



## The Love of Aerial Practice: Art, Embodiment, Phronesis

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ARTICLE INFO ABSTRACT

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Conflicts of interest: None Funding: None Background of study: Given the importance of movement and low exercise adherence among young adults, it is imperative to understand reasons for the love of movement. Objective: The purpose of this phronetic, qualitative study was to examine if the values of aerial practice encompassed elements of embodiment, techne (art), and phronesis (practical wisdom). Method: Participants were 13 undergraduate college students in an aerial practice class. Individual-based interview topics included exercise behavior and the values and meaning of aerial practice. Results: All participants were active regardless of aerial practice classification (e.g., beginners vs advanced). Beyond aerial practice, other exercises included dancing, yoga and aerial yoga, Pilates, aerobic activities (e.g., running and spinning classes), rock climbing and hiking, weight lifting, somatics and acrobatics. Based on the first theme, the love of aerial practice, techne aspects reflected fitness, skill improvement; challenging, infinite learning and determination. Art, performativity, fluidity included techne and embodiment, while the sensation of whole-body movement encompassed an embodied element for the love of aerial silks. A combination of *phronetic* and embodied elements were sense of community and inclusivity: novelty; it fits me. Embodied qualities of the second theme, *challenges with aerial practice*, included fear, injuries, bruises, pain. Fitness, skill, performance and the struggle to learn new movements linked to techne and the integral parts of movement. Phronetic categories regarding situation-specific reflections were time on the silk and unhealthy competition in the business world (territorial traits and lack of sharing). The third theme was future exercise plans and its categories included phronetic (decision-related) elements: practice and/or teach aerial silks; keep exercising. Conclusion: Artistic, embodied, and phronetic approaches in movement education can enhance the value and pursuit of movement.

Key words: Movement, Practical Reasoning, Art, Embodiment, Dance, Theater

## INTRODUCTION

The reasons for the love of movement, such as exercise participation, have problematized several researchers and practitioners in Kinesiology. Potential explanations for this include low exercise adherence among young adults (Cardinal et al., 2015; Lackman, Smith, & McNeill, 2015; Mitchell et al., 2013) and major public health concerns, including high obesity and diabetes rates, heart disease, and high blood pressure (US Department of Health and Human Services [USDHHS], 2018). Disparities in exercise participation and health by race/ethnicity, education, and income levels (US-DHHS, 2018) are also indicative of the disconnect between the health of the public and abundance of behavior change randomized controlled trials. Contrary to logical positivism, it will be outlined below that choices about movement experiences are based on elements in the concepts of phronesis (practical reasoning or moral wisdom), techne (art), and

embodiment (body-mind connection) (Kosma & Buchanan, 2018a). Therefore, the purpose of this qualitative, *phronetic* study was to examine if the values (e.g., reasons and challenges to be active) and meaning of participating in aerial practice derived from elements of *phronesis*, *techne*, and embodiment.

Given that artistic endeavors like dancing can lead to the love of movement (Kosma & Buchanan, 2018a), aerial practice was the art form used in this paper. Aerial practice or aerial silks is a physically demanding artistic endeavor, which can be performed as physical theater or dance. The emphasis is on artistic expression, including sharing a story and expressing emotion, primarily via physical movement. Aerial practice is performed above ground via the use of silks. The aerialist can climb up on two pieces of fabric (silks) and, while wrapped around the silks, perform different movements, including inversions, suspensions, and splits. Aerial practice requires the integration of cognitive and sensory

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bodily awareness and can be performed with or without music (see e.g. Kosma & Erickson, 2019).

#### Phronesis for the Love of Movement

The concept of phronesis (practical reasoning or moral wisdom) was coined by Aristotle in his Nicomachean Ethics (Aristotle, 350 B.C.E/1962) to distinguish between theoria (the scientific method) and praxis. Theoria reflects the cause-and-effect laws in natural sciences that lead to the knowledge of episteme/science. Praxis refers to the ever-changing context-based life experiences within one's history, culture, family upbringing, and society that lead to the knowledge of phronesis (Buchanan, 2000, 2004, 2006, 2016; Flyvbjerg, 2001, 2004). Cause-and-effect laws from theoria are effective in predicting stable and invariant phenomena in natural sciences, such us how the pull of gravity explains why objects fall to earth or why the earth orbits the sun. However, human action, such as deciding to be active or not, is unstable in nature and cannot be predicted by a set of predetermined constructs as expected in the scientific method or logical positivism. While psychological characteristics (e.g., perceived confidence) can influence decisions about exercise behavior, these concepts are typically studied in isolation by being reduced to "measurable" constructs within 5-7-point Likert type scales (Buchanan, 2004; Kosma & Buchanan, 2018b). Psychological characteristics are not entirely individualistic in nature; rather, they are qualitatively unique based on one's cultural and societal experiences as identified in phronesis. In other words, the meaning of exercise enjoyment and confidence can greatly vary between two people of diverse cultural and societal backgrounds (Bourdieu, 1990; Kosma & Buchanan, 2018b; Kosma, Buchanan, & Hondzinski, 2017).

Instead of relying solely on theoria and logical positivism, phronetic researchers examine human values and moral reasoning regarding how they choose to lead the good life based on the Humanities, such as philosophy, history, literature, and liberal arts (Buchanan, 2016; Flyvbjerg, 2001). To become phronimos (wise) and exercise practical reasoning means to reflect upon one's socio-political system, culture, family upbringing, religion or lack of, and personal exercise experiences. Decisions about movement experiences can relate to the intensity, duration, and type of activities to partake or not (Aristotle 350 B.C.E/1962; Bourdieu, 1994; Flyvbjerg, 2001; Kosma, Buchanan, & Hondzinski, 2015; Sayer, 2011; Wolf, 2015). Based on phronesis, exercise behavior is considered normative and its values and meaning can be evaluated based on culture and society. In two recent phronetic studies regarding exercise values and health, it was identified that basketball and dancing were culturally and socially meaningful exercises among African American young adults and older adults (Kosma & Buchanan, 2018b; Kosma, Buchanan, & Hondzinski, 2017).

