www.jpnim.com Open Access eISSN: 2281-0692
Journal of Pediatric and Neonatal Individualized Medicine 2022;11(1):e110132
doi: 10.7363/110132
Received: 2022 Jan 30; accepted: 2022 Feb 15; published online: 2022 Apr 04

Invited review

What future for the child after COVID-19

Giovanna Perricone

Past Professor of Developmental and Educational Psychology, University of Palermo, Palermo, Italy
President of the Italian Society of Pediatric Psychology

Abstract

This paper studies the possible condition of fragility as a "dysfunctional psychophysical state" of the child in these times of SARS-CoV-2, based on neuroscientific studies, a biopsychological approach and on know-how from pediatric psychology. We bring to your attention a possible interventional approach for the support, orientation, accompaniment and shadowing of the child which has experienced and is still living through the pandemic, to allow the child to reverse the developmental risk that the COVID-19 pandemic constitutes. This period experienced by the child has taken on the meaning of a "developmental emergency", the importance of which depends on relations between disorders (caused by the state of fragility which exposure to the adverse event can determine) and the developmental resources available to the child.

This "ferrying" must necessarily include the management of the child as a "field", bringing into play know-how from pediatric psychology. It is a "field" which is constituted by the outcome of relationships the child has with his/her reference system. For the professional figures involved, managing the field means intervening in all the types of relationships which define it. This is done through proximal, community-based interventions, promoting strengthening actions, such as reinforcing life skills, and, therefore, improving the developmental trajectory. This provides support to the child when facing transformation developmental tasks created by the developmental crisis which the pandemic, as a critical event, has determined.

Keywords

Fragility, biopsychosocial, relationship field, strengthening, SARS-CoV-2, integrated work.

Corresponding author

Giovanna Perricone, Past Professor of Developmental and Educational Psychology, University of Palermo, Palermo, Italy, and President of the Italian Society of Pediatric Psychology; email: giovanna.perricone@unipa.it.

How to cite

Perricone G. What future for the child after COVID-19. J Pediatr Neonat Individual Med. 2022;11(1):e110132. doi: 10.7363/110132.

Background

The Scientific Community in the field of research and prevention in child development is now making a conscious effort to pose questions about the future of the child following the "apocalypse", as we can now define the recent epidemic [1]. It may be more accurate to refer to a syndemic, a type of comorbidity between functional and non-functional disorders, dysregulation and behavioral disorders, eating disorders, isolation and others. These are all disturbances which, when found together, create a condition of distress [2]. It is an individual "developmental emergency" [3], the result of a specific interaction between disturbances and developmental resources, and between this relationship and mentalizations of the experience of the epidemic.

Every child has interiorized this mentalization, and, like all mentalizations or interiorizations, it contributes to aggressive functioning of the mind, and, more specifically, in terms of those very "domains" which seem to have been thrown into "crisis" by the pandemic – that is the domains of identity, relationships and emotions. They are domains [4-6] which preside over the executive functions, and, therefore, over attention, self-regulation and the representation of the self amongst others. These alterations seem to create a new biopsychosocial fragility, characterized by a particular absence of "ordinary magic" [7]: the lack of that ordinariness made up of certainties, and, for smaller children, those routines which constitute their first cognitive models and normality which help to maintain relationships, experiences, etc. The effects of this absence on development seem to be extremely regressive [8]. This has created the need for criteria or guidelines which can be used to support the child, providing a new approach and employing strengthening, (therefore experiencing the possibility of becoming stronger in terms of developing resources) [3, 9].

The approach must help foster new opportunities of development in the here and how, re-establish routine (albeit in different ways), and build and test the chance to be different. In this way, the condition of fatigue and loss of energy is overcome, and we can move towards regaining that lost energy.

