that I have read is consistent with such speculation. Fortunately, such inaccessible writing is rarely found in sport and exercise psychology scholarship. However, the use of language that makes understanding difficult can be found in the sport and exercise psychology literature[5].

According to Bauerlein (2004), Culler and Lamb (2003), Dutton (1999), Miller (2000), and Slezak (2001), and inquiries I have made of my students, social constructionists write in ways that make understanding the content exceedingly difficult, and at times outright impossible. Slezak (2001) notes that many social constructionists tend to "recast truisms in pretentious polysyllabic jargon to create a superficial illusion of deep theory". Slezak suggests that social constructionists use a number of buzz words instead of more easily understanding synonyms and notes 18 common ones (e.g., perturbations, discursive practices, a community of discourse, enculturation, dialogic interaction process). Slezak (2001) also provides a host of words and phrases and notes their English equivalent (e.g., the mediation process involving intervention and negotiation with authority = teaching). Murray (1997) suggests that social constructionists have felt the need to create a new language as a form of legitimization. One way of doing this is by assigning new definitions to words that already exist and using a less known definition for a word with multiple definitions. For instance, instead of suggesting a research gap exists the term "lacuna" is used (Howe, 2008).

Exacerbating the situation is a lack of definitions or real-life examples suggesting a tenuous assumption: readers know what they mean. Murray (1997) supports his contentions by noting 40 of the most common examples. For instance, instead of writing about marginalized individuals, the term "others" is used (Silva & Howe, 2012). Social constructionist writers rarely seek to understand but instead to "unpack." Sport and exercise is not physical in nature; rather it is "corporeal". Other examples include, self-reflexivity for introspection, problematizing to criticize, and deconstructing to disagree or understand. It should be noted that Murray's examples were based on attempting to infer the meaning from the context of the passage he examined. According to the Oxford dictionary, "discourse", means "written or spoken communication or debate" when used as a noun, and common synonyms are "discussion, conversation, and talk". When used as an intransitive verb, synonyms are "converse, talk, and speak". In sport and exercise psychology research, it is not uncommon to read about "lived experience, embodied experience, and interrogating and problematizing". If the goal is to communicate, educate, and persuade readers of the validity of their arguments, it would seem writing in simpler well-known familiar words and phrases is more apt to accomplish those goals. Given the poor reading proficiency of many college students, especially ones graduating from underperforming school districts, this is not a cosmetic or trivial issue (Gorzycki et al., 2016).

The following sentence, fairly representative of this type of writing, "My own narrative, like any other, is incoherent, replete with potential to reconstitute dominant narratives regarding sport, impaired bodies, and disability" was subjected to a Flesch Kincaid readability test and received a score of 0.8 on a 0 - 100

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[5]Of course, authors of quantitative research can also write in ways that are difficult to understand too.

scale suggesting a very difficult reading level and comparable to someone in grade 20. A second sentence, "In order to contextualize the impact of the injury experiences, and commensurate with the auto ethnographical spirit, it is appropriate to render visible some accountable knowledge, to situate the researcher-runners within their biographies of running" received a score of −9.9 and a grade level of 24. In brief, many qualitative authors frequently write in ways that make it difficult for the reader to understand, thereby ignoring most popular writing guides (Zinsser, 2006) as well as guidelines on writing clearly offered by the American Psychological Association (APA), which many sport and exercise psychology journals follow and direct researchers to for guidance. Finally, for researchers interested in forging a career in academics writing clearly has a pragmatic element; clear and accessible writing produces citations (Freeling et al., 2019; Martínez & Mammola, 2021), which in turn can strengthen promotion and tenure application. A prominent example of language, precision, and how perspectives on reality are intertwined is offered next. In summary, social constructionist's especially strong social constructionists, prioritize language over thought and frequently write in ways that are very challenging to understand, thereby undermining reader's ability to comprehend.