*Phronetic* action (e.g., movement participation) is viewed as an end in itself, such as the joy of dancing and theatrical play (Sheets-Johnstone, 1966). Playful activity is key to healthful psychological, social, and biological development of children (Sheets-Johnstone, 2003) and can translate into health and well-being during adulthood. Playful, enjoyable, and non-competitive child-like movement patterns like running, play-chasing, jumping up and down, play-fighting without hitting, and even falling are essential to health and well-being (Sheets-Johnstone, 2003). Based on two *phronetic* studies, playful, non-competitive, and culturally relevant balls games (e.g., basketball) among socio-economically disadvantaged African American young adults and their parents were enjoyable and meaningful (Kosma & Buchanan, 2018b, Kosma & Buchanan, 2019).

## Techne for the Love of Movement

Beyond *episteme* and *phronesis*, in his *Nicomachean Ethics* (Aristotle, 350 B.C.E/1962) Aristotle discussed another type of knowledge, *techne*, which is translated as craft or art. *Techne* links to *phronesis*, in that it involves the knowledge of principles to produce a good (*agathon*) end. As with *phronesis*, *techne* is pragmatic, variable, and context-dependent and can involve several fields, such as craft and health. The good ends of many *technai*, including the importance of medicine to produce health and the doctor's wisdom to prescribe medication or not has been exemplified in Aristotle's *Nicomachean Ethics* (Aristotle, 350 B.C.E/1962).

Although *phronetic* action is typically viewed as an end in itself without the need to fulfill certain outcomes, *techne* typically links to the accomplishment of internal outcomes, such as increased skill and fitness levels (Angier, 2010; Kosma & Buchanan, 2018a). If these *techne* outcomes are internal-integral to the action and not external, such as monetary prizes and fame, *phronesis* can also be achieved. People can make wise decisions about an action (e.g., dancing) not only for the mere joy of the activity (*phronesis*), but also for its good ends (e.g., advancing in skill and expression - *techne*) (Angier, 2010; Kosma & Buchanan, 2018a).

It is well-established in philosophical analyses that techne encompasses not only technique derived from habituation/ habit (ethismos), but also knowledge regarding the how and what of the artistic behavior (Angier, 2010; Bourdieu, 1994; Sayer, 2011). Excelling at movement-related artistic skills and performativity, such as aerial dance or physical theater, requires a combination of regular practice and cognitive knowledge regarding positions of the body, expression, and safety. In this case, cognition and practice inform each other regarding the mastery of a skill as exemplified in technai models (Angier, 2010; Kosma & Buchanan, 2018a; Kosma & Erickson, 2019; Montero, 2010). Physical theater encompasses theatrical performance (e.g., storytelling) primarily through physical movement. It emphasizes physical skills, training, and body form, where the somatic and cognitive elements of movement are emphasized (Artaud, 1994; Kosma & Erickson, 2019). It is important to note that in this study aerial practice was taught either as a form of theatrical play or dance. It was considered an art form and expression, emphasizing movements that resemble child play kinetic patterns (Sheets-Johnstone, 2003) like tumbling, jumping, spinning, swinging, and "flying" (being above ground) while wrapped around silks.

## **Embodiment for the Love of Movement**

The interaction between physical practice and cognition has also been exemplified in embodiment. Embodiment is typically studied in phenomenology, which is the study of structures of experience and consciousness. Contrary to the dominant logical positivism, where conscious experiences, including understanding and learning, derive only from the mind, consciousness is also part of embodied-corporeal experiences (Sangeetha, Sinha, & Sreekantan, 2014). In his Phenomenology of Perception (Merleau-Ponty, 1945/2014), Merleau-Ponty challenged the Cartesian dichotomy between body and mind, where the intelligent mind is supposed to take precedence and lead the passive body, which (the latter) is viewed only as an object like other objects in this world. Contrary to the emphasis on common Cartesian dualisms - mind vs. body; intelligence vs. values - Merleau-Ponty emphasized the interaction between mind and body, where the body operates as a subject (e.g., dancing and climbing) and informs the mind. The type of knowledge that derives from practical experiences of the active (Lived) body is practognosia (Merleau-Ponty, 1945/2014). Sensory information from joints, ligaments, tendons, muscles, and skin (proprioception) and the visceral system (interoception) can influence decisions regarding how to execute a movement (Montero, 2010). Analytical thinking about how to move and wrap in aerial silks has shown to be prevalent when aerial practice movements are first learned; however, for mastered skills sensory bodily awareness takes precedence (Kosma & Erickson, 2019).

Like phronesis, embodied action (e.g., movement) is not an individualistic manifestation. It is rather a holistic approach, which is influenced by and influences society (e.g., community and culture) and the physical environment (nature) (Allen-Collinson & Leledaki, 2015; Kosma & Buchanan, 2018a; Merleau-Ponty, 1945/2014). Runners and dancers can form communities to share experiences, common goals, and learn from each other. Such experiences can affect current and future exercise participation. Based on few studies, embodied exercise and mainly sports can be pleasant and meaningful. Being connected with the natural environment, such as viewing the sea, rivers, and trees, and sensing the drop of the rain, was linked to delightful and motivating walking experiences among inactive adults in Wales (Allen-Collinson & Leledaki, 2015). US traceurs, who participated in parkour and free running, expressed exhilarating experiences, including childlike play; feeling flow in movement; risk taking and managing; and environmental interactions with other traceurs, community members, and the physical environment (Clegg & Butryn, 2012). Embodied sensations in aerial practice included integration of cognitive and sensory bodily awareness, diminished sensation of pain over time, and embodied bodily expressions with or without music (Kosma & Erickson, 2019).

Given the shortcomings of logical positivism in exercise promotion and proposed links among *phronesis*, *techne*, embodiment and movement, the purpose of this qualitative, *phronetic* study was to examine if the values and meaning of participating in aerial practice derived from elements of *phronesis, techne,* and embodiment. It was hypothesized that aerial practice experiences within physical theater would be valued and encompass elements of a) *techne*-art, such as challenging, creative, expressive and performative endeavors; b) *phronesis,* including wisdom in decisions, community and the joy of movement as an end in itself; and c) embodiment, such as body-mind unity and society.