The fragility of the child in pediatric psychology

If we accept developmental psychology at the developmental-clinical intersection as the linchpin of pediatric psychology, our child must be considered as a "condition of the field", made up of relationships between the child himself/herself and his/her reference systems: the family, the caregiving system, and the education system, for example. It is a plastic, multicomponent "field" which, due to the co-presence of aspects, processes, and different and interconnected alterations, we can define, borrowing the term from other areas of study, as "comorbidity", and it would seem to constitute a future risk for developmental trauma disorder (as the sum of micro trauma in adult age, this is expressed through certain psychosomatic reactions) [10] and adjustment disorder (which makes the child unable to form adequate social relationships and to know how to contextualize actions and desires) [11]. It concerns a "field" which is formed by various relationships, linked to the age of the child, to the dysfunctional conformation of the functioning of child's mind, to the characteristics of the processes at the base of its functioning, the fragility of the individual; even the configuration of the functioning of the systems themselves affect the field.

This type of dysregulation impacts, therefore, in terms of behavior, disorientation, confusion, dissociation of internal working models [12, 13] and, therefore, of all the representations and mental scripts. These scripts allow the child to measure himself/herself against everyday life, affections and fragility characterized by disorganized attachments [14-16] (ties where the child seeks out his/her mother, but when the mother is near, the child does not feel a sense of security, so distances himself/herself once again) and conflict of needs (for example, the need for independence due to age and the need for dependence caused by isolation), by the possibility that a condition of trauma might develop or by the possible dysregulation of parenting competence. This latter becomes a condition of child neglect in the sense of a parenting competence which omits awareness of the child's needs in the here and now [9, 17]. It is important here not to dismiss the dysfunctional nature of the community services (health, school, etc.), often inadequate in terms of time and organization and which undoubtedly compound this condition of fragility.

The child's condition of fragility within this field can be defined as a condition of psychosocial and developmental risk, characterized through

neuropsychological dysregulation in terms of the domains of identity, relationships and emotions [18-22]. This neuropsychological state is identified, in cerebral terms, with a state of dysregulation of the primitive executive system (the amygdala, the subcortical structure, the corpus callosum) which produces reactivity and predominance of the right of veto system. As regards the secondary executive system (frontoparietal hippocampus networks), fragility affects the learning process and memory, particularly compromised by chronic activation. Concerning the brain's medial structures, we see inhibitions of emotions and the loss of synchronization and empathy.

Concerning the inhibition of these processes, adequate parenting competence can act as a deterrent in moments when the parent is providing caregiving, thus when taking care of and restraining, when employing emotional and cognitive coping mechanisms (facing events, for example) or when consciously or unconsciously activating scaffolding, and, in doing so, acting as a point of reference for the child.

We can, therefore, assume that the child who has suffered from an adverse experience regarding the health of his/her developmental trajectory [9, 23, 24], which may be attributable to the pandemic in terms of disruption of time, space and relationships, has experienced distressing situations within these relationships [2]. In this way the child activates a toxic response to stress [25], with the risk of negative outcomes for the child's physical health (for example diabetes, heart pathologies, etc.) and mental health (depression, for example).

Some studies highlight the relationship between exposure to adverse events during childhood (for example, traumatic events) and developmental changes [26, 27]. It has been shown that a strong stress condition due to exposure to adverse events can determine a contraction of the hippocampus, with negative effects on the memory and emotive regulation, together with effects on the development of the size of the amygdala, and a subsequent increase in fear [28]. Relative scientific evidence includes cross-cutting studies on reactive response in mammals to exposure to adverse conditions, which induce toxic responses, such as pseudo-Cushing's syndrome [29] and issues in general adaptation, first studied as early as 1946 [30].

Pediatric psychology views this type of distress, with its relative outcomes, as attributable to the relationships between various intersections of the "condition of the field". In this sense, regarding dysregulation of parenting competence and relationships between the child and the family system, we refer here to omissive behavior [31].

This can refer to educational aspects of this competency (promotion of learning, support to developmental tasks, etc.), to social aspects and rights (facilitating access to treatment and protection) [32] and to omissive behavior concerning psychological aspects (controlling critical parenting [17], ensuring attachment and a "secure base" [33], etc.).

These are aspects and omissive behaviors which shape the various functional areas defining these competences – from scaffolding (parenting ability to provide emotional and cognitive support [34, 35] to the child), to coping (ability to manage stressful situations [36]) and caregiving (group of relational competencies which concern the management of the relationship with the child) [15, 37]; evidently, omissive behaviors would seem to "drain" these same parenting-competence functions of sense and meaning.

