

A Five-Phase Model at the Intersection of Embodied Cognition, Inclusion, and Situated Motor Learning

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Abstract: This contribution examines Magnanini's five-phase pedagogical model (2018) from an embodied perspective, with the aim of investigating its didactic relevance in the field of motor sciences. The paradigm of Embodied Cognition makes it possible to move beyond a conception of motor activity focused solely on technical execution or performance, recognizing it as a situated experience in which corporeality, emotion, and environment contribute to the construction of knowledge (Ceciliani, 2018; Gomez Paloma et al., 2017). On the basis of a theoretical-conceptual analysis guided by the embodied indicators that Ceciliani (2018) derives from Wilson's (2002) six claims, the contribution proposes that the model can be interpreted as an educational structure consistent with embodied teaching. The model organizes the motor pathway into progressive moments that engage the person in their sensory, affective, cognitive, and social components, fostering emotional regulation, motivation, active involvement, and situated learning. Its principles of participation, accessibility, and equal opportunities also allow it to be read as an inclusive device, open to plural needs and heterogeneous educational pathways (Magnanini, 2018; Sangalli & Borgogni, 2025). The resulting mapping between indicators and phases is offered as an interpretive proposal and as a first step toward an operationalization of the model to be verified by future empirical research.



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1. Introduction

The paradigm of Embodied Cognitive Science offers a renewed perspective on cognitive processes. It defines cognition as "embodied" insofar as it assumes that the ways in which human beings learn, act, and know are rooted in the body, in perception, and in the relationship between the body and the environment (Gomez Paloma & Minghelli, 2022).

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This conception draws on a long-standing philosophical tradition. With phenomenology, the body progressively gained conceptual autonomy from the primacy of the mind, a central assumption of Western thought. Husserl emphasized that the perception of things constitutes the first form of sensory, motor, and therefore embodied knowledge (Husserl, 1970, 1989): the body-subject, situated in the *Lebenswelt*, understands reality without necessarily relying on symbolic representations. Merleau-Ponty (2012) further developed this perspective, conceiving the body as an original unity of subjectivity and objectivity grounded in perception. More recently, research on *mirror neurons*, initiated by Rizzolatti and colleagues, has been interpreted as consistent with a close link between action and perception (Rizzolatti & Craighero, 2004). Since the functional interpretation of these findings remains debated (Hickok, 2009), they are recalled here not as a confirmation of Embodied Cognition, but as one of the research lines that have drawn attention to the role of the body in information processing.

As the site in which emotions are experienced and identity is formed, the body is also a fundamental medium of communication: embodied emotional actions function as tools through which social actions are performed, in a manner analogous to verbal language (Jensen, 2013).

This renewed attention has also generated significant interest in the pedagogical field, where the body is conceived as a producer of knowledge within experiential learning (Gomez Paloma & Tafuri, 2017). Dewey, through the principle often summarized as “learning by doing”, emphasized that learning is grounded in interaction with the world and in the experience that derives from it (Dewey, 1916, 1938). Piaget (1952) attributed a central role to motor activity in the sensorimotor stage, in which the child knows the environment through manipulation and exploration before the emergence of abstract thought, while Montessori (1912) grounded her method in an education that passes through the senses.

This awareness, however, does not appear to have translated into the widespread adoption, within formal education systems, of practices based on perception, experience, and corporeality. Traditional teaching has been described as a form of “disembodied education” (Rathunde, 2009), insofar as it tends to reproduce the mind–body dualism rooted in Western culture. It may be argued that movement, perception, and emotion often occupy a marginal position in school practice, and that in the Italian context, too, a didactic model centered primarily on abstraction still appears to prevail in many settings; this is to be understood as an interpretive consideration rather than as an empirically established generalization.

By contrast, the body should not be relegated to limited times and spaces (Maganini & Battista, 2022), but recognized as an essential mediator of relational, experiential, and cognitive development. Placing it at the center of formal education may foster the transition from a “disembodied” to an “embodied” didactics oriented toward school and social well-being (Lo Piccolo, 2019), promoting the active construction of knowledge, the emotional involvement of pupils, and the transfer of skills to everyday life.