## **METHODS**

## **Design and Participants**

Drawing on the philosophy of hermeneutics (Kafle, 2011), this was a *phronetic*, qualitative study to examine the perceptions, reflections, and aerial practice experiences of young adults from diverse racial and aerial practice backgrounds. Hermeneutics philosophy ties its origins to Martin Heidegger (Kafle, 2011) and refers to rich description, analysis, and interpretation of the values and meaning people attach to a life phenomenon (e.g., aerial practice) in relation to their experiences with the pertinent phenomenon (Kafle, 2011). In this study, hermeneutics philosophy was used because it is the recommended approach to examine values about human behavior (e.g., exercise) in *phronetic* research (Flyvbjerg, 2001; Kosma, Buchanan, & Hondzinski, 2015).

Data were collected once during an aerial practice class from 13 participants (nine women and four men): 12 undergraduate students, who enrolled in the class at a major Southeastern US university, and a male university alumnus. The university alumnus was an advanced aerialist with several years of pedagogical experience in aerial silks; thus, he was assisting with class instruction. Using this approach, which is also in accordance with phronetic research, the values and meaning of aerial practice was examined in a more in-depth and rigorous way. The racial/ethnic distribution of the participants included 10 European Americans, two African Americans, and one Middle Eastern student. The average age of the participants was 20.46 years old ( $\pm 2.03$ ; range = 19-26). Participants majored in a variety of academic areas, including theater, public relations, communication studies, dance, microbiology, engineering, and biochemistry.

## Procedures

In accordance with *phronetic* research, the class instructor and first study author purposively recruited the participants based on their diverse aerial practice experiences: four beginners; four intermediates; and five advanced participants. Following a class announcement about the study, students and/or TAs volunteered to participate in the study without any obligation or extra credit for participation. The study participants were interviewed in a quiet room next to the movement studio where aerial practice took place. The length of the interviews varied from 23 minutes to 58 minutes. The first study author also participated in the aerial practice class for personal interest, observations, and journaling. The study was reviewed and approved by a university-based Institutional Review Board and, prior to the interviews, participants signed the study's consent form.

Interview questions addressed current and past exercise behavior (e.g., type, frequency, intensity, and duration); reasons for and challenges in participating in aerial silks; embodied experiences during aerial practice; reasons for progress; perceptions about the social setting of the class; and future exercise goals. The interview process was dialogical in nature to build trust and engage in in-depth discussions regarding participants' aerial practice experiences and future exercise plans. The content of the interview guide is shown in Table 1. At the end of the interviews, participants were asked about their age, gender, ethnicity, and education. All interviews were conducted in-person and audio-taped. The first author drafted the initial interview guide with the assistance of the class instructor (second author). All authors reviewed and revised the questions for clarity and consistency with the study objectives. The final questions were then pilot-tested with two participants, whose results were included in the study.

Based on the educational approach in the aerial practice class, the values of art movement were emphasized by taking into consideration the various educational backgrounds and exercise experiences of the students/participants. Beginner aerialists learned basic aerial skills, including climbing, inverting, and becoming familiar with different types of wraps.

#### Table 1. Interview guide

- 1. What is your major at university's name?
- 2. What year of study are you in?
- 3. Why did you pick aerial practice? What does this mean to you?
- 4. Do you observe changes in your body due to aerial practice and how do you feel about them? Do these changes influence your participation in aerial practice and how?
- 5. Beyond aerial practice, do you currently exercise? If yes, in which activities do you participate – how frequently and how intensely?
- 6. In which activities did you participate in the past?
- 7. Can you describe some of your bodily sensations during aerial practice? How does your body feel when you perform your routines?
- 8. Do you pay attention to those sensations and why?
- 9. Can you describe changes in sensations as you advance in aerial skills? Can you describe some of those sensations during certain movements?
- 10. How does your body feel when you transfer from one movement to another?
- 11. Do you think about the audience in relation to your performance and how?
- 12. How did you manage to progress in your routines?
- 13. What do you think about the social setting in class? How does it help or hinder your aerial practice experiences?
- 14. Is it important to interact with your mentors (TAs) and why?
- 15. What are some challenges related to aerial practice and how do you deal with them?
- 16. What are your future goals related to aerial practice and/or other exercises?

All aerialists, regardless of their level in aerial silks, were expected to put a sequence of movements together and perform during the three class quizzes and final exam. There was more assistance with the movement sequence for beginners than advanced aerialists. Performativity expectations included sharing a story or dancing, expressing emotion, executing smooth transitions, and paying attention to poses and lines. The class setting was inclusive and supportive in nature, in that the class instructor and TAs were encouraging and provided constructive feedback and a variety of ways to learn and execute different skills. Participants were also encouraged to practice outside class time during Physical Theater Club hours when TAs were also available for assistance.

## Demographics

Audiotapes of the interviews were transcribed verbatim and double-checked for transcription accuracy by the first author. All participants but one preferred using their actual first name when reporting the study results. Therefore, a pseudonym was used for only one participant. This approach was in accordance with the institution's IRB regulations and has been used in other studies within the same institution (e.g., Kosma & Erickson, 2019) and elsewhere (e.g., Ravn & Christensen, 2016). Two participants had the same name, Chase, thus the names ChaseM and ChaseF were used for the male and female, respectively. The transcripts and interviewer's post hoc reflections and debriefing notes were entered in NVivo 10 and themes and categories were developed based on hermeneutics philosophy for analyzing qualitative data (Flyvbjerg, 2001; Kafle, 2011): a) after reading the transcripts and notes multiple times, the first author systematically coded the data and developed themes and categories by examining each individual story and the whole data set in a recursive process; b) the second study author independently reviewed the coded data to finalize the themes and categories via consensus discussions with the first author; c) representative extracts were then selected based on the coded data, the entire data set, research questions, and the literature.

