## **CSC: Bibliography Assignment**

 Aizawa, K. (2015). What is this cognition that is supposed to be embodied? *Philosophical Psychology*, 28(6), 755–775. <u>https://doi.org/10.1080/09515089.2013.875280</u>

This article investigates embodied cognition, and attempts to clarify the various ambiguities associated with this approach to characterizing human thinking. For instance, is it reasonable to claim that cognition is a form of behavior? It also considers how the term "cognition" as it relates to embodied cognition encompasses features that slightly differ from the traditional definition of "cognition." Various perspectives on embodied cognition are explored from a number of theorists.

2. Allen-Collinson, J. (2009). Sporting embodiment: sports studies and the (continuing) promise of phenomenology. *Qualitative Research in Sport and Exercise*, *1*(3): 279-296. <u>https://doi.org/10.1080/19398440903192340</u>

This article offers a phenomenological application to athletic activities. It advocates for such an approach, specifically addressing the importance of ideals from existentialist phenomenology in the embodiment of sport and exercise. The social, historical, and contextual influences on human experience and performance will be considered.

 Bandura, A. (1997). Self-efficacy: The exercise of control. W. H. Freeman/Times Books/ Henry Holt & Co. <u>https://www.academia.edu/28274869/Albert\_Bandura\_Self\_Efficacy\_The\_Exercise\_of\_C\_ontrol\_W\_H\_Freeman\_and\_Co\_1997\_pdf</u>

This book examines self-efficacy and how an individual's self-perception of their athletic abilities impacts athletic performance. The overarching themes/findings of this novel will be used in order to provide a foundation for the self belief and performance subsection, as it pertains to gymnastics specifically, of my paper.

 Barrero González, L. F. (2019). Dance as therapy: Embodiment, kinesthetic empathy and the case of contact improvisation. *Adaptive Behavior*, 27(1), 91–100. <u>https://doi.org/10.1177/1059712318794203</u>

This article explores potential applications of dance, the phenomenology of psychiatry, and the embodied consciousness of the dancer as a form of treatment or therapy for a variety of psychopathological conditions. In particular, the effectiveness of contact improvisation (CI) and dance movement therapy (DMT) is examined. These are meant to help patients to become more aware of their bodies and more effectively recognize bodily signals. This article is expected to be used in the latter portion of the paper, which

aims to describe how elements of embodied cognition can be applied to the attainment of a healthy lifestyle (sound body and sound mind).

 Bradshaw, E. J. (2010). Performance and health concepts in artistic gymnastics. XXVIII International Symposium of Biomechanics in Sports, July, 51–55. <u>https://ojs.ub.uni-konstanz.de/cpa/article/download/4378/4070</u>

This article provides an informative overview of the events, demands, and training involved in artistic gymnastics. This source will serve as an important reference for the introduction of my research paper.

 Cappuccio, M. L. (2015). Introduction: When embodied cognition and sport psychology team-up. *Phenomenology and the Cognitive Sciences*, *14*(2), 213–225. <u>https://doi.org/10.1007/s11097-015-9415-1</u>

This article describes the key elements of embodied cognition, differentiating this perspective from other more traditional cognitive approaches to understanding intelligent function. It offers insight into how the body inspires the mind's capabilities in many ways, and it specifically describes this phenomenon from a sports psychology perspective.

 Cheng, S., Werning, M., & Suddendorf, T. (2016). Dissociating memory traces and scenario construction in mental time travel. *Neuroscience & Biobehavioral Reviews*, 60, 82-89, <u>https://doi.org/10.1016/j.neubiorev.2015.11.011</u>

This article describes what "mental time travel" is, how humans and non-human animals construct associated scenarios, which include contextual information concerning the event, such as those involved, the event's setting, associated interactions, and the event itself, and how scenario construction differs between humans and other animals. Overall, while certain non-human animals possess the ability to encode, store, and retrieve episodic memory information, humans seem to be unique in their ability to construct, reflect upon, and critically examine a variety of scenarios.

 Chirazi, M. (2021). Expressiveness of gestural communication through body actions. *Învăţământ, Cercetare, Creaţie*, 1(1), 53–59. <u>https://www.ceeol.com/search/article-detail?id=957635</u>

This article describes artistic expression and the importance of bodily awareness, perceptiveness, and adaptability in the context of gymnastics, sportive dance, figure skating, and swimming. Elements of neuroscience and neural patterns during such activities are also explored.