9. Multiple Realities or Multiple Experiences

In the first section on philosophy of science, I suggested that many researchers (qualitative and quantitative) might ignore the philosophy of science issues because of a belief in conventional thinking (i.e., a knowable reality independent of the researcher). Unfortunately, a number of qualitative researchers appear to implicitly (and I believe unknowingly) endorse social constructionism by employing the phrase "multiple realities" in the absence of any other philosophy of science content that supports such a perspective. "Multiple realities" is one of the most ubiquitous phrases linked to social constructionism and is seen in many sport and exercise psychology writings (see Table 2 for just a few examples from the 100s of qualitative papers in sport and exercise psychology). Smith (2011) refers to these as "rhetorical slippages" (p. 123) when the authors do not make it clear if they are referring to reality or "beliefs" about reality. When authors begin and end with asserting that there are "multiple realities" I, and my students, crave more explanation.

I highlight the example of multiple realities because suggesting there are multiple realities reflects strong social constructionism and runs contrary to peoples' everyday experiences of reality and practical adequacy (e.g., the woods I ran in today will—barring a catastrophe—be the same woods I run in tomorrow). In contrast, asserting that people have different beliefs or perceptions about reality is a completely different and reasonable assertion. Turning "multiple realities" into "multiple meanings of reality" (Goodwin et al., 2022) represents an economical and precise way to articulate how research from an interpretive paradigm views reality.

Table 2. Examples of how multiple realities are described.

Citation	Quote
Fletcher & R. Arnold, 2011: p. 225	"Qualitative research emphasizes the exploration of multiple realities gained from different interpretations."
Priest & Karageorghis, 2008: p. 351	"Indeed, the epistemological position that underlies the present study is one of multiple realities. Hence, a piece of music is not seen as being motivational per se, that is, in an absolute sense; rather, music is *perceived* as motivational by an individual…"
Holt & Tamminen, 2010: p. 412	"The emergence perspective therefore follows the idea there is 'one truth' in the data, whereas the Straussarian view acknowledges there are multiple realities and multiple ways of interpreting a data set."
Sparkes & Smith, 2009: p. 493	"For him, this was evident in their appeals to and advocacy of specific procedures or techniques, such as member checks, to establish trustworthiness in world of multiple realities and ways of knowing. That is, although they accepted a world of multiple, constructed, and mind-dependent realities…"
Busanich & McGannon, 2010: p. 392	"…the idea that 'facts' are dependent on language, which help us to make sense of our lives; 2) people generate meaningful reality based on the particular terminology made available to them; and 3) 'reality' is dependent on one's historical and cultural location and thus allows for multiple realities to exist."
Holt, Kingsley, Tink, & Scherer, 2011: p. 492	"Interpretation is informed philosophically by ontological perspectives of multiple realities and epistemologically that knowledge is socially constructed by the person who experiences events."
Massey, Meyer, & Naylor, 2013: p. 13	"…one cannot argue that objectivity was maintained, but rather multiple realities were in existence."
Chalkley et al., 2020: p. 49	"Within this position, the authors acknowledge that scientific enquiry is contextual in nature, and there may be multiple realities in terms of how MK is perceived by pupils".
Slater, Spray, & Smith, 2012: p. 281	"In addition, the current study is underpinned by ontological constructivism and epistemological interpretivism in offering our interpretation of perceptions of multiple realities concerning golf ability."
Perrier, Smith, & Latimer-Cheung, 2015: p. 61	"Furthermore, a second key aspect of interpretivism is ontological pluralism, such that there is the existence of multiple realities and truths that are constructed through relationships and dialogue with others (Sparkes & Smith, 2009)".
Cruickshank, Collins, & Minten, 2015: p. 8	"Instead, pragmatism embraces the existence of multiple realities but sustains that this co-constructed knowledge relates to meaningful applied artifacts (Corbin & Strauss, 2008)."
McEwan, Tod, & Eubank, 2019: p. 2	"…Informed by ontological relativism (a belief that there are multiple realities) and epistemological constructionism (knowledge is constructed), there is no separation between the knower and the known."
Shaikh, Bean, & Forneris, 2019: p. 114	"A constructivist paradigm was adopted by the authors, which acknowledged that people interpret their realities based on their interactions in the social environment; thus, multiple realities can exist."
Wilson, Bennett, Mosewich, Faulkner, & Crocker, 2019: p. 64	"…which she considered the participants' perspectives, doing so by remaining open to multiple realities, by consistently challenging her preconceptions, and by discussing with co-authors challenging viewpoints and interpretations of the data."
Alexander, Bloom, & Taylor, 2020: p. 4	"Our research was guided by ontological relativism (i.e., multiple realities exist, which are co-constructed by the researchers and participants) and epistemological social constructionism (i.e., all reality is constructed rather than created; Daly, 2007)."