## RESULTS

## **Exercise Behavior**

As indicated above, exercise behavior and all data in this study were qualitatively measured (see e.g., Table 1). Based on Table 2, all participants were active regardless of aerial practice classification. All of them participated in the aerial practice class and Physical Theater Club, which (the latter) took place outside class hours for enhanced practice. Other exercises included dancing, yoga and aerial yoga, Pilates, aerobic activities (e.g., running and spinning classes), rock climbing and hiking, weight lifting, and somatics and acrobatics. Although some participants were too busy academically to participate in other exercises beyond aerial practice, they were quite active the summer before the interviews, participating in such activities as weight lifting and cardio-respiratory exercises (ChaseM and Emile).

Name	Туре	Frequency	Duration	Intensity
	Advanced aerialist	s (TAs)		
Alysson	Aerial practice PTC hours*	3 days/week	2 hours/day	TA in class
	Aerial yoga Yoga	1-3 days/ month 2 days/week	>1 hour/day	Hard (1 hr/week)
Carlee	Aerial practice	3 days/week	2 hours/day	TA in class
ChaseF	Aerial silks Aerial practice Running Zumba class Yoga, ab** or leg workout	3 days/week 2 days/week 3-4 days/week 2 days/week 1-3 days/week	2 hours/day ~ 2 hours/day 15-20 minutes 1 hour/day 2 hours/week	TA in class Personal training 1.5 mi/moderate Aerial conditioning
Sara	Aerial practice Dancing (cheerleading and dance college classes) Dance instructor Riding bike to school	3 days/week Daily	2 hours/day 18 hours/week 4.5 hours/week	TA in class
	Some cardio and weight lifting		20-30 minutes/day	
Mark (alumnus)	Aerial practice Somatics and acrobatics Climbing walls	~ 3 days/week 5-6 days/week	1-2 hours/day	TA in class Intense
	Dancing	Twice/month		
	Intermediate aer	ialists		
Bailey	Aerial practice PTC* hours	3 days/week 1 day/week	1 hour/day	Intermediate
	Yoga Weight lifting	1 day/week 2 days/week	1 hour/time	Intermediate
ChaseM	Aerial practice	3 days/week	1 hour/day	Intermediate
Kaitryana	Aerial practice PTC* hours	3 days/week	1 hour/day	Intermediate
	Working out (running, dancing, weight lifting)		>15 hours/week	Intense
Murtaza	Aerial practice PTC* hours	3 days/week 1 day/week	1 hour/day 1-2 hours/time	Intermediate
	Beginner aerial	lists		
Emile	Aerial practice Tai Chi PTC* hours	3 days/week 3 days/week Not often	1 hour/day 1 hour/day	Beginner Moderate
Kaitlyn	Aerial practice PTC* hours	3 days/week Before quiz	1 hour/day	Beginner
	Cardio (running, spinning classes, elliptical, Pilates classes)	Daily	5-7 hours/week	Vigorously
Kelly	Aerial practice PTC* hours	3 days/week Before quiz	1 hour/day	Beginner
	Running Gym (swimming, running, weight lifting, ab** exercises)	3 days/week 3 days/week	1 hour/day 2 hours/time	Pushes herself
Olivia	Aerial practice PTC* hours Rock climbing, hiking	3 days/week ~2 days/week Twice/month	1 hour/day	Beginner

Table 2. Exercise levels by aerial classification

\*PTC = Physical Theater Club; \*\*ab = abdominal

## **Emerging Themes**

Three themes emerged from the analysis, encompassing aspects of embodiment, *phronesis*, and *techne*. The categories for each theme were organized according to their relations with the study's overarching concepts of embodiment, *phronesis*, and *techne*, including any combination of their elements. The first theme was *the love of aerial practice*.

*Techne* aspects in this theme related to achieving internal-integral outcomes of aerial practice: fitness, skill and physique improvement; challenging, infinite learning and determination. The sensation of whole-body movement encompassed an embodied element for the love of aerial silks. A combination of *techne* as art and embodied aspects included art, performativity, fluidity. A combination of *phronetic* and embodied elements were sense of community and inclusivity; novelty; it fits me. The second theme was <u>challenges with</u> <u>aerial practice</u>. Fear, injuries, bruises, pain encompassed embodied elements. Fitness, skill, performance and the struggle to learn new movements linked to *techne* and the integral parts of movement. *Phronetic* categories regarding situation-specific reflections were time on the silk and unhealthy competition in the business world (territorial traits and lack of sharing). The third theme was <u>future exercise</u> <u>plans</u> and its categories included <u>phronetic</u> (decision-related) elements: practice and/or teach aerial silks; keep exercising.

## Theme 1: The love of aerial practice

## Techne (internal-integral outcomes) elements

Fitness, skill, and physique improvement. All participants claimed that they loved aerial practice because they improved their fitness levels, including muscle strength, endurance, and flexibility, skills, and physique (achieving toned muscles and a lean body). Several students mentioned that their muscle strength, especially upper-body strength, improved because of aerial silks. They enjoyed muscle growth in their upper arms, constituting to a lean, toned, and healthy physique. Bailey acknowledged that she already had "pretty toned legs", but with aerial silks her "upper arms have gotten a lot bulkier" and this reflects her progress. ChaseF enjoys improvements on her "upper body strength and core strength." She does not feel that she is "bulky"; rather, she feels "healthy and fit." For Emile, it was "gratifying and super-satisfying" to notice how his "weak points like shoulder, back strength and particularly grip strength improved." For Alyson, building up endurance, stamina, and strength in relation to paying attention to performativity, such as "perfect poses" can ensure safety:

"And there's also a little bit of... holding on for dear life, because you're up there and your muscles can't fail you... if your muscles give way in a silk, you're falling down and you're injuring yourself. So, it's definitely a mindover-matter thing. If you think that you are going to fall down, then you do hold on stronger and you do build that strength more and you really focus on making sure the poses are perfect so that you do not hurt yourself."

