Exploring Movement-Modifier Facilitation in Movement-based Sports, Health, and Game Design

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Abstract: Ensuring a movement flow that unleashes creativity can be daunting when facilitating movement-based design activities within play, games, sports, and technology domains. When incorporating movement in game design, it is vital to understand game and learning elements but equally movement and play elements because these are important motivational factors. To thoroughly comprehend the aspects of play, sport, and physical activity in movement-game design, it is necessary to delve into the world of physical activity and performance. As a part of the Erasmus+ project, MeCaMInD, the innovative design of Movement-Modifier cards was developed, intended as a tool in the facilitation process to engage participants in physical exploration, supporting, modifying, or tweaking movement-based design practices for an inclusive game and physical activity and performance design. The Movement-Modifiers are grounded in sports and health theories, as well as creative design tools and methods. To harvest the Movement-Modifier's tweaking creative potential, it is crucial to understand when and how to use them in the generative parts of a movement-based design process. Grounded in a phenomenological approach and based on a multiple case study, this paper explores how eight facilitators used the Movement-Modifiers to challenge and tweak the generative processes. The cases are 1) A two-day sports innovation camp for 80 K12 high school students, 2) A workshop on Inclusive exergame design with 15 participants at the Nordic Innovation Summit 2022, 3) A course teaching 65 sport bachelor students the creative acrobatic body performance design. Empirical data were generated using a combination of observations, video recordings, and interviews, and the phenomenological analysis was condensed into written facilitator narratives. We present Movement-Modifier facilitation strategies in three phases of movement-based design facilitation, illustrated on a continuum with the facilitator's level of involvement on one axis and participation structure on the other. The facilitator's role is multifaceted, requiring sensitivity, adaptability, and careful planning for effective Movement-Modifier facilitation. The Movement-Modifiers should be regarded as a tool that supports the design process rather than the essence of it.

Keywords: Movement-based Design, Embodiment, Movement-Modifiers, Facilitation, Exergame, Game-based

1. Introduction

The game-based learning community is increasingly attentive towards movement-focused and playful applications, such as exergames, VR exertion, rehabilitation, dance, and circus (Segura, E. 2019), and learning games combined with physical activity (Reidsma et al, 2022). Thus, we recognise the physical movement as a vital element in games and play (Erkut and Dahl, 2018), and we recommend that designers incorporate movement into their design activities to build awareness of fleeting and immediate movement experiences (Schleicher et al, 2010; Segura E. 2018). Physical movement as a source of creativity has been explored by Márquez-Segura, (2018), Schleicher (2010), and Vidal (2018), who points to design technics and the challenges of enabling the right state of a body-being for participants. Exploring physical movement as a medium of creativity often requires a designer to facilitate the right mindset through judicious selection and use of methods, forming an appropriate process and modifying it as needed. Svanæs & Barkhuus (2020) argue that the designers' active involvement is crucial for using Movement-based Design Methods (MbDM). Therefore, we aim to understand how designers can cultivate both sensitivity and skill to facilitate MBD effectively.

In the MeCaMInD (Method Cards for Movement-based Interaction Design, 2023) Erasmus+ project, we strive to make the increasing number of MbDM accessible to engineers, designers, and students by making physical design cards. Specifically, we have collated MbDM into an easy-to-use method card toolbox. (Elbæk et al, 2023) Our mission is to assist in creating more sustainable movement-game solutions and engaging MBD activities. In the project, we uncovered theories supporting MBD, made inventories of existing methods, categorised them, and made a model (the 4M framework) of four distinct card categories (Elbæk et al, 2022).

The model is founded on the theory of embodied cognition that builds on radical embodied cognition summarised in the 5E's, embedded, embodied, enactive, extended, and emotive to approach and understand the concept of embodied cognition (Malinin, 2019; Stilwell & Harman, 2022). The embodied premise situates the body as an intrinsic part of a larger cognitive system, which spans the mind, body, and environment. The embedded thesis suggests that affordances shape the unique bodily capacities we shape as we interact with our social and physical context. The enactive element suggests that our sensemaking and embodied experiences are formed through interactions with the environment in an interwoven process of action and perception. The extended element claims that our mind's boundaries are open, flexible, and distributed beyond our body. Design methods linked to the 4M model, we recommend using an open and situational creativity-in-the-wild approach (Malinin, 2019). The 4M model illustrates a box placed on top of Movement-Modifiers, which we will use along with the three other types of method cards (Mood Setters, Movement Methods, and Movement Concepts).