Even referring to beliefs about reality, instead of reality, does not do justice to a phrase that often seems to lead readers unfamiliar with philosophy of science to think the authors are denying an objective reality or asserting there are multiple objective realities. Expanding the "multiple realities" phrase to indicate that athletes, for example, have different experiences based on different types of interactions with coaches and teammates (e.g., good friends on the team versus others), leading to different perceptions of their experiences is one example that may prevent misunderstandings. People, including athletes and exercisers, have different experiences despite playing the same sport or being in the same aerobics or cross-fit class. For example, athletes clearly interact differentially with coaches and receive differential forms of feedback which in turn can influence social constructed social-perceptions (e.g., coaching climate) and cognitively constructed self-perceptions (e.g., competence, self-esteem; Horn, 2019). When people in an ice hockey arena react differentially to a potential penalty it is often a function of each person having a different perspective (or angle of sight of the player). Each spectator is seeing something different, but they are seeing the same player and reality from a different perspective. Different perspectives does not mean there are different realities.

Much of the qualitative research in sport and exercise psychology documents the participant's different experiences and interactions, and not different or multiple realities. I have yet to see a published research paper that explicitly frames the results as supporting "multiple" realities although I have read many quotes that reflect different experiences. Creswell & Poth's (2016) assertion that multiple quotes in a research study confirm the existence of multiple realities is rhetorical slippage given that multiple quotes simply document participant's differing (and quite often similar) experiences.

Athletes' experiences are not so individualized as to represent a unique and different reality for every person, resulting in an endless number of multiple realities, as the phrase, lacking any explanation, is prone to suggest. My assertion is simple: People frequently have similar experiences based on similar perceptions of finite realities and not multiple and different realities. Stated differently, people mostly have similar experiences because their social and cognitive construction of those experiences is based on a shared underlying and similar reality and this assertion is based on two very common research findings. First, every time a quantitative researcher provides descriptive statistics like Means (M) and Standard Deviations (SD) they are making statements about their participants' perceptions of reality. When researchers indicate that 200 youth sport athletes' report a M of 4.0 and a SD 0.3 for their perceptions of the team task and ego climate they are also stating that all 200 children share very similar (not identical) experiences and perceptions of the climate reality. Second, when researchers report internal consistency results of 0.90 for a scale assessing the task and ego climate, they are also saying that their participants are answering questions in a relatively consistent manner.

The most plausible explanation for participant's consistent answers is a similar understanding and answering of the various questions designed to assess a psychological construct. They do not perceive the reality postulated by the questions in multiple ways. Additionally, quantitative researcher's acceptance of measurement error and things like internal consistency values as low as 0.70 also indicates that they do not endorse a positivist philosophy of science. Most quantitative researchers do not have an expectation that they can accurately capture reality with 100% accuracy or that every athlete experiences the same reality in an identical fashion. However, they do believe they can present a reasonable enough portrait of one reality or a few very similar realities (not multiple realities), often combined with other results, to present findings and conclusions that can edify readers and help coaches and athletes.

Next, although there are different types and purposes for data saturation, many qualitative researchers stop recruiting and interviewing participants because of data saturation (Saunders et al., 2018). Stopping data collection clearly has a pragmatic element to it. However, even qualitative researchers have criticized it as having no substantive basis (Thorne, 2020). Stopping data collection at $N = 12$ athletes, for example, due to data saturation is often claimed by researchers because no new information was being obtained. Interpreting this from a "multiple" reality perspective suggests that people have common experiences and realities, and research participants experience a shared, similar, and common reality that can often be captured in a limited and finite number of participants. Data saturation is also claimed when no more themes in the data are discovered, again suggesting a similar reality. Additional participants will not reveal more and different "realities". It should be noted that data saturation conducted when thematic analysis (TA) is done from a "codebook" perspective is immune to the above criticism as codebook TA tends to reflect a post-positivist philosophy. The data saturation criticism is most relevant for reflexive TA, which has a social constructionist philosophical underpinning.

