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RESEARCH: MONTESSORI

Title Determining and Comparing the Effect of Traditional and Montessori Methods on Perceptual Motor Activities of Elementary School Students

Citation

Adibpour, N., & Hasanvand, B. (2020). Determining and comparing the effect of traditional and Montessori methods on perceptual motor activities of elementary school students. *Journal of Motor and Behavioral Sciences*, 3(3), 303–312. http://www.jmbs.ir/article_118239_13995.html?lang=en

Summary/Abstract The purpose of this study is to determine and compare the effect of traditional and Montessori methods on perceptual motor activities of elementary school students. This research is applied in terms of purpose and semi-experimental in terms of implementation. Abad forms. The sample size in this study was selected using G-POWER software and the sample size was 36 people. It is necessary that three groups of 12 people are selected randomly from them. In this study, there are three groups of 12 people for research, one of which is the Montessori training program; In the second group, the traditional training program and the third group as a research control group, in which the two experimental groups performed the necessary training sessions for 8 weeks and 3 sessions per week. In both traditional and Montessori groups, the changes in pre-test and post-test are significant and this means that both Montessori and traditional methods have been able to improve students' balance. The results showed that the Montessori group had the greatest impact on fine motor skills. Also, the traditional training group was able to create a significant difference with the control group.

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Title Teachers' Perceptions of Supporting Pre-School Children in Self-Learning in Montessori Classrooms: A Case Study of Three Saudi Pre-Schools

Citation

Almajed, M. A. (2020). Teachers' perceptions of supporting pre-school children in self-learning in Montessori classrooms: A case study of three Saudi pre-schools. *Multi-Knowledge Electronic Comprehensive Journal For Education And Science Publications*, 37, 1-21. https://www.mecsj.com/uplode/images/photo/Teachers_Perceptions_of_Supporting_Pre-School_Children.pdf

Summary/Abstract Teaching at pre-school in Saudi Arabia can involve the use of many types of teaching methods, and the Montessori educational system is one approach that can be used. Over time, this method has gained value and popularity due to its promotion of a self-learning strategy. This current study aims to explore the perceptions of Montessori teachers working in Saudi Arabia about their role in supporting a self-learning strategy for pre-school children. The research sample comprised Montessori teachers working at three schools in Saudi Arabia. Data was collected by undertaking qualitative semi-structured interviews and using an unstructured questionnaire. The interviews was piloted in advanced. The findings show that most of the Saudi pre-school teachers who participated are knowledgeable about teaching the Montessori system in the classroom, and have knowledge of applying the self-learning strategy. However, in practice, their role in supporting children to achieve self-learning is affected by various factors, including: the overall ethos of the Saudi education system, the Ministry of Education's perceptions about teaching pre-school children using the Montessori system, the teacher's background and their years of experiences working with pre-school children, and the use of individual education plans for each child.

Title Four Pillars of the Montessori Method and Their Support by Current Neuroscience

Citation

Catherine, L., Javier, B., & Francisco, G. (2020). Four pillars of the Montessori method and their support by current neuroscience. *Mind, Brain, and Education*, 14(4), 322–334. doi.org/10.1111/mbe.12262

Summary/Abstract Maria Montessori developed an educational program during the first half of the 20th century. Nowadays, the Montessori method (MM) is considered one of the main alternatives to teacher-paced conventional preschool education. This review aims to open a dialogue between the MM and current understanding of neurodevelopment. Four conceptual pillars of the MM—the *sensitive periods*, the *education of the senses*, the *prepared environment*, and *spontaneous activities through repetition*—are discussed. According to the MM, the teacher provides children with an environment that, leaning on maturational time windows, should promote sensory development through *spontaneous repetition*. We describe brain changes in 3- to 6-year-old children due to development and externally-provided experience. Then, it is discussed whether these pillars are supported by neuroscience. Finally, the influences of Montessori are explained, and we suggest possible lines of research to underpin the neuroscientific grounds of the MM.

Title Children's Automatic Evaluation of Self-Generated Actions is Different from Adults

Citation

Denervaud, S., Hess, A., Sander, D., & Pourtois, G. (2020). Children's automatic evaluation of self-generated actions is different from adults. *Developmental Science*, e13045. doi.org/10.1111/desc.13045