9. Cox, A. (2016). *Music and embodied cognition: Listening, moving, feeling, and thinking.* Indiana University Press. https://www.amazon.com/Music-Embodied-Cognition-Listening-Interpretation/dp/025302 160X?asin=025302160X&revisionId=&format=4&depth=1

This book considers embodied cognition from a music cognition perspective. Cox explores conscious and unconscious influences of music on the human experience. Music cognition will be investigated through Cox's "mimetic hypothesis," which attributes a substantial portion of our experience and understanding of music (sensory, motor, and affective) to the listener's ability to replicate bodily movements that are associated with music production. Elements of neuroscience and phenomenology will be explored that pertain to embodied music cognition. Particularly of interest include parts 1 (Mimetic Comprehension, Metaphor and Related Means of Reasoning) and 3 (Music and the External Senses, Musical Affect, Applications, Implications).

10. Daroglou, G. (2011). Coping skills and self-efficacy as predictors of gymnastic performance. *The Sport Journal*, *14*(1). <u>https://go-gale-com.ezproxy.oswego.edu/ps/i.do?p=AONE&u=oswego&id=GALE%7CA2</u> <u>84323945&v=2.1&it=r</u>

This study investigates the demanding physical and psychological pressures experienced by gymnasts during practices and performances, especially among those who begin practicing gymnastics at a young age and those who excel rapidly. In particular, the psychological skills and the elements of self-efficacy involved in the practice of gymnastics are examined, in which the coping skills in dealing with stress during performances are further studied.

 Dennett, D. (1996). The creation of thinking. In *Kinds of minds: Toward an understanding of consciousness* (1st ed., pp. 119–152). Basic Books. <u>https://books.google.com/books/about/Kinds\_Of\_Minds.html?id=nrtchsJKQeAC</u>

This book was specifically chosen for its section of chapter 5, "The Creation of Thinking," that describes the importance of the environment in thinking, learning, and acting. Essentially, in the section, "Making Things to Think With," Dennet offers support for the embodied cognition perspective, describing contextual influences in cognitive processing. He describes how one must alter one's actions during the execution of learned skills depending on environmental factors that may impact its success, and how fundamental the process of labeling elements of our environment serves to be, for example.

 Fitzpatrick, J. M. (1998). Causal attributions of elite youth female gymnasts: An investigation of types and antecedents of attribution (doctoral dissertation). Michigan State University, East Lansing, MI. <u>https://www.euro-book.net/books/99iGwGgMNjQC/causal-attributions-of-elite-youth-fema</u> <u>le-gymnasts/john-michael-fitzpatrick/unknown/246/1998/MSU:31293016883633/saint</u> This dissertation explores the fundamental attribution that psychological factors play, in addition to athletic skill and ability, in the occurrence of successful athletic performance. This will be used as an example in the coping skills subsection of my research paper.

 Foell, J., Bekrater-Bodmann, R., Diers, M., & Flor, H. (2014). Mirror therapy for phantom limb pain: Brain changes and the role of body representation. *European Journal of Pain*, *18*(5), 729–739. <u>https://doi.org/10.1002/j.1532-2149.2013.00433.x</u>

This article was included as a reference to the use of mirror therapy in treating phantom limb pain. The pain relief that many experience following treatment offers support for the embodied cognition perspective, as being presented with an illusion of an intact limb and moving, clenching, and releasing tension in that limb while looking at the reflection in the appropriately positioned mirror has been shown to alleviate much of the pain experienced in the phantom limbs of many individuals.

14. Garbarini, F. & Adenzato, M. (2004). At the root of embodied cognition: Cognitive science meets neurophysiology. *Brain and Cognition*, *56*(1), 100–106. <u>http://comphacker.org/pdfs/631/Brain\_and\_Cognition\_2004%20(1).pdf</u>

This article reflects on James Gibson's theory of affordances and Eleanor Rosch's principles of categorization and explains these concepts from an embodied cognition perspective. The authors use neurophysiological and neuroscientific evidence (namely using research findings from canonical neurons and mirror neurons) in support of their embodied approach to cognition. In particular, they investigate how action and simulation influence cognitive processes, object recognition via perception, and the categorization of concepts in the mind.

 Haugeland, J. (2000). Mind embodied and embedded. In: Haugeland, John (ed.), *Having Thought: Essays in the Metaphysics of Mind*. Cambridge: Harvard University Press, 207-237. https://www.amazon.com/Having-Thought-Essays-Metaphysics-Mind/dp/0674004159

This essay offers a comprehensive interpretation of embodied cognition, and it will be used in the embodied cognition background section of my paper in an attempt to write an informative and explanatory definition.