Kaitryana's major improvement was her "arm and shoulder strength." She "likes feeling stronger and knowing that I can lift my entire body weight up." Her parents recently complimented her on her physique changes: "... your arms and your back are like ripped." Others like Olivia and Kaitlin enjoyed improving their flexibility.

*Challenging, infinite learning and determination.* Several students mentioned that they love aerial silks because it is challenging and learning never stops. For these students, aerial silks involve dedication, determination, passion, perseverance, care, and ambition. Alysson is a determined "go-getter kind of person", who loves to keep learning and growing in aerial silks:

"I love it because there's always something new. There's always something more. It never fails. There's never information that you can just get to and then stop... you can never stop learning about people and you can never stop changing; you can never stop growing. And I just think I gravitate towards... infinite activities that just keep going."

Carlee also talked about the endless learning of aerial movements and her tendency to constantly improve by setting new small goals to meet and:

"...persevere through the painful or tiring moves... there's so many variations of the same moves... that I don't think there's an end."

Mark and Emile spoke of creativity and exploration of aerial silks, where "there are some things that come out, some really cool sequences and discoveries" (Mark). ChaseF is passionate about aerial dance and she cares about its infinite world because aerial is not just silks, but also trapeze and lyra. She applies aerial silk movements to trapeze or lyra or:

"You can do something you learn on lyra and attempt it on trapeze. It all is interchangeable, but they're all different because they're different equipment."

## Embodied element

**Sensation of whole-body movement.** Several participants mentioned that their love of aerial derives from a sensation that their whole body is activated, and, at times, the activity does not feel like a workout. Based on Emile, Murtaza, and Sara, aerial silks is a whole-body movement that they enjoy. Murtaza was not exercising before trying aerial silks, which he immensely enjoys:

"I'm just not interested in swimming or running. I think that aerial is so much different because you use every part of your body... your shoulders, your wrists, your arms, your core, your hips, your legs, your butt, everything."

Similarly, for Sara aerial silks is a whole-body movement and "out of body experience" that she loves:

"Well, it's definitely different than working out. I had never experienced lifting my whole body the way we do. I have always loved physical fitness and... just sweating and just feeling like you're active... And aerial gives me that feeling for my whole body, not just in my feet with dancing or stretching. It's working everything at the same time, and when you're in the air for 3+ minutes you don't realize how much you're working until you come down.... Oh, I was working all these muscles... and I can feel my muscles engage...it's kind of like an out of body experience almost when you're up in the silks."

Emile also emphasized that, unlike weight training, aerial silks is a "full body" movement, which is enjoyable because "you didn't think about the fact that you were working out your whole body."

#### Techne (art) and embodiment

*Art, performativity, fluidity.* Most participants said that they enjoyed the artistic, expressive, and performative aspects of aerial practice, including feelings of transcendence, fluidity, and being in the zone. Alysson mentioned that performing helps her connect body and mind while expressing her feelings:

"I feel the fluidity of my surroundings and the silk just transferring through the energy in my body and... it's almost like you're in a state of ecstasy. You're up there and you're just... moving and seeing the whole world from a different way...as I was descending, it's almost like floating down and just floating, becoming grounded again and it's a lot of linked with the mind just being able to really connect the most with the body."

Similarly, Sara is "in the zone when performing with my music on." Aerial silks giver her "a new sense of gravity." Carlee enjoys creating a "cohesive piece of art" and paying attention to every single detail to be "graceful" like having her "toes pointed and turned out with nice lines in a pose." She also discussed the expressive and transcendental experience of aerial silks performance:

"...you put this art together for other people to appreciate, or for you to communicate in some form with other people...you can relay so many things to people without language... for the actual performance when it's just me with an audience... and music... and I start moving on the silk, it's almost transcendent. You just go to a different place."

Emile, who was a beginner and quite talented aerialist, exemplified the joy of "doing theatrics", creating, and performing:

"...You're exercising for the sake of creating another story, another performance, which I find really captivating and really intriguing; one of the reasons I keep coming back to it."

ChaseF will "choreograph to portray an emotion to an audience." Kaitryana distinguished between skills and performativity when connecting with the audience:

"I think part of aerial silks is not really about you, it's more about the audience and what they get from it. And so, it's not very exciting to see someone just going through the moves and like they can do it and just like showing their strength... I'm trying to find other ways to let the audience kind of feel something."

Mark also mentioned that expression is the main reason he loves aerial silks, both as a performer and as an observer. To him, aerial silks without performance "would be boring, very mechanical and bionic." He tends to enjoy performance especially without music because:

"it's almost stripped-down bare bones sort of feeling... Without music you're very much focused on the aerialist, what they're doing, and you will hear the sounds that they make and the struggle that is aerial practice... If anything, the performance aspect is intensified."

#### Phronetic and embodied elements

*Sense of community and inclusivity.* All participants mentioned that their aerial practice class gave them a sense of community and inclusivity within a supportive and instructive atmosphere. Alysson, an advanced teaching assistant (TA), spoke of the inclusivity of the movement studio where aerial practice took place:

"There's no age in the studio. There's no color in the studio. There's no religion in the studio... the studio

encompasses everyone's humanity... we all respect each other as a person. We all see people struggle and acknowledge that and, you know, have a heart for it and compassion for it, and feel the empathy whenever they do something right or they do something great. And even just being able to... being in physical theater club hours and seeing someone struggle on something and helping them and like trying to do as much as you can for them, and then see them perform their quiz, and you're just like, Wow. That was so great. And it's really moving... and I just wish that the studio could flow out into the world. Because what a wonderful world it would be if it would be like the studio."

Similarly, Mark, an advanced alumnus, who also assisted with class instruction, highlighted how rewarding it is for him to assist other aerialist students with achieving their goals:

"Whenever I go into the studio and I'm with the students and I see and I'm observing them, and I feel like I have something to offer... I feel a need to say... here's an exercise that might help you facilitate getting what you want out of the silks... for me it's really rewarding because you see someone struggle, struggle, struggle, you talk to them for two or three minutes, and they go do it again and then they've got it... for me that's very rewarding as a student and a teacher... that's the watch, do, teach... And then... you have a mastery of your craft and I think that's why the teaching process is important."