Once again from a pediatric psychology perspective, and thus identifying the child as a condition of the field, the relationships the child develops with the care system should also be taken into careful consideration, as they are considered as elements which contribute to the development of fragility. The care system seems to disregard the "children's program", also in terms of prevention [38], with the exception of local units formed by pediatricians acting by free choice. In literature on the condition of the field, worthy of note is the aspect of dysfunctionality in relationships between the child and the education system. It is a system which has been unable to make more suitable methodology choices regarding distance learning during this period. The education system often views the psychologists at its disposal (provided for by law) useful for "care" of the individual and rarely in a preventative role, such as promotion of the "sense of agency" [39], and, therefore, promotion of the ability to choose, of decision-making, etc., within a peer group – an aspect of fundamental importance for the health of the developmental trajectory. Analysis carried out to date tends towards defining fragility in terms of "a dysfunctional psychophysical state" based on a level of complexity which does not allow reductionism, such as focusing exclusively on maladaptive behavior (dysfunctioning of sleep-wake rhythm) or simplification, such as when fragility is attributed only to one area of development (intellectual disability). This complexity constitutes a deterrent

for health, also due to the fact that it fosters "fatigue" [40]. A further aspect which supports the need to consider fragility as a dynamic and complex state, is based on the relationship between this complexity and cellular memory transformation [41-43].

Every cell provides not only inherited information (fear of the unknown which the pandemic represents), but, at the same time, that information is also integrated with data acquired through the mentalization of that same personal experience of the pandemic and connected sense of fragility perceived by the child. Taking into consideration the contribution neuroscience has made [44], it is important to note that these mentalizations, thanks to the activation of chemical substances produced by emotions (neuropeptides), become thoughts or ideas transformed into matter [45, 46]. In this sense, emotions which are at the base of fragility (fear, sense of guilt, etc.) seem to be physically present in the body, establishing a connection with tissues and cells [47]. The body, strained by fragility, is a body which thinks and elaborates emotions in all its cells, thus influencing its own feelings and those in the "field" systems through these thoughts or emotional elaborations [48]. These transformations brought about by the body, however, can be further modified as a result of relations between the three cerebral executive systems controlling executive functions.

These dynamics of cellular memory can become, therefore, a further base for the characterization of the state of fragility.

A future for the child?

If this is the picture of the condition of fragility, what kind of immediate and not so immediate future can we imagine as care professionals, fully aware that a period for elaboration and change will be needed, also for us?

We can answer this question when the two possible directions are clear to us, both in the immediate and in near future. In this sense, we refer here to creating conditions and, therefore, acting in the natural environment (without introducing variables) and directing the child towards feeling close [49], towards personal contact, towards integrating these times of COVID-19 into the evolution of their own personal history, towards feeling new autonomy and living within a number of conditions needed for health and the development of life skills [51-53]. They are conditions which provide the child with an opportunity to "heal" and, thus, to rebuild what has changed or even deteriorated in dysfunctional terms.

The other direction addresses helping the child intercept his/her own resources and experience conditions in which self-protection, narrative thought and self-awareness come to the forefront in his/her life, helping the child move towards a new sense of agency and, therefore, the chance to be and to feel, to be aware of having a leading role and being decisive in this stage of development.

On the one hand, it is about strengthening the child, and on the other, about accompanying them to get through this new condition of risk by guiding the child towards new objectives. At the same time, it is important to avoid certain mistakes: for example, that of considering the functioning of the child's mind during pre-COVID-19 identical to that which the child will adopt in this future – both the immediate and near future; of going back to previous developmental interpretive models or of making sure that he/she removes the memory of this historical COVID-19 era entirely.

Developmental health professionals for children

In order to promote a different future for the child, we professionals will need to rise to a new challenge: that of embracing different human and professional perspectives, and of changing the way we consider the child [54-65]. We must involve the "field of relationships" and all significant actors in this field. We must consider contexts not as variables but as epiphenomena of psychophysical health and wellbeing, and, therefore, as essential elements of this highly complex condition of the field, with which we identify the child and for which we are responsible in our professional practices. However, at the same time, we are part of this complexity. This situation in which we practice our profession forces us to adopt an integrated working approach with other professionals – something we can no longer postpone, seen in terms of a vision rather than a common goal (see **Tab. 1**).