Summary/Abstract Performance monitoring (PM) is central to learning and decision making. It allows individuals to swiftly detect deviations between actions and intentions, such as response errors, and adapt behavior accordingly. Previous research showed that in adult participants, error monitoring is associated with two distinct and robust behavioral effects. First, a systematic slowing down of reaction time speed is typically observed following error commission, which is known as post-error slowing (PES). Second, response errors have been reported to be automatically evaluated as negative events in adults. However, it remains unclear whether (1) children process response errors as adults do (PES), (2) they also evaluate them as negative events, and (3) their responses vary according to the pedagogy experienced. To address these questions, we adapted a simple decision-making task previously validated in adults to measure PES as well as the affective processing of response errors. We recruited 8-to-12-year-old children enrolled in traditional (N = 56) or Montessori (N = 45) schools, and compared them to adults (N = 46) on the exact same task. Results showed that children processed correct actions as positive events, and that adults processed errors as negative events. By contrast, PES was similarly observed in all groups. Moreover, the former effect was observed in traditional schoolchildren, but not in Montessori schoolchildren. These findings suggest that unlike PES, which likely reflects an age-invariant attention orienting toward response errors, their affective processing depends on both age and pedagogy.

Title Intervention Fidelity of a Volunteer-Led Montessori-Based Intervention in a Canadian Long-Term Care Home

Citation

Hunter, P., Rissling, A., Pickard, L., Thorpe, L., & Hadjistavropoulos, T. (2020). Intervention fidelity of a volunteer-led Montessori-based intervention in a Canadian long-term care home. *Canadian Journal on Aging / La Revue Canadienne Du Vieillissement*, 1-13. [doi:10.1017/S071498082000029X](https://doi.org/10.1017/S071498082000029X)

Summary/Abstract Montessori-based interventions (MBIs) were developed to promote guided participation in meaningful activities by people with dementia patients. In this study, we assessed nursing home volunteers' fidelity to an MBI, relying primarily on a qualitative descriptive design. We completed a deductive content analysis of eight volunteer interviews using the Conceptual Framework for Intervention Fidelity. We also calculated average volunteer and resident scores on the Visiting Quality Questionnaire (VQQ), which assesses volunteers' and residents' perceptions of visits. We found good evidence that volunteers attended scheduled visits, made use of pre-designed activities, and attended to training recommendations. Most reported enjoying the visits (VQQ \bar{x} = 6.12, standard deviation [SD] = 0.75) and receiving a positive response from residents (VQQ \bar{x} = 5.46, SD = 0.88). Nevertheless, use of pre-designed activities and response to the MBI was lower for volunteers working with residents who had late-stage dementia. Therefore, overall, fidelity depended on the cognitive status of the resident.

Title Montessori as a School Reform Alternative Reflecting Biblical Anthropology

Citation

Jeong, J. (2020). Montessori as a school reform alternative reflecting biblical anthropology. *Journal of Research on Christian Education*, 29(3), 307–327. <https://doi.org/10.1080/10656219.2020.1841049>

Summary/Abstract Today's education has three impediments to meaningful and sustainable educational reform; first, the lack of precise and accurate anthropology of learners; second, dilemma between constructivism-leading academy and behaviorism-dominating classrooms; third, the lack of philosophy of education in theory and practice. The Montessori system was built upon the Christian theological anthropology, which uncovers that the main source of failure in our education is humanity's original sin and sins preventing us from fulfilling the Imago Dei or the reciprocating self. This article highlights why the Montessori method is a feasible school reform model by briefly examining Montessori's anthropology centering on Imago Dei, teacher's respect for the child resulting in education through being and embodiment, and systematized teacher-training system.

Title Peace Education: A Case Study of a Montessori School in Lebanon

Citation

Kotob, M., & Antippa, V. (2020). Peace education: A case study of a Montessori school in Lebanon. *Millennium Journal of Humanities and Social Sciences*, 44–68. doi.org/10.47340/mjhss.v1i3.4.2020

Summary/Abstract Lebanon suffered a civil war that has torn its society. The third generation is still living the instability and conflicts that their grandparents experienced when the war started forty-five years ago. Nowadays, there is a need of a substantial change and children have the power of creating peace and making a major transformation of the society. Therefore, educators should believe in children's power. The inclusion of a practical Peace Education Program in the Lebanese National Curriculum is, from the perspective of the researches, the tool children need to lead the future transformation. Peace Education can help them to know themselves and understand that everyone is an important part of the community and the country. Accordingly, this study examines the Peace Education Program at the first Montessori School in Lebanon and the teachers' level of awareness of implementing it through their teaching practices. The level of awareness is related to the four pillars to be developed in the students according to the Montessori approach to Peace Education: Self-awareness, community-awareness, cultural-awareness, and environmental-awareness. The results of the study show that the director and the teachers have the adequate knowledge and awareness about this approach and they implement it, complying with Montessori's principles and concepts.