This is relevant for all pupils, including those with disabilities. In the case of intellectual disabilities, the body risks being perceived, and treated within educational contexts, as a “mute body”, whose expressive and communicative possibilities are overlooked. This silence is not a characteristic of the persons themselves, but the effect of the ways in which contexts interpret and respond to

their bodily expressions; studies on embodied emotional communication show how children with intellectual disabilities participate in learning activities also through bodily and emotional resources (Jensen, 2013). It is therefore necessary to recognize a living body, with “its feeling, appearing, making itself felt, which is the condition of the thinking–acting–thinking nexus” (D’Ambrosio et al., 2019, p. 1).

Within this framework, motor activities and sport constitute a privileged field for the integration of mind, body, and environment. Owing to their holistic nature, motor sciences support the affective-emotional, intellectual, social, motor, and organic dimensions of learners’ personalities, and represent a significant stimulus for the design of educational interventions, including those addressed to pupils with disabilities (Montesano et al., 2017).

A terminological clarification is also needed. The expression *situated motor learning*, used in the title, does not refer primarily to the theory of situated learning developed by Lave and Wenger (1991), centered on legitimate peripheral participation in communities of practice. It indicates, more specifically, motor learning that takes place within concrete, meaningful, and relational contexts, in which perception, action, and environment are coupled in real time, and is therefore grounded in the construct of situated cognition formulated by Wilson (2002) and reinterpreted for the motor-sport domain by Ceciliani (2018). The two perspectives are nonetheless compatible, since the emphasis of the five-phase model on participation, cooperation, and shared meaning-making resonates with the view of learning as participation (Lave & Wenger, 1991).

On these premises, the contribution examines a model of motor activities aimed at fostering the potential of all pupils, analyzing its consistency with the principles of Embodied Cognition. Its intended original contribution is twofold: to make explicit the embodied assumptions that remain largely implicit in the original formulation of the model (Magnanini, 2018), and to propose a first, theoretically grounded operationalization of the correspondence between embodied indicators and phases, as a basis for subsequent empirical verification. The contribution does not, therefore, aim to validate the model, but to offer a conceptual interpretation of it.

2. The Five-Phase Pedagogical Model: Origins, Principles, and Structure

The five-phase pedagogical model is an inclusion-oriented educational strategy developed by Angela Magnanini within the Master’s Degree Course in Sport Science and Technique at the University of Rome “Foro Italico” (Magnanini, 2018). It responds to the need to restore full pedagogical value to motor and sports activity, moving beyond a tradition focused mainly on performance and conditional capacities (Carraro & Lanza, 2004), and recognizes sport as an educational experience rich in values and relationships and as fertile ground for social inclusion.

The model thus originates in the training of future motor and sport science professionals, who learn to design activities according to its phases; its intended contexts of application, however, are the settings in which these professionals will work, both in and outside of school, from physical education to extracurricular and community sport (Magnanini, 2018). The model therefore operates on two levels, as a training device for educators and as a design framework for the activities they propose. For this reason, it is referred here primarily to school and pupils, while remaining applicable, with appropriate adaptations, to the other contexts mentioned.

The model rests on three principles (Magnanini, 2018): participation, understood as the degree of a subject's involvement in life situations relative to their own conditions and functions; accessibility, meaning the capacity to design for a wide range of diversity rather than relying on standardized solutions; and equal opportunities, ensuring that activities and contexts are usable by all on an equal basis. These principles frame the model as an open design framework aimed at valuing individual differences (Sangalli & Borgogni, 2025). Theoretically, the model engages bodily, emotional, cognitive, and social dimensions simultaneously, which aligns it with Embodied Cognition: the body is the site where knowledge is generated through perception, action, and relationship with the environment (Cecilian, 2018; Gomez Paloma et al., 2017).

2.1. The Five Phases

The first phase, observation and knowledge, lays the foundation of the educational relationship, understood as situated, intentional, asymmetrical, and content-mediated (Magnanini, 2018). Strategies such as circle time or icebreaker games foster contact, nonverbal exchange, and awareness of differences, creating a welcoming group climate.

The second phase, trust, uses trust games to build authentic bonds and support self-efficacy (Bandura, 2000) and self-determination (Deci & Ryan, 1985). Activities requiring reliance on a partner, such as guiding a blindfolded peer or being supported by the group, mobilize the body as a relational medium, intertwining emotional regulation, risk perception, and mutual responsibility.