Mark also mentioned how the feeling of community and inclusivity helped him personally improve on aerial silks because:

"... we are just bodies in space and we all each move individually in different ways and can improve, and we can build each other. I think that's what community should be, is building each other and creating space to help facilitate communication and inclusivity."

Sara, an advanced aerialist and TA, spoke also of the "fun, warm, and inviting atmosphere, where everyone just wants to help everybody learn and improve." Kaitryana, an intermediate aerialist, also exemplified that the collaborative atmosphere in aerial silks facilitates learning via teaching movements to each other: "You can't learn how to do aerial silks... just by yourself. I'm always collaborating with other people."

Others mentioned that sharing similar goals with other aerialists is motivating and a way to overcome boredom. Based on Murtaza, learning aerial silks together with others is fun, motivating, and helpful to improve his social skills. Carlee, an advanced aerialist and TA, spoke of the importance of "constructive criticism" in instruction and her struggles with being motivated to practice aerial silks alone during summer.

*Novelty.* Based on five students, aerial practice is a unique and novel activity that "not many people can do or even know about." Although Bailey loves the way she feels after aerial silks, a reason that drives her to continue with this activity is its novelty:

"I like how other people react whenever they see me do it... 'cause this is something that like not a lot of people do. And like most people's only experience with aerial silks is people who do it for like Cirque du Soleil and it's like cool to know that it's something like people who you know aren't in a circus can do it, too."

Although Emile was majoring in Kinesiology and had a variety of activities to choose, he was looking for something more interesting and unique than the typical exercise classes of weight lifting, tennis, golf, and running:

"I decided to do something a little bit more interesting... it's just something a little different. I've never heard of anybody else doing it as opposed to weight lifting, tennis, golf, and running."

*It fits me.* Four students stated that they love aerial silks because it fits with their physique and enjoyable activities and settings. For example, ChaseF said:

"I love it because it fits me. I'm not tall and thin like most ballerinas. I'm not small enough to be a gymnast... I'm just kind of in an awkward in-between... in aerial, you can put ballet and gymnastics and rock climbing all together in one and perform with it. And I love... doing all of those things."

Similarly, Kaitryana said that she enjoys aerial practice "because it's kind of a blend of gymnastics with the skills and then dance with the artistic kind of ability." Although Emile acknowledged the importance of a group setting in aerial practice, he tends to prefer more individualized activities:

"I really enjoy it... Oh, I want to go do this right now... it's like kind of more individualized... Even though it's really good to have like a group setting..., at the end of the day it's just you and the silk. And you can do that on your own time... improve at your own pace. that's really helpful for me... I tend to... gravitate more towards those individual sports and activities."

For both ChaseF and ChaseM aerial silks is also an adrenaline rush – a combination of fear and excitement. ChaseF said:

"There is an element of fear that comes with it, because you'll get up to the top of the silk and look down and you're like, Oh, I'm gonna die. I'm like 20 feet in the air and I'm about to let go of this silk and hope that it catches me... I hope that I did the wraps correctly. It is terrifying, but it is so fun. It's such an adrenalin rush most of the time."

## Theme 2: Challenges with aerial practice

#### Embodied elements

*Fear, injuries, bruises, pain.* Ten participants spoke of fear of falling, being injured or in pain, or even dying when they are high up on the silks. Alysson, who used to teach aerial yoga before she was introduced to aerial silks, trusts the hammock more than the silks because:

"If you're holding the silks in your fists right next to your temples and your legs aren't holding onto anything and you look down, you see nothing except the floor. Whenever you're holding the hammock... you look down and you see the hammock."

Kaitlyn was also scared when she learned the first drop in class, the Brazilian. Mark has been scared at times, especially during risky movements: "Sometimes I feel terrified. There's this one move I'm gonna call the Death Spin. I'm just holding on, I'm not wrapped in any way, just gripping. And I have a friend at the bottom twirling. So, I'm completely horizontal. He started flinging it really, really hard. I popped a blood vessel in my eye. I thought I was gonna fly off and bash into the mirrors and I was just gonna be maimed and it did not happen. I held on, but it was terrifying."

Emile and Olivia talked about being in pain and getting bruises behind their knees because of the Angel movement where:

"you have to pinch the silk behind the back of your knee... using your hamstring muscle... your calf muscle to really pinch it and hold it, 'cause that's what's gonna be holding you up" (Emile).

## Techne aspects

*Fitness, skill, performance.* Certain students, like Bailey, Kelly, and Olivia emphasized the challenge to keep up with their strength and endurance. They also mentioned the difficulty to "grasp" new movements, such as Bicycle Climb (Bailey) and inversion (Olivia). Other students like ChaseM, Kaitlyn, and Kaitryana emphasized their struggle with performativity, and specifically with the need to "show emotion behind the skill."

Avoid boredom, learn new movements. Two advanced students and the alumnus said that one of the challenges was to learn new skills. Mark indicated that there's a skill level plateau and when he attained the skills he had set as a goal his common question was: "What's the next thing?" ChaseF and Sara, who were also TAs, struggled to find new movements, so they downloaded online videos and assisted each other with identifying how to execute a new movement.

## Phronetic category

*Time on the silk.* Several students mentioned that their main challenge was to find more time to practice outside class like during Physical Theater Club hours. Emile said that besides "Monday nights" and class time, he could not practice another time because of his busy schedule. At times, even during class, students felt that they needed more time to practice because of the crowed class groups (e.g., beginners). For the advanced students, who were also TAs, it was difficult to find time for their own training beyond teaching aerial silks. Nevertheless, being a TA had also positive consequences for ChaseF because she was "reviewing the basics again, which is very important."

#### Theme 3: Future exercise plans

#### Phronetic categories

**Practice and/or teach aerial silks.** Ten participants mentioned that they would love to continue with aerial practice throughout their school years and even after they graduate. ChaseF would love to continue practicing aerial, "even if it's just training and not performing." Alysson may "end up training to be an aerial teacher in case an opportunity comes." ChaseM may also look into it professionally depending on the need for an aerialist in the job market. Carlee would like to practice and teach aerial at a studio in order to also receive free membership. Mark would love to continue teaching aerial because there seems to be high need for aerial teachers "within the community."