Title Montessori as an Alternative Early Childhood Education

Citation

Lillard, A. S. (2020). Montessori as an alternative early childhood education. *Early Child Development and Care*, 1–11. doi.org/10.1080/03004430.2020.1832998

Summary/Abstract Montessori education was developed over 100 years ago, and persists as a marginal 'niche reform' of the standard model. Here I discuss two unresolved dichotomies in early childhood education – the tension between work and play, and between structure and freedom. I explain how Montessori collapses and thereby resolves the dichotomies, and does so in a contemporary theoretical frame – one that is dynamical rather than linear. I next describe the origins and functioning of Montessori preschool environments, outcomes from the most methodologically sound studies to date, and impediments to Montessori's more widespread adoption. I also show how Montessori is a culturally responsive pedagogy, and conclude by returning to the dichotomies and how Montessori makes sense for the modern era.

Title Interaction of Children with and without Communication Disorders using Montessori Activities for the Tablet

Citation

Pérez-Pérez, J.-R., Cabiellas-Hernández, D., Sánchez-Santillán, M., & Paule-Ruiz, M. P. (2020). Interaction of children with and without communication disorders using Montessori activities for the tablet. *Personal and Ubiquitous Computing*. doi.org/10.1007/s00779-020-01471-7

Summary/Abstract Mobile technologies used for education may offer advantages for children with Communication Disorders, among which we can find language disorders and speech disorders, which are identified in DSM-V. In this research, we have introduced two educational activities, “Matching Cards” and “Cards & Sounds”, based on the Montessori Method and which deal with the first stages of reading and writing. We have tested these two activities with children with and without Communication Disorders in order to study how they interact. These groups of children use a Tablet to perform the two activities, which vary in visual and auditory stimuli. The activities employ two touch interactions: tap and drag & drop. Based on Montessori, the activity and the interaction do not produce either positive or negative feedback. The analysis performed with the variables of time, interaction and mistake has shown that children from both groups change their efficiency of use. Differences regarding the interaction of children with and without Communication Disorders have also been observed. Additionally, children with Communication Disorders need additional strategies as explicit indicators in the interaction which may be a guide to be able to carry out specific actions.

Title Understanding Teacher Identity Construction: Professional Experiences of Becoming Indonesian Montessori Teachers

Citation

Siswanto, I. L., & Kuswandono, P. (2020). Understanding teacher identity construction: Professional experiences of becoming Indonesian Montessori teachers. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 5(1), 1–16. doi.org/10.21093/ijeltal.v5i1.539

Summary/Abstract This study sought to investigate the identity construction of Indonesian Montessori teachers. The research was done in two Montessori schools in Yogyakarta: Cosmic School and Universe School (pseudonyms). The participants involved in this research were eight teachers in total. The data gathering process employed questionnaire, classroom observation, interview, and written reflections. The findings have shed a light on the ways teachers develop their identities within Montessori’s values and principles that they reflect and implement in their daily teaching practice. The findings of the research portrayed that there were four major salient principles influencing the identity formation of becoming Montessori teachers. They were movement and cognition, choice, interest, and teacher ways and child ways. Those principles and values were becoming teachers’ guidance of creating professional working ethos. Montessori principles also influenced the teachers in the ways they perceived and treated the students. This study also revealed the undertaken agencies to hold identity as Montessori teachers. There were three broad themes to explain their agencies. They entailed the essence of building communication between teacher and parents, the significance of community support, and the importance of being well-prepared teachers. Based on the findings and discussion, some recommendations for future studies are also presented.

Title The Reception of Maria Montessori’s Pedagogical Theory in Pre-School Education in Interwar Poland

Citation

Sosnowska, J. (2020). The reception of Maria Montessori’s pedagogical theory in pre-school education in interwar Poland. *Nauki o Wychowaniu. Studia Interdyscyplinarne*, 11(2), 106–124. doi.org/10.18778/2450-4491.11.09

Summary/Abstract An innovative trend in pedagogy, called "new education", which appeared in many European countries in the first half of the 20th century, aimed at the renewal of the school, learning conditions and the learning process, assigned a new role to the teacher, and emphasized a new approach to the child. One of the many representatives of the "new education" was Maria Montessori (1870–1952), an Italian doctor and educator. Learning about M. Montessori's pedagogical theory in Poland was supported by her book publications and the pedagogical and psychological literature of Polish educators, which referred to the concept of Montessori education. The aim of the article is to present the reception of M. Montessori's pedagogical theory in preschool education in the years 1918–1939.