The third phase, cooperation, consolidates positive interdependence through cooperative learning strategies, particularly the Learning Together model (Johnson & Johnson, 1994), based on positive interdependence, individual and group accountability, face-to-face promotive interaction, social skills, and shared evaluation. The group becomes the primary learning resource and the teacher acts as facilitator.

The fourth phase, focused on play and technical/socio-relational goals, integrates the motor and sporting dimension through simulated games and adaptable proposals, in which technical objectives are never separated from relational ones and small modifications keep activities accessible to all participants.

The fifth phase, reflection, closes the cycle by surfacing experiences, emotions, and opportunities for improvement, through words but also through corporeality and movement. This metacognitive moment consolidates learning and offers the facilitator feedback for recalibrating future action.

The phases do not form a rigid order: the first three are tightly interconnected and may be revisited as context demands. According to Magnanini (2018), this flexibility allows a wide range of activities to become inclusive when the educator embraces a culture of inclusion and masters its paradigms. This condition should, however, be regarded as necessary rather than sufficient, since the inclusiveness of a motor context also depends on environmental (spaces, equipment, accessibility of facilities), organizational (group composition, time, support staff), and institutional conditions (curricular choices, policies, resources) that go beyond the individual educator (Booth & Ainscow, 2002).

2.2. Embodiment and Inclusion

The link between embodiment and inclusion can be made explicit by identifying the mechanisms through which the phases may help to recognize and reduce barriers to participation. In the observation and knowledge phase, the educator identifies, before proposing any task, the barriers that the context, rather than the individual, may create, and the different ways in which participants perceive, move, and communicate, read as different forms of bodily access to the world rather than as deficits. The trust and cooperation phases shift the focus from individual performance to the group: positive interdependence makes each contribution necessary to the shared task, so that adaptation concerns the rules, roles, and interactions of the whole group, not only the participant with a disability.

In the play phase, tasks open to multiple solutions and modifiable in their spatial, temporal, and material constraints legitimize different modes of action as equally valid ways of achieving the same goal. The reflection phase, finally, by also allowing bodily forms of expression, makes it possible to collect the experiences of those who communicate primarily through the body and to use them to recalibrate the context. Inclusion thus does not derive automatically from the flexibility of activities, but from a design process that acts on the context and on the group, in which the body is both the medium of participation and a source of information about its barriers.

3. The Five-Phase Pedagogical Model from an Embodied Cognition Perspective: Indicators and Didactic Implications

If the five-phase model lends itself to an embodied reading, it is because motor and sport activities constitute a domain in which mind, body, and environment cannot be separated. Examining this coherence requires moving from principles to indicators, identifying which traits of motor experience make the embodied functioning of cognition observable and how they may recur in the phases of the model. To this end, reference is made to Ceciliani (2018), who reinterprets Wilson's (2002) critical review through a motor-sport lens, reorganizing its six claims into markers recognizable in didactic practice. The indicators are described below (Section 3.1), followed by the procedure of analysis (Section 3.2) and the correspondence with the phases (Section 3.3).

3.1. Embodied Indicators

The relationship between Wilson's (2002) claims and the indicators is not one-to-one. Wilson's claims are: (1) cognition is situated; (2) cognition is time-pressured; (3) we off-load cognitive work onto the environment; (4) the environment is part of the cognitive system; (5) cognition is for action; and (6) offline cognition is body-based. In the grid adopted, claims (1) and (2) converge in the online dimension of situated cognition, claims (3) and (4) in affordance, and claim (6) in the offline dimension of situated cognition, while claim (5) underlies two indicators, the perspective adopted in action and the quality of engagement. The affective-relational indicators do not derive from Wilson's claims, but constitute a domain-specific extension for the motor-sport field. Table 1 keeps these levels distinct from the correspondence with the phases, which is the authors' interpretive elaboration.

A first indicator is situated cognition. In motor-sport contexts, cognition unfolds in a real space-time, coupling perception and action within the flow of information offered by the situation; executive functions become embodied in real-time action, often under time constraints that force the subject to act before the situation has fully developed (Ceciliani, 2018). Alongside this online dimension, an offline dimension emerges in processes of motor anticipation and mental simulation, such as the mental rotation of one's own or another's body.