This paper addresses a specific design hurdle in MBD: in our experience, movement-centric design activities are frequently interrupted by cognitive activities such as talking and writing. We have noted specific strains on the facilitator tasked with mediating MBD activities, ensuring a movement flow that unleashes creativity. We used props as modifiers and developed movement-focused Modifier cards consisting of words or images to provoke divergent thinking. However, we have experienced that it is challenging to facilitate and use the Movement-Modifiers: how and when to use and choose between the 300 cards combined with the physical props.

This paper explores the facilitation and use of Movement-Modifiers during MBD activities. To fully understand the play, sport, and physical activity aspects of movement-game design, we include cases in which the design for physical activity and the design of physical performance are embraced, as these movement and play elements are important motivational factors in movement-based games such as exergames, exertion games and movement-based learning games. Our goal is to make the MBD more accessible since the learning-game industry needs designers to facilitate the methods and educators that can teach students the use of MBD.

We will examine the Movement-Modifier use and facilitation in three design workshop cases. We describe the cases, provide condensed phenomenological facilitator narratives, and embed our discussions in literature, interview and observation context, and experiences facilitating MBD activities. Finally, we provide guidelines for using Movement-Modifiers in the design of movement and learning games, as well as in the creation and instruction of movement activities.

2. Movement Modifier Design Card

The development of the Movement-Modifier cards is grounded in sports and health theory, complemented by analogue tools that provoke divergent thinking, and further informed by fundamental design knowledge, as exemplified by https://innovation.sites.ku.dk/metode/inspirationskort/ (2023). Illustrated in **Figure *1***, each Movement-Modifier contains one or more words or images intended to provoke, tweak, or inspire generative design activities. The cards relate to knowledge, theory, and practical movement concepts in the domain of sport, technology, games, plays, and movement practices.

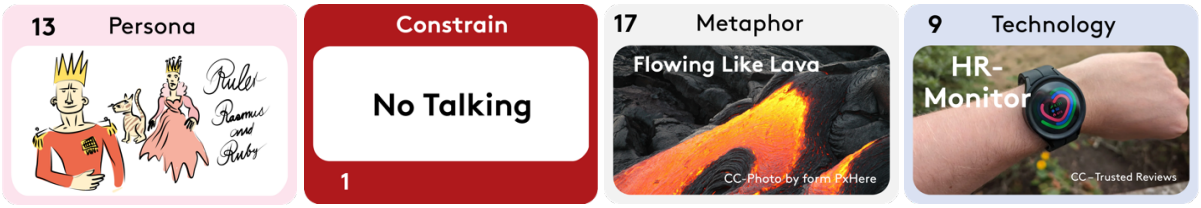

Figure 1 Examples of the MeCaMInD Movement-Modifiers

The Movement-Modifiers are categorised into five categories: Movement, Structures, People, Motives, and Artefacts, encompassing 17 types of cards along with a card for making your own modifiers. The category of Modifying Movement holds cards with basic movement, movement perspectives, and training elements. The category Modifying Structure grasps play & sports disciplines, play elements, and play perspectives. Modifying Motives holds metaphors, logic, stances, & values, and Role & Perspective. Modifying People contains persona, environment, special needs, and constraint. Modifying artefacts includes technologies, game genres, game structure, and game perspectives. In addition to Movement-Modifiers, we provide Instruction Cards that suggest the use of various forms of music and physical artefacts, including props and DIY materials.

2.1.1 Informed design of Movement Modifiers

Freach (2010) presents design tools as a means to frame or reframe design challenges, facilitate the externalisation of insights through dialogue, make use of existing knowledge, visualise problems and solutions, and equip teams to learn about users. According to Sanders and Stappers (2014), physical artefacts allow groups to think through design and play with materials striving for the new not yet known. Based on Peters et al. (2021), we categorise the Movement-Modifiers as Prompts that include tools encompassing provocative questions, triggers, or abstract terms or visuals to prompt divergent thinking. The Movement-Modifiers allow participants to externalise and reorganise systems during the design work. One benefit of using analogue cards is their tangible and interactive nature (Daly et al., 2012).