Finally, review papers of qualitative research (i.e., qualitative metasynthesis) are becoming more frequent inside and outside of sport and exercise psychology (Sandelowski et al., 1997). In one review of 18 qualitative research papers the authors discovered eight overarching concepts and 25 sub-themes (Williams et al., 2014). Support for the themes ranged from one paper to 15 papers with many themes supported by seven individual papers or more. While a subjective assessment, the results suggest many common experiences across individuals within papers suggesting limited support for multiple realities. There is some irony in noting that the tradition of reviewing research to comment on consistent findings and to generalize across studies originated in the quantitative domain and is now being embraced by qualitative researchers.

Often the implied goal of metasynthesis is framed as determining if there are common themes/findings across various individual studies (Fuller, 2014), although this approach has been criticized (Thorne et al., 2004). Finding common

results across diverse samples, sports, athlete characteristics, nationality, culture, etc., clearly suggests common experiences that transcend culture and context. The common results suggest similar realities (e.g., perceptions of controlling coaches diminishes the sport experience), not multiple realities, and suggests research findings across different categories (e.g., cultures) are not devoid of a common human experience. Another common purpose of qualitative metasynthesis is often to generalize (much to the chagrin of Thorne et al., 2004) and when a metasynthesis is presented that way it aligns with a postpositive perspective and contradicts many of the tenants of social constructionism.

In summary, the major point of this section is that realities (i.e., experiences) are much more shared, similar, and common then they are unique and different as is implied by the phrase "multiple realities". In brief, careful writers should distinguish between reality, multiple realities, beliefs about reality, and/or simply having different experiences as I have articulated above. Qualitative researchers are not limited to two polar opposites (post-positivism and social constructionism), so I next present CR as a more balanced approach.

10. Critical Realism

"Critical realism is a philosophy of and for the social sciences" (Sayer, 1999).

Critical realism (CR) is a meta-theory or as noted above, a philosophy. Discussions of critical realism in sport and exercise psychology are beginning to emerge (e.g., Ronkainen & Wiltshire, 2021; Wiltshire, 2018; Wiltshire & Ronkainen, 2021), and commentaries and books about CR are becoming increasingly prevalent in other disciplines (Danermark et al., 2019). As explained next, CR mostly avoids the extremes of positivism and strong social constructionism and the criticisms directed at each. Social constructionists tend to conflate epistemology and ontology (Smith, 2011), a critical error, and CR clearly distinguishes between epistemology and ontology. I believe CR will resonate with both quantitative and qualitative researchers in sport and exercise psychology given that CR does not endorse any one type of research and is compatible with a broad array of research methods. Another attractive feature of CR is that it seeks to understand and explain by hypothesizing constructs, relationships, and mechanisms responsible for behaviors such as those found in sport and exercise. CR also appreciates the multitude of influences on behavior ranging from physiological and psychological to social and cultural and therefore has a holistic orientation.

Consistent with this approach is an appreciation for various methods (e.g., blood lactate, heart rate, self-report, observation, etc.). CR is also focused on causality, which many sport and exercise psychologists are interested in, as seen in the promotion of randomized controlled trials as the gold standard research design for establishing cause and effect. CR focuses on individual level constructs, such as increased efficacy, that might cause greater exercise adherence. Context and social influence are also very critical and similarities and differences in the motivational climate, for example, are important. Finally, the influence of

culture is not ignored. In regard to the earlier treatise on theory laden versus theory free, CR advocates acknowledge that researchers are part of the research process (e.g., collecting data) and can influence it, but that is not equivalent to creating the data, as social constructionists claim. Finally, CR is compatible with sport and exercise psychologists who seek to understand and promote well-being through sport and physical activity (Gorski, 2017). In contrast, positivism is often linked to determinism and a lack of free will and social constructionist approaches are frequently accused of moral relativism.