RESEARCH: RELATED

Title Montessori, Waldorf, and Reggio Emilia: A Comparative Analysis of Alternative Models of Early Childhood Education

Citation

Aljabreen, H. (2020). Montessori, Waldorf, and Reggio Emilia: A comparative analysis of alternative models of Early Childhood Education. *International Journal of Early Childhood*. doi.org/10.1007/s13158-020-00277-1

Summary/Abstract Montessori, Waldorf, and Reggio Emilia education remain three of the most popular models for alternative early childhood education. Each of these approaches has developed globally, with a rich history of supporting children’s educational freedom. This narrative analysis provides a means for early childhood educators and scholars to understand the aims, philosophical and theoretical frameworks, historical development, benefits, and challenges in these models and their methods of practice. As early childhood education evolves with technology and as re-conceptualizations about early education occur, an understanding of these alternatives to traditional education models is important. While adaptive options of these models may emerge in education systems across national contexts, this review allows educators to consider their applications and cultural appropriateness in specific local and community contexts.

Title Lead It!: An App to Enable Persons With Dementia to Lead Group Activities for Their Peers

Citation

Skrajner, M., & Gorzelle, G. (2020). Lead It!: An app to enable persons with dementia to lead group activities for their peers. *Innovation in Aging*, 4(Suppl 1), 274–275. doi.org/10.1093/geroni/igaa057.878

Summary/Abstract LEAD IT! is an app that enables persons with early and middle stage dementia to lead activities for their peers—i.e., other persons with dementia (PWD). An alpha version of the app was

tested in a Phase 1 SBIR project. The alpha version included three Montessori-inspired activities. While PWD ostensibly view LEAD IT! as a set of enjoyable activities, it is actually an evidenced-based intervention aimed at reducing responsive behaviors and enabling PWD to fill meaningful social roles. A total of 24 PWD participated in the Phase 1 study: five leaders and 19 players. LEAD IT! Programming was implemented for six weeks, twice per week. LEAD IT! produced higher levels of positive engagement and affect, and lower levels of negative engagement, as compared to standard, baseline activities—i.e., non-digital activities led by staff. More specifically, when compared to baseline programming, players exhibited an 82% increase in Constructive Engagement ($P=0.000$), 80% increase in Passive Engagement ($P=0.000$), 60% reduction in Other Engagement ($P=0.035$), and 171% increase in Pleasure ($P=0.000$). One limitation of the Phase 1 study is that, at least insofar as the intervention is only implemented twice per week for six weeks, the positive outcomes seem to be limited to the period of time during which PWD are participating in the activity—i.e., changes on global measures, such as quality of life and depression were not detected. Still, the promising results of this study suggest that LEAD IT! is worthy of further development and evaluation in a planned Phase 2 study.

Title Understanding School Engagement: The Role of Contextual Continuities and Discontinuities in Adolescents' Learner Identities

Citation

Verhoeven, M., Zijlstra, B., & Volman, M. (2021). Understanding school engagement: The role of contextual continuities and discontinuities in adolescents' learner identities. *Learning Culture and Social Interaction*, 28. doi.org/10.1016/j.lcsi.2020.100460

Summary/Abstract Adolescents' school engagement is related to continuities and discontinuities in learning notions between various contexts (e.g., school, home, peer groups). Learning notions are the prevalent ideas in a context about appropriate learning goals, contents and means. It has remained unclear how adolescents' learner identities mediate the role that (dis-)continuities play in adolescents' school engagement. To advance insight into adolescents' school engagement, we examined what relations could be found between various contextual (dis-)continuities in learning notions adolescents with diverse levels of school engagement experience and their learner identities. Our comparative case study suggests that especially (dis-)continuities regarding notions of what it entails to be a good learner and the importance of being one between the school context on the one hand, and the contexts of home and peer groups on the other inform students' school-related learner identities. The present study implies that adolescents' school engagement can be fostered by building continuities between school and home in the appreciation of students' efforts and by making them resilient to unconstructive learning notions in home and peer group contexts.

Title Status of Peace Learning through Curriculum Based Activities in College Students: A Survey

Citation

Yadav, M. M., & Tiwari, D. S. (2020). Status of peace learning through curriculum based activities in college students: A survey. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(6), 14190–14200. <https://archives.palarch.nl/index.php/jae/article/view/4054>

Summary/Abstract To investigate the current scenario related to activities helping students about peace learning in higher education, a survey of randomly selected 600 students of higher education was

carried out in the Rajasthan state of India studying in science, commerce and humanities. Survey through a reliable and valid self-made checklist was done. Checklist constituted for a list of ten different academic and co-curricular activities usually organized in the colleges. Students' responses on the checklist was qualitatively analyzed. Major findings in terms of their observations were included that activities like sports and games, debates and extempore, clubs events, seminar-conferences, class room teaching learnings and cultural programs organizing in higher education institutions are promoting peace learning related ideas at average level whereas activities planned related to assemblies, training programs, workshops and discussion forums are not sufficiently organized for peace learning in the higher education.

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