A second indicator concerns the perspective adopted in action: egocentric in closed skills, when attention is centered on one's own body and on execution precision; allocentric in open skills, when the subject must read others' movements and environmental changes (Ceciliani, 2018). In phenomenological terms, the body is the first-person starting point from which the relationship between environment, corporeality, and consciousness is lived (Allen-Collinson & Hockey, 2009).

A third indicator, of ecological origin, is affordance, a quality of the environment that not only orients action but elicits it, activating motivation, exploration, and problem-solving. The enriched educational proposal (Pesce et al., 2016) derives from this perspective, valuing deliberate play and tasks open to multiple solutions; the environment becomes a partner in action rather than a neutral backdrop.

A fourth indicator concerns the quality of engagement required by the task, ranging from high coordinative complexity, which calls for egocentric body control, to high strategic-tactical organization, in which external perceptual data and problem-solving in variable contexts prevail (Ceciliani, 2018). In the latter case, contextual interference is a particularly relevant marker, since it favors transfer and flexible behaviors.

Affective-relational indicators, finally, lie beyond Wilson's claims but are decisive for the educational character of motor experience. Self-perception, mindfulness, emotional regulation, and affective engagement qualify not only what the subject does, but also how they perceive and experience themselves in movement (Gomez Paloma et al., 2017).

3.2. Procedure of the Analysis

The correspondence was constructed through a qualitative, deductive conceptual mapping. The corpus consists exclusively of the presentation of the model in Magnanini (2018). The units of analysis were the descriptions of the five phases, each considered in three components: educational objectives, proposed activities and strategies (e.g., circle time, trust games, cooperative structures, adaptable games, final reflection), and role of the educator. The categories were defined *a priori*: Wilson's (2002) claims provided their theoretical source, Ceciliani's (2018) indicators their operational translation, and the operational definitions in Table 1 served as coding criteria.

A correspondence was attributed only when the description of a phase contained an element explicitly matching the distinctive feature of an indicator's operational definition, and not a generic reference to cognitive, perceptual, affective, or social processes, which would apply to almost any educational activity. For instance, the presence of emotions was not sufficient to assign the affective-relational indicator, which required an explicit reference to emotional regulation and self-perception in relation to others. When a phase met the criteria of several

indicators, all were retained, and the same indicator could correspond to more than one phase. The correspondences were discussed jointly by the authors until agreement was reached. The resulting mapping (Table 1) is to be understood as a plausible reading of the model, not as its validation.

3.3. Correspondence between Indicators and Phases

The observation and knowledge phase may be associated with the online dimension of situated cognition and with affordance. Its distinctive element is the mutual discovery of participants and context, which requires reading in real time the information that the environment and others' bodies make available, while space, materials, and others' presence solicit exploration and contact. Although affective dimensions are also activated, the description does not focus on emotional regulation, which is why the affective-relational indicator was not assigned.

In the trust phase, affective-relational indicators are particularly traceable, owing to the explicit reference to emotional regulation, risk perception, and mutual responsibility in activities that require relying on others. Trust can thus be interpreted not as an abstract premise of the educational relationship, but as a form of learning that occurs in and through the body.

The cooperation phase may be associated with the allocentric perspective and open skills. Its distinctive element is the need, inherent in cooperative structures (Johnson & Johnson, 1994), to coordinate one's action with that of others: reading and anticipating others' bodily configurations, communicating nonverbally, and subordinating one's action to a shared situation. Knowledge is thus constructed through the negotiation of meanings between bodies acting together.

The play phase is the most immediately recognizable on the level of embodiment and the only one associated with three indicators: perspective, affordance, and quality of engagement. In simulated games and adaptable proposals, intrinsic motivation, exploration, contextual interference, and skill transfer converge, and technical objectives are never disjoined from socio-relational ones.

The reflection phase, finally, can plausibly be associated with offline cognition. When reflection involves rethinking, planning, and imagining action, it may activate processes of motor simulation and anticipation. This is a plausible interpretation rather than a necessary equivalence, since not every reflection entails bodily simulation, as in the case of a verbal reflection on relationships. The correspondence is most pertinent when reflection is oriented toward action and conducted, at least in part, through the body; in these cases, it supports the interpretation of reflection as a moment of embodied consolidation of learning.