When designing design cards, it is important to understand how these cards can contribute to the design process. In this article, we mainly focus on the divergent or creative parts of the design process, and the Movement-Modifiers aim to support these activities. Along with Biskjaer, Dalsgaard and Halskov (2017), we see divergence as a process of expanding the design possibilities by identifying new options beyond the immediate design space. Divergent thinking is important in a creative process because it allows the discovery of many possible ideas and combinations that may serve as solutions.

Various movement practices, such as dance, performance art, yoga, and martial arts, utilise the body as a creative tool for expression and exploration. Dancers use the principle of improvisation to generate new movement possibilities, while performers may draw on characters or themes to create their own movement performances. An approach we used in designing the Movement Perspective cards was by using Rudolf Laban's BESS Framework. Dancers use the framework to experiment with various body shapes, applying different levels of effort, such as light or heavy, and the space in which the movement occurs. These content elements are included in the cards. In yoga and martial art, movements are a tool for self-expression and exploration, and the focus is also on your body's inner presence and feel. Inspired by these divergent movement practices, we designed the Movement-Modifiers.

2.1.2 Facilitating Movement-Based Design practices

Facilitation involves applying design processes and strategies to enable exploration, fostering the emergence of ideas and decisions in the development of solutions, a process that requires a comprehensive understanding of design (Mosely et al. 2021) The role of the facilitator significantly impacts participatory activities and outcomes, as Dahl and Sharma (2022) state. Based on the facilitator's strategies and responsibilities, they propose six facets of the facilitator role: Trust builder, enabler, inquirer, direction setter, value provider, and user's advocate. Starostka et al. (2021) state that facilitation is done in multiple ways and describes four facets of facilitation: tool vs mindset perspective, problem vs solution focus, planned vs emergent process, and individual vs shared leadership.

Little focus has been on facilitating movement-based activities. Thus, Reidsma et al. (2022) propose that the facilitator in movement-based design can draw upon various role-related perspectives and activities, including the Instructor and Game Master, Coach and Mediator, Role model, and Initiator and Animator. The Initiator and

Animator roles are essential in controlling the purpose of the activity, focusing on the energy in the process, and exploring emergent movements. These roles create prerequisites for new paths of movement, encourage movement inquiry, an open space for wonder, support exploration, and let the art of improvisation be a driving force (Borghäll, 2019). We propose using cards such as Movement-Modifiers to support the various facilitator activities and roles, plus using a palate of strategies to facilitate movement-based design activities. This leads us to question how we can stimulate people, through the use of prompt cards, to engage in divergent design stages, using their bodies as vehicles for the identification of new ideas.

3. Cases and methods

To anchor this study in the physical realities of the lived body, we adopted an existential-phenomenological framework complemented by a phenomenological attitude (Allen-Collinson, 2009), using an explorative approach. We used a multiple-case study design to develop an in-depth, comprehensive, and context-dependent understanding of Movement-Modifier facilitation (Stake, 1995). The cases included were 1) Bright over Night Movement 2022, 2) Exergames for Equality, and 3) The Creative Acrobatic Body. These will be introduced below.

3.1 Bright over Night Movement 2022

Bright over Night Movement (BoNM) is an innovation camp based on a collaboration between a Danish high school, the municipality of the high school, and the regional university. The high school aims to incorporate innovative design thinking in Physical Education (PE). Over the course of a two-day movement-based sports innovation camp, the PE students develop sports and health solutions based on relevant and authentic cases provided by the municipality. The 2022 camp was held 8-9th December. The cases are presented in **Table *1***. The Liedtka design model (Liedtka & Ogilvie, 2011) provided the framework for the design process. The first day of the camp was dedicated to the *What If* and *What Wows* stages, while the second day focused on *What Works*.