16. Illundáin-Agurruza, J. (2013). Moving wisdom: Explaining cognition through movement. *Fair Play*, *1*(1), 58–87. <u>https://doi.org/10.1038/nrn1285</u>

This article provides an overview of embodied cognition and the foundational figures in its development as a field of study, including elements from historical pieces that hint at more of an embodied approach to understanding human intelligence. This article will also be beneficial to me in that it gives extensive background information that will aid in my understanding of embodied cognition.

17. Kimmel, M., & Rogler, C. R. (2018). Affordances in interaction: The case of aikido. *Ecological Psychology*, *30*(3), 195–223. <u>https://doi.org/10.1080/10407413.2017.1409589</u>

This article examines elements of embodied cognition and artistic expression in the martial arts, specifically in Aikido, "the way of harmonizing energy." It describes the unique aspects of Aikido practice and performance, such as the importance of mindfulness, the defensive motions and their utility, the practiced movement phases, the exceptional technique involved, and the themes of reciprocity, noncompetitiveness, and nonviolence.

 Lewis, A., Berntsen, D., & Call, J. (2019). Long-term memory of past events in great apes. *Current Directions in Psychological Science*, *28*(2), 117–123. <u>https://doi.org/10.1177/0963721418812781</u>

This article provides evidence that "mental time travel" abilities exist in non-human animals, particularly among the great apes. In their review, these researchers found, from information presented in multiple studies (one these researchers published previously) that great apes are able to remember specific events for a period of months to even years. Further, these memories can be made more memorable in the ape's mind based on an event's surrounding information that makes it more distinctive, and they also have been shown to follow a similar logarithmic trend in forgetting similar to humans. Recall improved when characteristics from the event were shown to the apes, which corresponds to encoding specificity and cue overload occurrences with human memory.

 Luis del Campo, V., & Espada Gracia, I. (2018). Exploring visual patterns and judgments predicated on role specificity: Case studies of expertise in gymnastics. *Current Psychology*, 37(4), 934–941. <u>https://doi.org/10.1007/s12144-017-9572-1</u>

This study provides additional information into the perception of performance by gymnasts themselves, in addition to gymnastics coaches and judges. It examines how specific sensorimotor experiences influence visual search patterns and performance judgments in gymnasts, coaches, and judges.

 Marsh, H. W., Chanal, J. P., & Sarrazin, P. G. (2006). Self-belief does make a difference: A reciprocal effects model of the causal ordering of physical self-concept and gymnastics performance. *Journal of Sports Sciences*, *24*(1), 101–111. <u>https://doi.org/10.1080/02640410500130920</u>

This study investigates gymnasts' own evaluations of their skill levels in practices (their self-concept), and how this translates to performance in competitions. Their findings highlight the benefits of fostering a healthy self-concept concerning gymnastic skills and abilities. Higher levels in one lead to higher levels of the other, according to their results.

21. Mulcahy, N. J. & Call, J. (2006). Apes save tools for future use. *Science*, *312*(5776), 1038-1040. doi: 10.1126/science.1125456

This study offers support for the argument that some non-human animals, like humans, possess the ability to engage in "mental time travel." These researchers found that orangutans and bonobos engaged in the behavior of selecting, conserving, and transferring various tools as a means of saving them for future use. These results offer support for embodied cognition from an evolutionary perspective, providing evidence for the development of future planning/"mental time travel" abilities and other cognitive functions seen in humans evolved from great apes, based on bodily actions and interactions with the environment.

22. Pizzera, A. (2012). Gymnastic judges benefit from their own motor experience as gymnasts. *Research Quarterly for Exercise and Sport*, *83*(4), 603–607. <u>https://doi.org/10.1080/02701367.2012.10599887</u>

This study investigates the difficult task that gymnastic judges are presented with in needing to appropriately classify various skills and gauge point deductions in a fairly short amount of time during and soon after gymnasts perform their routines. Findings indicated that judges who had previous specific motor experiences to the skills being performed were better able to accurately categorize and judge the particular routine, especially in detecting body angles.

 Raab, M. & Araújo, D. (2019). Embodied cognition with and without mental representations: The case of embodied choices in sports. *Frontiers in Psychology*, *10*(August), 1-12. <u>https://doi.org/10.3389/fpsyg.2019.01825</u>

This article offers a historical background for embodied cognition, defines key concepts associated with it, and describes conflicting views among scholars concerning theories of embodiment. This will serve as an important source for the background section of my paper.

24. Raby, C. R., Alexis, D. M., Dickinson, A., & Clayton, N. S. (2007). Planning for the future by western scrub-jays. *Nature*. *445*(7130), 919-121. doi: 10.1038/nature05575

This article explains "mental time travel" (the ability to plan for the future based on previous experience) abilities as seen in the western scrub-jay. This will be utilized as a means of offering an example of an animal that, in this study, was able to revise their behaviors according to prior knowledge learned from experience. These animals were shown to be able to store food for future use in areas that were previously associated to be locations where food is more difficult to come by at that moment in time, which they argue is an ability that is representative of "mental time travel."