Integrated working would seem to be the winning strategy to ensure the successful "ferrying" of the child towards psychophysical health. The starting point is, undoubtedly, this state of fragility created by the pandemic; a critical event which has induced a developmental crisis [54-57]. The pandemic was able to disrupt the previously established equilibrium in functioning.

Table 1. Integrated working approach with other professionals.

Integrated work know-how
An inclusive, integrated model, aimed at creating a future for the child and his/her fragility following COVID-19, must foster collaboration and sharing between those professionals responsible for the well-being of the child's developmental trajectory.

An approach
Sharing this common approach (in addition to the objective) of managing the child with the various professional roles involved; this includes planning for the department or community service [60, 61].

Some criteria
- Managing the involvement of the various professional roles in the daily flow of activities, aiming to ensure a degree of continuity.
- Accompaniment and joint shadowing of the various professional roles crosscutting the treatment process, in addition to the single treatment [62].
- Representation of the child not only based on his/her fragility but also based on the child's resources. First, we must intercept the child's resources and, through these, treat his/her fragility.
- Refusal to consider the child as a case, representing him/her as a "condition of the field", which develops as a result of the relationships between the child, the child's fragility, and his/her reference systems (family, care system and other systems) [63, 64].
- Inseparability and diachronicity of cure and care.
- Continuity.

Specifications – prospects
- Integration/inclusion.
- Managing the network (creating connections between educational and psychological services and pediatric services) and the condition of the field which the child represents, opting (also in terms of prevention) for proximal, community-based interventions and, therefore, identifying immediate needs. This will provide the child with the chance to lessen the sense of self-exclusion and loneliness induced by the pandemic [65].

This disruption was possible as a result of the fact that the models, competences and representations used for coping with the pandemic (which, prior to this critical event, allowed the child to manage himself/herself and his/her reality in learning, relations, etc.) did not prove adequate.

The metaphor of "ferrying" intends to represent those actions of support, orientation, accompaniment and shadowing [3] which are innate to integrated working. This allows the child to respond to developmental tasks of transformation which the crisis has induced. The most frequent tasks include redefining an understanding of the self, the concept and image of the self, managing an experiential self in the here and now of the critical event (constituted by the pandemic), mentalizing the experience of this latter, as part of the child's personal history, creating integrated mapping to represent himself/herself, building new ties and redefining previous ties, recognizing his/her own resources, redefining the meaning of those resources, and projecting himself/herself in terms of his/her own difficulty/criticality. In this sense, the crisis plays a fundamental role in discontinuity in development [58, 59] and is defined as a "transition".

We must ask ourselves, however, if we are ready for this challenge, ready to accept the sense of discomfort that this challenge inevitably brings. Perhaps we might consider that we also need to try to fly, that we will not fall like Icarus but will change perspective and come back stronger. We need it, we too have been through the risk and suffering brought about by COVID-19.

Declaration of interest

The Author declares that no conflicts of interest exist. This paper received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

References

1. Lubrano R, Villani A, Berrettini S, Caione P, Chiara A, Costantino A, Formigari R, Franzoni E, Castelli Gattinara G, Giustardi A, La Marca G, Lionetti P, Lima M, Maffei C, Malamisura M, Manzoni G, Marseglia GL, Memeo A, Mosca F, Perricone G, Peruzzi L, Piacentini G, Pozzobon G, Riva E, Tesoro S, Zampino G, Zanetto F, Zecca M, Bloise S. Point of view of the Italians pediatric scientific societies about the pediatric care during the COVID-19 lockdown: what has changed and future prospects for restarting. Ital J Pediatr. 2020;46(1):1-5.
2. Cerniglia L, Cimino S, Ammaniti M. L'impatto del periodo di isolamento legato al Covid-19 nello sviluppo psicologico infantile. Psicol Clin Sviluppo. 2020;24(2);187-90.
3. Perricone Briulotta G. Il Vento della Psicologia pediatrica: l'esperienza di un know how oltre la Psicologia applicata in Pediatria. Milan: McGraw Hill, 2019.
4. Fodor JA. The modularity of mind. Cambridge, MA: MIT Press, 1983.
5. Macchi Cassia V, Valenza E, Simion F. Lo sviluppo cognitivo, Bologna: Il Mulino, 2004.
6. Bear MF, Connors BW, Paradiso MA. Neurociencia: la exploración del cerebro. Barcelona: Wolters Kluwer, 2016.