Workshop BoNM22	
Theme	Innovation and design thinking in PE
Aim	To create a 20 min activity for either: ▪ Children in a kindergarten ▪ Eighth graders in middle school ▪ Seniors in an activity centre
Participants	80 K12 high school students 4 facilitators are master students from the local university 6 facilitators are PE high school teachers
Context	Classrooms and gyms at a Danish high school. (15 hours in total)
Outcome:	Participants created a 20 min activity for one of the three cases, tested it on their respective target group and presented their solutions to local health experts, politicians, and municipality professionals

Table 1 Outline of the Bright over Night Movement 2022 (BoNM22) high school innovation camp

3.2 Exergames for equality

At the Nordic Sports Innovation Summit (NSIS) held in Odense on the 29th of November 2022, a movement-based design workshop on Inclusive exergame design showcased The MeCaMInD Project Toolbox. The aim was to design exergames that both people with disabilities and those without could enjoy on an equal footing. The workshop consisted of three parts, starting with framing the design challenge (see **Table *2***). Next, a physical part, starting with a warm-up activity followed by explorative group work to create playful games compatible with the LYMB.iO GmBH MultiBall Wall (LYMB.iO, 2023) and ending with presentations of the games and sharing knowledge and feedback. The participants worked together to create inclusive games.

Workshop NSIS	
Theme	Inclusive exergame design
Aim	Create a game compatible with the MultiBall Wall for people with and without disabilities and test the Card toolbox from MeCaMInD project
Participants	15, including students, researchers, NGO and organization representatives, and teachers from Denmark
Context	Lab for Play and Innovation at the local University, 1.5-hour workshop
Outcome:	Participants created 4 inclusive games compatible with MultiBall Wall system and tested the Movement Modifiers

Table 2 Outline of the Exergame on equal terms workshop at the 2022 Nordic Sports Innovation Summit

3.3 The Creative Acrobatic Body

The Creative Acrobatic Body is a 4 ECTS bachelor course for Sport Science Students at the local university. The students were tasked with creating a physical acrobatic performance inspired by, or innovatively designed from, their choice of movement culture, such as parkour, new circus, cheerleading, and creative gymnastics. The students' assignment was to produce an informative, inspirational video showing parts of the performance and core elements of the process of creating said performance or facilitating acrobatic creativity (see **Table *3***). The course is structured into two main components: 1) formal lectures and 2) practical workshops. Central was the first workshop introducing the MeCaMInD card box and the 4M model, mood setting, generation, testing, and documentation of acrobatic performance. (Elbæk et al, 2023)

Creative Acrobatic Body Course	
Theme	Design of acrobatic movement
Aim	Create a creative acrobatic performance and facilitate a workshop in creative acrobat practice for a defined high school student group
Participants	65 second-year PE and sports science students, joining the Sports and Health educational programme at the local university
Context	The local University gymnastics centre, 3-hour embodied creativity workshop + 30 hours of teaching of various acrobatic cultures and self-guided facilitation creating acrobatic performance and teaching practice for school students
Outcome:	17 performance and facilitation instruction videos

Table 3 Outline of the Creative Acrobatic Body Course using MeCaMInD Movement Design Methods

3.4 Data generation and analysis

Observations, video recordings, and interviews with the facilitators yielded rich, in-depth narratives about the lived experiences of Movement-Modifier facilitation.
Written consent to do the observations and video recordings and to use the information in this study was collected from all participants and facilitators within this study.
Informed by phenomenology (Ravn, 2016), specific observation points related to the facilitation using Movement-Modifiers (Context, Social Dynamics, Moderation, Enabling) were included in an observation guide along with phenomenological focus points (the *what*, the *how*, sensorial impressions, curiosity, epoché, and openness).

Videos were recorded at BoNM22 in the Exergames for Equality workshop and were also produced by students at the Creative Acrobatic Body course, which was used to generate observation notes.

An interview guide was developed based on a rapid review of design facilitation, observations, and video recordings. Eight semi-structured interviews lasting 45-60 min were conducted and carried out individually with each facilitator from one of the three cases. Each facilitator was asked to focus their descriptions on their own experiences and to provide as many concrete examples as possible, striving for phenomenological reduction (Høffding and Martiny, 2016).