Wilson's (2002) claim	Ceciliani's (2018) indicator	Operational definition	Corresponding phase(s)
Cognition is situated; cognition is time-pressured	Situated cognition (online dimension)	Real-time perception–action coupling under time constraints; executive functions (attention, inhibition, working memory, flexibility) mobilized <i>in situ</i>	Observation and knowledge
Offline cognition is body-based	Situated cognition (offline dimension)	Motor anticipation and mental simulation (e.g., mental rotation of one's own or another's body)	Reflection
We off-load cognitive work onto the environment; the environment is part of the cognitive system	Affordance	Environmental features that solicit and guide action, activating motivation and exploration	Observation and knowledge; Play
Cognition is for action	Egocentric/allocentric perspective	Body-centered control in closed skills (egocentric) vs. reading others' movement and environmental change in open skills (allocentric)	Cooperation; Play
Cognition is for action (elaborated)	Quality of engagement	Task demands ranging from coordinative complexity to strategic-tactical organization; contextual interference favoring transfer	Play
<i>Domain-specific extension, beyond Wilson's six claims</i>	Affective-relational indicators	Self-perception, mindfulness, emotional regulation, and emotional engagement; anchoring of learning to the "here and now"	Trust

Table 1. Correspondence between Wilson's (2002) claims, Ceciliani's (2018) embodied indicators, and the phases of Magnanini's (2018) five-phase model

Note. Some of Wilson's (2002) claims are grouped into common indicators, while "Cognition is for action" underlies two indicators; the affective-relational indicators extend beyond Wilson's claims.

The last column reports the authors' interpretive mapping (see Section 3.2).

4. Conclusions

The contribution suggests that the five-phase model can be interpreted as a pedagogical-didactic device consistent with the principles of Embodied Education, as it integrates bodily experience, cognitive processes, emotions, and the relationship with the environment within a unified pathway. Its main original contribution lies in a first operationalization of this correspondence (Table 1), which makes explicit embodied assumptions implicit in the model and translates them into observable indicators.

This reading is interpretive rather than statistical: it does not aim to establish causal relationships or to validate the model, but to propose a conceptual coherence that future research could examine, for example through the observational coding of the indicators in Table 1 or through validated scales, verifying in particular the more interpretive correspondences, such as that between reflection and offline cognition.

The model may thus contribute to moving beyond a merely technical and performance-oriented view of physical education. The centrality of subjective experience, the flexibility of tasks, and the possibility of exploring different motor solutions support an interpretation of the model as inclusive, promoting participation, accessibility, and meaningfulness of the motor experience (Magnanini,

2018; Sangalli & Borgogni, 2025), provided that the environmental, organizational, and institutional conditions discussed above are also addressed.

References

- Allen-Collinson, J., & Hockey, J. (2009). The essence of sporting embodiment: Phenomenological analyses of the sporting body. *The International Journal of Interdisciplinary Social Sciences*, 4(4), 71–81.
- Bandura, A. (2000). *Autoefficacia: Teoria e applicazioni* (E. Del Miglio, Trans.). Erickson. (Original work published 1997)
- Booth, T., & Ainscow, M. (2002). *Index for inclusion: Developing learning and participation in schools*. Centre for Studies on Inclusive Education.
- Carraro, A., & Lanza, M. (Eds.). (2004). *Insegnare/apprendere in educazione fisica*. Armando Editore.
- Cecilian, A. (2018). Dall'Embodied Cognition all'Embodied Education nelle scienze dell'attività motoria e sportiva. *Encyclopaideia*, 22(51), 11–24. <https://doi.org/10.6092/issn.1825-8670/8424>
- D'Ambrosio, M., Diamare, S., Furia, R., Nappi, B., Ruocco, C., & Salerno, M. (2019). La metodologia Embodied per le disabilità sensoriali. *Research Trends in Humanities Education & Philosophy*, 6, 1–19. <https://doi.org/10.6093/2284-0184/6012>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. Macmillan.
- Dewey, J. (1938). *Experience and education*. Macmillan.
- Gomez Paloma, F., Ascione, A., & Tafuri, D. (2017). Embodied Cognition: Il ruolo del corpo nella didattica. *Formazione & Insegnamento*, 14(1 Suppl.), 75–88.
- Gomez Paloma, F., & Minghelli, V. (2022). Il ricorso al video nella formazione del docente della scuola dell'infanzia per la costruzione di competenze inclusive incarnate. *Media Education*, 13(1), 41–50.
- Gomez Paloma, F., & Tafuri, D. (2017). Embodied Cognition: Body, movement and sport for didactics. *Italian Journal of Educational Research*, 17, 41–52.
- Hickok, G. (2009). Eight problems for the mirror neuron theory of action understanding in monkeys and humans. *Journal of Cognitive Neuroscience*, 21(7), 1229–1243. <https://doi.org/10.1162/jocn.2009.21189>
- Husserl, E. (1970). *The crisis of European sciences and transcendental phenomenology: An introduction to phenomenological philosophy* (D. Carr, Trans.). Northwestern University Press. (Original work published 1954)
- Husserl, E. (1989). *Ideas pertaining to a pure phenomenology and to a phenomenological philosophy. Second book: Studies in the phenomenology of constitution* (R. Rojcewicz & A. Schuwer, Trans.). Kluwer Academic Publishers. (Original work published 1952)