25. Rietveld, E. (2008). Situated normativity: the normative aspect of embodied cognition in unreflective action. *Mind*, *117*(468), 973-1001. <u>https://doi.org/10.1093/mind/fzn050</u>

This article will be used in order to more fully describe embodied cognition and how many human actions are carried out on a subconscious level, This will be used in the embodied cognition background section of my paper.

26. Robinson, J. (2007). Deeper than reason: Emotion and its role in literature, music, and art. Oxford University Press. <u>https://www.amazon.com/Deeper-than-Reason-Emotion-Literature/dp/0199204268?asin =0199204268&revisionId=&format=4&depth=1</u>

This book examines the role that emotions play in the arts, namely arts and aesthetics, arts and emotional expression, art forms and emotional experience, and artistic interpretation. Historical and theoretical contexts of emotions and current research in the study of emotions are explored. This source offers additional insight concerning embodiment in other forms of art, such as poetry, plays, and novels, and provides other examples of emotional and artistic expression (film-making, painting, choreographing, and composing). Its exploration of emotional reactions and expressions in music and elements of embodiment (physiological changes and action tendencies induced by emotion) are particularly relevant.

 Schiavio, A., Gesbert, V., Reybrouck, M., Hauw, D., & Parncutt, R. (2019). Optimizing performative skills in social interaction: Insights from embodied cognition, music education, and sport psychology. *Frontiers in Psychology*, *10*(July), 1-14. <u>https://doi.org/10.3389/fpsyg.2019.01542</u>

This article discusses the internal and external influences on performance in music and sports engagement, such as bodily factors, activity patterns present in the environment, and social and cultural influences. It specifically examines the feeling of being a part of a collective whole during performances, the need to be able to adapt in these contexts, and the use of distributed forms of bodily memory as it pertains to music and sports. This source provides some foundational concepts and terminologies associated with the field of embodied cognition, which will aid in my understanding of embodied cognition.

28. Snowber, C. (2012). Dance as a way of knowing. *New Directions for Adult & Continuing Education*, 2012(134), 53–60. <u>https://doi-org.ezproxy.oswego.edu/10.1002/ace.20017</u>

This article specifically examines embodied cognition through dance as a form of artistic expression. Snowber defines dance generally, in a manner that encompasses creative movement, improvisation, and other expressive movements. Snowber discusses the importance of moving around in and interacting with the environment during childhood, which is primarily how children learn and acquire knowledge at an early age. Overall, this

article offers more of a general take on embodied cognition and artistic expression and how they are involved in learning and understanding.

29. Spatz, B. (2017). Embodied research: A methodology. *Liminalities: A Journal of Performance Studies*, *13*(2), 1–31. <u>http://liminalities.net/13-2/embodied.pdf</u>

This article describes what is encompassed by embodied research and how it can be applied to artistic performance, expression, and practice. It offers suggestions as to how to construct an effective research project with a topic encompassed in embodied cognition. This article will be used as a model during the development of this research project.

 Weiss, M. R., Weise, D. M., & Klint, K. A. (1989). Head over heels with success: The relationship between self-efficacy and performance in competitive youth gymnastics. *Journal of Sport and Exercise Psychology*, *11*, 444–451. <u>https://doi.org/10.1123/jsep.11.4.444</u>

This article describes self-efficacy as it relates to artistic gymnasts and their perception of success in athletic performance. This article will be used to define self-efficacy and describe study findings in artistic gymnastics.

 Wilson, M. (2008). How did we get from there to here? An evolutionary perspective on embodied cognition. In P. Calvo and A. Gomila (Eds.), *Handbook of Cognitive Science: An Embodied Approach* (p. 375–393). Academic Press. https://people.ucsc.edu/~mlwilson/publications/EvolEmbodChapt.pdf

This article describes the origins of embodied cognition as being primarily evolutionary, in which cognitive abilities were achieved from the structure of the physical human body, causing the brain to develop and evolve in response to the body's actions and existing needs over time. Rather than claiming that cognition is strictly a direct result of the body's immediate physical environment like some articles on embodied cognition claim, Wilson states that the embodied cognition perspective also encompasses more abstract, de-contextualized thoughts, which resulted from these sensorimotor abilities that were present beforehand. This article will be used in one of the body sections (exploring embodied cognition from an evolutionary perspective) of my paper.