The interviews were recorded and transcribed verbatim. Along with the observations and video recording notes, the empirical data were coded according to the terms 'emic' and 'etic' in a heuristic and iterative process as described by Ravn (2021). When conducting the emic coding, we performed a 'line-by-line' reading (van Manen, 1990). Then, we organised the notes into themes that concerned different aspects of the facilitators' experiences

with Movement-Modifier facilitation. Subsequently, we emphasised condensing the text into written narratives informed by Creative Analytical Practice (McMahon, 2016). We apply an autoethnographic style that allows us to write in first-person format (McMahon, J., 2016), grasping the lived experience of facilitating using Movement-Modifiers. We strive to express what and how, including the sensing, acting, experiences, and reflections of being an involved facilitator.

4. Findings

4.1 Sensitivity and controlled card facilitation

During BoNM22, I observed that being a facilitator utilising the Movement-Modifiers requires constant analysis of the situation, acute sensitivity to participants' needs at any given moment, and the ability to act accordingly. This makes the role of the facilitator quite intense. For example, Catherine told me: "You can observe, listen, and sense the group, look at the Movement-Modifiers in your hands and play the card(s) you think will help the group, whether to tweak the ideas or add energy to the process." Some groups struggled to start or maintain movement flow and bodily creativity. In these moments, the facilitator stepped in and played a Movement-Modifier for the group. To me, that is a controlled Movement-Modifier card facilitation style.

Anna and Catherine shared with me, "Before BoNM22, we picked out 30-40 cards from the deck. Despite thorough preparation, we still found using the cards as novice Movement-Modifier facilitators challenging. Often, we experienced becoming passive card-flipping facilitators. However, we learned through the process and feel confident that our knowledge of the Movement-Modifiers will make them more manageable to structure and use next time."

Ida and Eva mentioned, "One group went through many Movement-Modifiers quickly and performed one movement on each card. Another group got the Movement-Modifier 'balance' and decided to lift one leg while continuing to throw a ball to each other. We realised that as a facilitator, you must also be aware of *how* the Movement-Modifiers are used".

Emma and Alfred announced the term "balance" from the Movement-Modifier out loud to all the participants. "This was an in-the-moment decision because we did not plan how to structure the use of the Movement-Modifiers in advance. Doing this, we experienced a group exploring dynamic movement patterns when the Movement-Modifier was announced. This destroyed the movement flow of the group, making them passive, not knowing how to continue." It seemed they got the wrong Movement-Modifier at the wrong time, so timing the use of the Movement-Modifier is essential.

4.2 Modifying the explorative phases with impaired and non-impaired designing together

In the long middle part of the workshop, the teams tried out things with tools on the wall. During this exploratory phase, the teams used the Movement-Modifiers to explore and experiment with their ideas, thus adding valuable insights. I enjoyed observing the groups getting new crazy associations that helped create their games. I pre-selected Movement-Modifiers, 40 cards per group, and let the groups decide their Movement-Modifier use and how much or little they should influence their process. I arranged the cards by category and would, e.g., tell a group, "You could consider using these cards" or "This card might be useful because it deals with this," without forcing them.

Due to the schedule with tight deadlines, we needed to allow ourselves to make creative detours. For the Movement-Modifiers to make a meaningful impact, it is necessary to allocate sufficient process time. Also, the wheelchair users and the technology devices made the external factor of physical space a limitation to moving and exploring game options. Especially the use of balls, cones, etc., was restricted by the limited space.
I experienced when having impaired and non-impaired people working together, creating a safe atmosphere was crucial when using the Movement-Modifiers. I had to make sure that the participants were comfortable and trusted me to guide them through the process of reaching the end goal. I could steer the process by sensing the groups' moods and having a feel for them. I observed body language and listened to their talk. It was a mix of being present with all my senses and following my plan. Also, I let the participants know that the cards would add more value if everyone allowed themselves to be in the moment using Movement-Modifier.

4.3 Facilitating for "design of movement" in creative acrobatics

During my introductory workshop, I noticed a group repeating the same movement patterns, leading me to wonder if they were limiting themselves or just playing out sports habits. I returned to the Movement-Modifiers to select cards to inform new movements. The Movement Elements and Play Elements cards were particularly helpful, as they tweaked the habit of movement patterns and endorsed creativity.

One group chose the "Floating Like Lava" card, which they used to progress their new circus narrative theme. I realised that presenting all 19 cards with Metaphors would have likely led to confusion, hindering their ability to make quick decisions and start or maintain the creative flow.