The CR approach is ideal for sport and exercise psychology research where the mind and body are both so important. Finally, CR understands that observations can be fallible especially when language and the social nature of much of human behavior are involved. Given the above characteristics, I believe CR has the potential to appeal to sport and exercise psychology researchers who engage in all types of research. In particular, explicitly embracing CR has the potential to be a bulwark against real and perceived shortcomings associated with post positivist and strong social constructionism. Both qualitative and quantitative researchers are often, erroneously, accused of adhering to philosophical positions such as relativism and positivism, respectively, simply based on their method of research as opposed to any explicit allegiance to a particular philosophy of science. In the following section, I describe the CR view of knowledge and reality.

CR acknowledges that people have different perspectives or beliefs about reality but does not endorse the idea of multiple realities. Rather than denying reality, ambiguously referring to multiple realities, or denying our ability to generate knowledge CR presents a more sophisticated perspective. CR recognizes two types of knowledge. One type exists independent of human involvement or presence such as the frozen lake with a cleared off ice hockey rink (i.e., intransitive knowledge). A second type, transitive knowledge, involves social interaction and language. CR also describes three levels of reality.

First, there is the domain of the real, which might be considered the deepest level and is defined by experiences, events, and mechanisms and can be social or natural. Acknowledging that the real exists is not claiming that we can necessarily "know" it with certainty. In sport, an example of the real could be a competitive marathoner performing in a specific context (i.e., time, day, temperature, course difficulty, competitors, training phase) that is preceded by a more general context (i.e., culture, years of training, family, running partners, coach). All of the preceding factors, and other factors not considered (most of which cannot be measured or measured accurately) are likely to directly and indirectly facilitate or hinder race day performance. Another way to think of the domain of the real is that it is the whole of reality.

The second level is the domain of the actual. The race day marathoner will experience various physiological (e.g., blood lactate), affective (e.g., perceived exertion, fatigue) and cognitive (e.g., efficacy, motivation) states that might vary over the course of the race. These states and mechanisms are typically thought to influence performance (i.e., race time), but we cannot see self-efficacy and di-

rectly measure it; we obtain self-reports. The third level is the domain of the empirical, which is what we measure or observe. Quantitative researchers might approach this domain and attempt to support potential causal models of efficacy through structural equation modeling (SEM). Another example that may resonate with SEM experts involves latent constructs. When athletes answer questions on a survey that are perpetrated to reflect a latent construct such as self-efficacy, the questions are the domain of the empirical and self-efficacy, the latent construct, can be viewed as the domain of the actual. In this example, from a SEM perspective, self-efficacy (the actual) is causing participant's answers (the empirical). CR realism has also been presented as a perspective that can justify mixed methods research (MMR; Ryba et al., 2022). In brief, CR presents a philosophy that avoids the major criticisms of both positivism and social constructionism and presents a plausible ontology and epistemology that I believe will resonant with many researchers in sport and exercise psychology.

11. Conclusion

I believe most sport and exercise psychology researchers clearly believe in an agentic self, applied to themselves and the people involved in their research. This stance is consistent with the discipline of sport and exercise *psychology*. In contrast, social constructionism, particularly strong social constructionism, is antithetical to a self and a discipline such as sport and exercise *psychology*. Sport and exercise psychology researchers interested in acknowledging the role of social construction and social influences should simply consider referencing sociology or social psychology. Social constructionism and its moral relativism also provide a shaky philosophical foundation for a profession geared to helping athletes and exercisers by providing them with reliable information on the reality that they can depend on. Researchers should consider if conducting research and helping people grounded in a philosophy of science that denies and/or minimizes an agentic self that can understand and report on reality is a defensible position. Authors should also think carefully about word and phrase choices, and the degree to which their writing is accessible to other researchers and audiences such as undergraduate students. It is difficult to think about and use information if it is inaccessible. Finally, I urge interested readers to learn about CR as an alternative to social constructionism.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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[6]Full references can be found online at: XXXX or from the author (aa3975@wayne.edu). They were not included in the current paper due to space limitations.

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