Mark would also like to combine aerial silks with somatics in his teaching:

"It's probably gonna be the next two or three years in integration process... This is mostly for me. And then hopefully I can develop a program... Maybe teach it. reinform the study on different emotionalities and feelings that are brought out."

*Keep exercising.* Several students mentioned that they will keep exercising in the future and their experience with aerial practice will most likely affect their workouts. For example, Kaitryana said:

"I do a lot of arm and core exercises because you really need that in aerial silks. If you don't have strong shoulder muscles to hold yourself up and a strong core to lift yourself over, then you aren't going to be able to do a lot of moves."

ChaseM wants to continue with weight lifting because "it's fun and strength only helps silk and then silks only help strength." ChaseF, however, chooses to improve her strength by lifting her own body weight as she used to do in ballet, dancing, and rock climbing. Olivia also noticed interconnections among aerial silks, yoga, and rock climbing: "there's definitely a mutual benefit... aerial helps yoga, yoga helps aerial... rock climbing would help with that, for sure."

## DISCUSSION

The purpose of this qualitative, *phronetic* study was to examine if the values and meaning of participating in aerial practice as theatrical play or dance derived from elements of *phronesis*, *techne*, and embodiment. Three themes emerged, encompassing elements of the three overarching conceptual aspects of *phronesis*, *techne*, and embodiment, which will be discussed below.

#### Techne, Phronesis, and Embodiment for the Love of Aerial

Based on the concepts of *techne*, the highest degree of art can be achieved not only via technique derived from habituation/habit (ethismos), but also knowledge regarding the how and what of the artistic behavior. In this case, internal-integral parts of movement are emphasized, including increased skill and fitness levels (Angier, 2010; Aristotle, 350 BCE/1962; Bourdieu, 1990, 1994; Kosma & Buchanan, 2018a; Sayer, 2011). Despite the inherent challenges of aerial practice (e.g., improve in fitness, skill, and performativity), participants loved their experiences, including increased fitness, skill development, and infinite learning (techne elements). Therefore, human action, such as demanding physical movement, can be valuable and meaningful because of both its inherent qualities and challenges (Angier, 2010; Clegg & Butryn, 2012; Kosma & Buchanan, 2018a, 2018b; Merleau-Ponty, 1945/2014; Wolf, 2015). Based on the

conceptual underpinnings of *phronesis*, *phronetic* (wise) action regarding how to lead the good life, such as being active or not, is a normative process, which is influenced by societal experiences (Bourdieu, 1990, 1994; Buchanan 2000, 2004; Flyvbjerg 2001, 2004; Kosma & Buchanan, 2018a; Kosma et al., 2015). Similarly, embodiment is not an individualistic experience. It requires others, the world that surrounds us and we encompass, who make an influence upon each other (Kosma & Buchanan, 2018a; Merleau-Ponty 1945/2014).

Learning different aerial skills collaboratively within a supportive and inclusive setting was a major element in the aerial practice class. Study participants exchanged feedback and learned from each other in order to advance in aerial silks. They also received assistance from the TAs and the class instructor, who emphasized the value of technique and correct poses and lines for improvement and safety. Alysson and Mark took pride in assisting others with challenging moves and reinforcing a sense of inclusivity regardless of age, gender, ethnicity, and skin color. Murtaza (Middle Eastern), Carlee, ChaseM (African American), Kelly (African American), and Kaitryana also enjoyed a supportive and motivating community towards the pursuit of aerial silks. Importantly, all study participants, European Americans, African Americans, and Middle Eastern student, experienced inclusivity and were able to express their culturally meaningful stories in performative aerial silks. Such inclusivity should be expected in a supportive liberal art setting (Buchanan, 2006; Kosma et al., 2015).

Although the love of movement linked to personal reasons, such as perseverance, persistence, dedication, and passion to be challenged and excel, (phronetic-wise) decisions regarding the value and meaning of movement can vary based on population and setting. It is a complex normative process, which is learned consciously and/or sub-consciously within societies (Buchanan, 2000, 2004; Kosma & Buchanan, 2018a; Kosma et al., 2015). For example, African American young men enjoyed playing basketball with their friends and relatives (Kosma & Buchanan, 2018b), whereas African American older women valued the benefits of exercise on their health and physical function (Dohrn, Ståhle, & Roaldsen, 2016; Kosma, Buchanan, & Hondzinski, 2017; Kosma, Hondzinski, & Buchanan, 2017). Adults who followed a strong Protestant ethic valued movement if it linked to some greater good, such as gardening and household activities (Vanden Heede, Pelican, Holmes, Moore, & Buchanan, 2006). In other words, the meaning and value of skill, fitness, and movement can vary based on cultural and societal influences within such micro-settings as an aerial practice class.

# Combination of *Techne* and Embodiment for the Love of Aerial

An embodied element – body-mind connection – of art movement was exemplified while describing performative sensations of fluidity, transcendence, ecstasy, and being in the zone. During her performance for a class-quiz, Alysson experienced the connection between body and mind via a sense of fluidity while descending. A sensation of fluidity can appear

during the harmonious unity of body-mind, where the body knows the performed skills - as parts of body schemas - on a pre-reflective level due to repetition and practice. In this case, the body seems to "dis-appear" from one's attention and movement becomes fluid (Merleau-Ponty, 1945/2014; Zeiler, 2010). Carlee, ChaseF, and Kaitryana emphasized the importance to bodily connect with the audience during performance in a transcendental form, full of emotions. Contrary to the binary code of body and spirit-transcendence, embodied transcendence can manifest within conscious (here and now) corporeality during embodied experiences where others are involved, like in artistic performances (Zaner, 1971). Mark marvels connecting with his audience via his music-free monologues. For Mark, aerial silks without performance "would be boring, very mechanical and bionic", emphasizing the connection between embodied aerial practice experiences and techne (Kosma & Buchanan, 2018a; Merleau-Ponty, 1945/2014). The fact that talented intermediate and advanced students were able to embody and describe the value of artistic expression in a fluid manner exemplifies the different expectations in the aerial practice class. The goal of advanced students was not to merely execute technical skills (emphasis among beginner aerialists), but rather be performative via storytelling and expressing emotion in an enjoyable and seemingly effortless way.