When I select Movement-Modifier cards, I typically sort them, discarding any irrelevant ones before choosing the most appropriate ones. When approaching a group, I intuitively determine which of the chosen Movement-Modifiers to offer.

As a facilitator, while I offered options, I never forced card use, as I aimed to support empowerment and promote ownership. I tried to keep the energy flowing in the process and contrary also made room for creative frustration and development. Finally, I was impressed by how the students used Movement-Modifiers to facilitate their process for fellow students. They became more aware of the processes and were able to anticipate their direction. Facilitating with Movement-Modifiers is akin to being at the centre of a spider's web, sensing the tension in all threads. Overall, it was a fulfilling experience to see the students develop their skills and creativity with Movement-Modifiers.

By adopting a phenomenological approach, we were able to generate valuable data. We wrote condensed, in-depth narratives that captured the real-life experiences of utilising the Movement-Modifiers of the MeCaMInD method card box during Movement-Modifier facilitation. Our analysis has yielded several insights, which we will outline in the following analytical model. Additionally, we will discuss specific topics and provide recommendations based on our findings.

5. Discussing Insights from Facilitating Movement Modifier use

In **Figure *2***, we have extracted and positioned the essential Movement-Modifier facilitation strategies derived from the narratives of the three cases. We visually depict these in three phases of facilitating a design process: 1) When planning a workshop using Movement-Modifiers, 2) In-the-moment Movement-Modifier facilitation strategies, and 3) Effect of using the Movement-Modifiers.

The vertical axis represents the facilitator’s level of involvement. Being the Observer, the facilitator keeps a distance from the participants and ultimately lets them do the playing. As the Animator, the facilitator briefly joins the design activity in a more immersed and involving manner, exploring one’s and the group’s experiences and energising the process.

The horizontal axis represents how the facilitator structures the participants' empowerment option, which is analysed on the range between control and shared participation. Controlled Participation implies how the facilitator steers the process and the use of Movement-Modifiers, deciding which Movement-Modifiers to use and when to play them. Facilitating controlled participation can help ensure a safe atmosphere. However, the facilitator can let the participants decide on their Movement-Modifier use and provide only light guidance and freedom to utilise Movement-Modifiers as preferred, characterised as Shared Participation.

It is important to note that we observed and experienced a continuum of the axis, and the facilitator’s involvement level and participation structure can change during the design process.