- Jensen, T. W. (2013). Embodied emotional communication in learning activities involving children with intellectual disabilities. *Journal of Interactional Research in Communication Disorders*, 4(2), 185–210.
<https://doi.org/10.1558/jircd.v4i2.185>
- Johnson, D. W., & Johnson, R. T. (1994). *Learning together and alone: Cooperative, competitive, and individualistic learning* (4th ed.). Allyn & Bacon.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Lo Piccolo, A. (2019). Corpo e movimento per la promozione del benessere in prospettiva inclusiva. *Italian Journal of Health Education, Sport and Inclusive Didactics*, 3(4). <https://doi.org/10.32043/gsd.v3i4.155>
- Magnanini, A. (2018). *Pedagogia speciale e sport: Modelli, attività e contesti inclusivi tra scuola ed extrascuola*. Edizioni Incontropiede.
- Magnanini, A., & Battista, F. (2022). Unicum suum: Artistic and educational interweavings for a new culture of the body. *Italian Journal of Special Education for Inclusion*, 10(1), 146–155.
- Merleau-Ponty, M. (2012). *Phenomenology of perception* (D. A. Landes, Trans.). Routledge. (Original work published 1945)
- Montesano, P., Peluso Cassese, F., & Tafuri, D. (2017). Valorizzazione del corpo nella proposta didattica al soggetto con Sindrome dello Spettro Autistico. *Formazione & Insegnamento*, 14(2 Suppl.), 83–96.
- Montessori, M. (1912). *The Montessori method* (A. E. George, Trans.). Frederick A. Stokes. (Original work published 1909)
- Pesce, C., Masci, I., Marchetti, R., Vazou, S., Sääkslahti, A., & Tomporowski, P. D. (2016). Deliberate play and preparation jointly benefit motor and cognitive development: Mediated and moderated effects. *Frontiers in Psychology*, 7, 349. <https://doi.org/10.3389/fpsyg.2016.00349>
- Piaget, J. (1952). *The origins of intelligence in children* (M. Cook, Trans.). International Universities Press. (Original work published 1936)
- Rathunde, K. (2009). Montessori and embodied education. In P. A. Woods & G. J. Woods (Eds.), *Alternative education for the 21st century: Philosophies, approaches, visions* (pp. 189–208). Palgrave Macmillan.
- Rizzolatti, G., & Craighero, L. (2004). The mirror-neuron system. *Annual Review of Neuroscience*, 27, 169–192.
<https://doi.org/10.1146/annurev.neuro.27.070203.144230>
- Sangalli, S., & Borgogni, A. (2025). Inclusione sociale e Capabilities: Il ruolo della corporeità. *Journal of Inclusive Methodology and Technology in Learning and Teaching*, 5(2).
- Wilson, M. (2002). Six views of embodied cognition. *Psychonomic Bulletin & Review*, 9(4), 625–636.
<https://doi.org/10.3758/BF03196322>