## **Embodied Elements for the Love of Aerial**

As hypothesized elsewhere (Kosma & Buchanan, 2018a), the embodied element of whole-body movement contributed to the love of movement-aerial silks. Murtaza, Sara, and Emile enjoyed the feeling of engaging their whole body (all muscles) without even noticing. Similarly, the sensation of such physique changes as upper-body muscle growth was viewed positively for showcasing progress towards a lean, toned, and healthy body. Upper body strength and conditioning were emphasized in the aerial practice class in order to improve skill, performance, and enhance safety. Pertinent conditioning exercises were incorporated during the warmup and end-of-class sessions. At times, strength-training exercises with or without the silks were also introduced during the main session of aerial practice. Positive and healthy physique changes are associated with the love of movement among young and older adults (Coffey, 2015; Kosma & Buchanan, 2018b; Kosma, Buchanan, & Hondzinski, 2017; Kosma, Hondzinski, & Buchanan, 2017). However, overemphasis on unrealistic and unattainable western body ideals, such as thin, strong, and sexualized female bodies, can hinder exercise participation (Cardinal et al., 2015).

Embodied experiences were also exemplified in sensations of pain from brush burns and bruises. Expected pain from certain movements acts on a pre-reflective level where bodily discomfort is anticipated and the painful body part "dys-appears" to the person. In other words, the painful body part appears as bad and disconnected from the pleasant body-mind unity (dis-appearance) (Svenaeus, 2009; Zeiler, 2010). Pain and fear of risky drops and movements did not hinder participation in aerial practice. On the contrary, for some participants like ChaseF and ChaseM the sensation of fear presented an adrenaline rush, which was motivating. Like the meanings of accomplishment and personal fit in this study, lovers of extreme sports can be viewed as healthy exercisers, who learn to face and control their fears in difficult situations. This sensation can contribute to enhanced well-being, empowerment, and pride of accomplishment (Brymer & Schweitzer, 2013). In this way, fear can be an embodied sensation to be reflected upon for phronetic action regarding managing risk and safely participating in fulfilling activities that may involve risk. Importantly, the notion of safety and social responsibility were key in this study's aerial practice class. Beyond using mats, the emphasis was not on risky drops - though some advanced students performed such drops, but on expression and artistic, playful movements like tumbling, jumping, spinning, and swinging (Sheets-Johnstone, 2003). Students were spotted as needed when they learned new skills, which they first practiced close to the ground before performing at a higher level.

This is the first study to examine the relations among techne, embodiment, and phronesis in relation to the value and meaning of aerial practice as a form of dance or theatrical play. The study included participants from several aerial practice levels (beginners, intermediate, and advanced). Therefore, beyond aerial silks, the study findings can generalize to several populations who are at different exercise levels. Regardless of aerial practice classification, the study participants expressed similar values for the love of aerial silks. Uniquely in this study, advanced aerialists and skillful beginner and intermediate students, like Emile and Kaitryana, better articulated their phronetic, embodied, and techne experiences of aerial silks than less skillful students. This is expected in the description of the embodied elements of art movement like aerial silks (Kosma & Erickson, 2019). When the action is fully absorbed and embodied both cognitively and sensorially - as experienced among advanced aerialists - it can be better expressed, valued, and maintained.

Although the first study author also participated in the class and observed student experiences, it is difficult to describe the essence of experience. Every effort was made to accurately represent the experiences of the participants by allowing their voices to be heard. However, an inherent challenge in the study of embodied experiences is that the breadth and depth of such sensed experiences are not easy to be reflected and verbally expressed, even if shared at the same time they are performed (Merleau-Ponty, 1945/2014).

Based on the results, key implications can be recognized within movement programs in kinesiology like art movement, physical theater, and dancing. Exercise promoters can utilize a combination of artistic, embodied, and *phronetic* approaches to enhance the value of movement. They can incorporate performative, playful, expressive, and challenging forms of whole-body movement within a supportive community while emphasizing personal growth and improvement. Inclusivity can bring about determination to improve and excel for a harmonious body-mind unity, where feelings of fluidity and transcendence emerge. If movement is highly valued, such challenges as pain and fear can be positively faced as pre-reflective and active embodied experiences, leading to empowerment and continuing participation. Discussing realistic challenges, including time constraints due to educational or employment priorities can enhance understanding and wise-*phronetic* decisions regarding the pursuit of future movement experiences in the form of aerial silks and/or cross-training settings. Future qualitative (community-based) designs are necessary to understand different embodied and *phronetic* movement experiences within a performative vs. solely skill-based setting. Examining aerial silk experiences and mental health among different populations, such as children and people with physical disabilities, is also of importance.

## CONCLUSION

Contrary to logical positivism, this is a unique study showcasing that the love of art movement like aerial practice reflects elements of techne, phronesis, and embodiment either solely or in some combined form. The love of challenging, infinite learning where artistic expression is transcendent, fluid and seemingly effortless is not a reflection of only personal characteristics of perseverance and determination. It rather encompasses a sense of supportive and inclusive communities, through which movement educators instill the value of collaboration, constant progress, expression, and sharing. Negative bodily sensations like pain and bruises should not be ignored, but rather processed and monitored in order to perform comfortably and safely. The love and joy of movement is an ongoing process, which involves *phronetic* (wise) deliberations regarding bodily sensations and experiences (embodiment), internal outcomes of movement (e.g., techne), and the world-communities (phronesis and embodiment). Art movement experiences like aerial practice and other relevant activities, such as yoga, weight training, and climbing that are valuable and meaningful can be maintained for a lifetime.

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