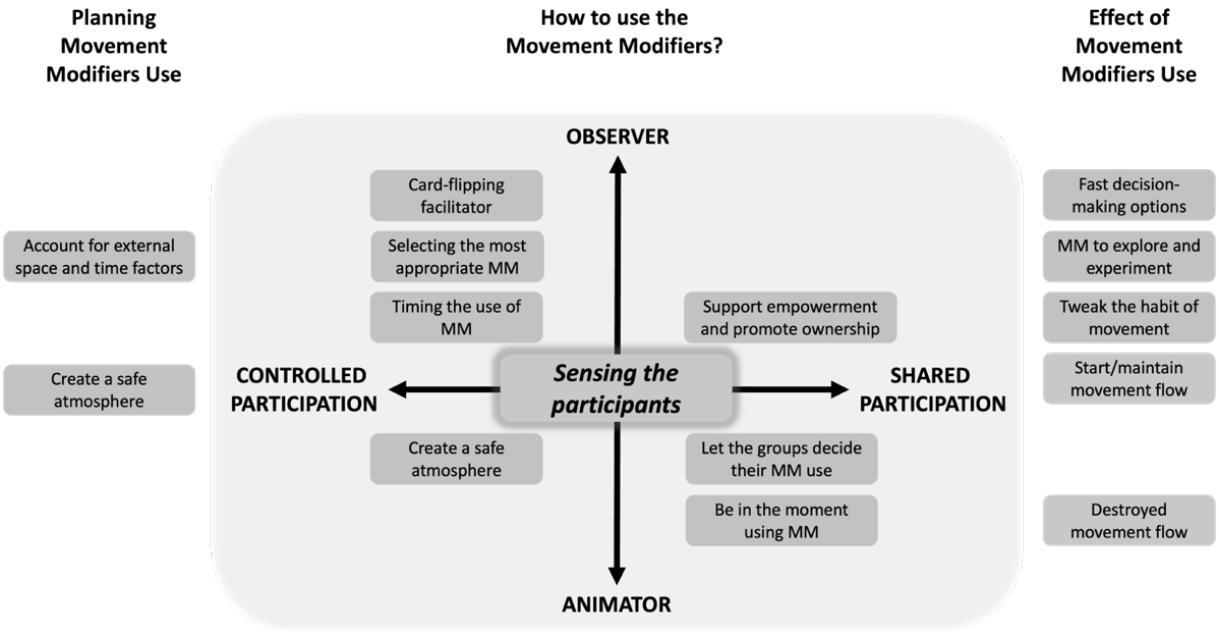

Figure 2 Planning, Facilitation, and Effect Model using MeCaMInD Movement-Modifiers

Through the narratives, we identified that physical and mental elements, such as space, time, and mindset, could limit the potential value of Movement-Modifiers and the opportunity to make creative detours using them. The facilitator must be aware of this when planning a workshop for movement-based game design. As Van Loon & Larsen (2017) argue, facilitation is relevant before, during and after. As with every design activity, practical issues often receive too much focus. A facilitator must prepare the physical space, relevant resources, and music, engage participants, etc. Thorough planning is essential to establish a solid foundation for the best possible outcome using Movement-Modifiers. In movement-based game design activities, the physical space and design resources are highly important for the process as the participants need this to explore and move around. To create optimal conditions for each activity, we recommend adopting the role of a Game Master (Reidsma et al, 2022), focusing on setting up the activities in advance.

As emphasised in the three narratives, facilitating a movement design workshop using Movement-Modifiers and other materials requires a sensitive and adaptable approach. Thus, facilitators must be aware of what is happening, sensitive to the use and effects of Movement-Modifiers, and aware of the participants' needs to support design progress during facilitation.

To gain the most creative insights from movement, the facilitator must be careful not to disrupt the flow of movement by misusing method cards or overemphasising their use. Instead, Movement-Modifiers should be viewed as tools to support the design process, not as the essence of it.

6. Recommendations using Movement-Modifiers

To be a truly effective facilitator, it is essential to understand the group dynamics and meticulously prepare design materials, which may include physical props, method cards, and even a gameboard for card preparation (Elbæk al, 2023). Clear and transparent communication forms the backbone of successful facilitation, requiring well-rehearsed instructions on using the chosen method cards.

The facilitator must also adeptly perform the diverse roles outlined by Reidsma et al (2022). As a 'game master', they manage the overall planning of workshops. As an 'instructor', they initiate mood-setting activities and guide the use of Movement Methods and Movement Concepts in conjunction with the Movement-Modifiers. Acting as a 'coach', they foster optimal design insights through guiding questions. The 'role model' demonstrates what it takes to be a comprehensive designer. The 'initiator/mediator' spurs necessary actions and mediates discussions, ensuring that every voice is heard and respected. And the ‘Animator’, when necessary, intervenes in the design process to ensure optimal energy, flow, and creation of design insights.

In most cases, controlled facilitation promotes a safe atmosphere, but shared facilitation, if done carefully, can also support a safe atmosphere and encourage shared participation. It is, however, crucial to strike a balance

between the risk of overusing Movement-Modifiers disrupting the flow and the benefits of participant empowerment and ownership.

In conclusion, facilitating a design workshop using Movement-Modifiers requires sensitivity, adaptability, and careful planning. These cards should serve as a tool to support the design process, not as its central element. Effective facilitation is achieved through a comprehensive understanding of the group, thorough preparation of design materials, and clear communication. We advocate for facilitators to embody the roles of coach, moderator, initiator, mediator, role model, and animator, intervening when necessary to ensure the design process stays on track and progresses. Shared facilitation can be particularly beneficial when the users' input is critical for them to feel ownership of the design outcome. However, striking a balance between avoiding disruption of the flow and promoting empowerment, democratic involvement, and ownership is paramount. As a designer of exergames, exertion games, and movement learning games, honing and utilising your movement skills when facilitating movement-based design workshops can provide significant benefits. The carefully facilitated use of Movement-Modifiers can greatly enrich the design process, making it more engaging, participative, and ultimately, more fruitful.

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