7. Masten AS. Ordinary magic, Resilience in development. Am Psychol. 2001;56(3):227-38.
8. Perricone G. Rotolo I, Polizzi C. Una costruzione di senso e significato della competenza genitoriale, traghettandola oltre il COVID-19. In: Fanos V, Khoory BJ, Trapani G (Eds.). Bambini e COVID-19. Come orientarsi. Quartu Sant'Elena: Hygeia Press, 2021.
9. Perricone G, Polizzi C, Burgio S, Carollo A, Fontana V, Morales MR, Rotolo I. Corso di psicologia dello sviluppo e dell'educazione con elementi di psicologia pediatrica. Milan: McGraw Hill Education, 2021.
10. Van der Kolk B. The body keeps the score: Mind, brain and body in the transformation of trauma. New York: Penguin, 2014.
11. Carati MA, Dell'Erba GL. I disturbi dell'adattamento: un modello di concettualizzazione. Cognitivismo Clinico. 2014;11(2):207-26.
12. Albasi C. Attaccamenti traumatici. I modelli operativi interni dissociati. Turin: UTET, 2006.
13. Albasi C. Modelli Operativi Interni Dissociati: una prospettiva relazionale sull'attaccamento, il trauma, la dissociazione. Rome: Astrolabio, 2008.
14. Tani F. I legami di attaccamento fra normalità e patologia: aspetti teorici e d'intervento. Psicoanalisi Neofreudiana. 2011;23(1):1-31.
15. Solomon J, George C (Eds.). L'attaccamento disorganizzato: gli effetti dei traumi e delle separazioni. Bologna: Il Mulino, 2007.
16. Speranza AM. Disorganizzazione dell'attaccamento e processi dissociativi: il contributo di Liotti allo studio delle traiettorie di sviluppo. Cognitivismo Clinico. 2018;15(2):217-20.
17. Bifulco A, Moran P, Jacobs C, Bunn A. Problem partners and parenting: exploring linkages with maternal insecure attachment style and adolescent offspring internalizing disorder. Attach Hum Dev. 2009;11(1);69-85.
18. Simonetta E. Il corpo che apprende: per una nuova teoria dei DSA. Il corpo che apprende. Sesto San Giovanni: Mimesis, 2014.
19. De Cillis S, Mauro M, Romagnoni A. Il disturbo specifico dell'apprendimento come conseguenza di un evento traumatico complesso e di un attaccamento insicuro. Quaderno PSIBA. 2017;46:2.
20. Patriat R, Birn RM, Keding TJ, Herringa RJ. Default-mode network abnormalities in pediatric posttraumatic stress disorder. J Am Acad Child Adolesc Psychiatry. 2016;55(4):319-27.
21. Muetzel RL, Blanken LM, Thijssen S, van der Lugt A, Jaddoe VW, Verhulst FC, Tiemeier H, White T. Resting-state networks in 6-to-10 year old children. Hum Brain Mapp. 2016;37(12);4286-300.
22. McMahon M. Work and why we do it: A Systems Theory Framework Perspective. CPADJ. 2017;33(2):9-15.
23. Melogno S. Bambini e metafore: sviluppo tipico e atipico. Rome: Scione Editore, 2004.
24. Karmiloff-Smith A. Nativism versus neuroconstructivism: rethinking the study of developmental disorders. Dev Psychol. 2009;45:56-63.
25. Monti C. La Tossicità dello Stress nell'Infanzia. Available at: https://www.iwatson.com/la-tossicita-dello-stress-nellinfanzia/, last access: 2018.
26. Felitti VJ, Anda RF. The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders and sexual behavior: implications for healthcare. In: Lanius RA, Vermetten E, Pain C (Eds.). The impact of early life trauma on health and disease: the hidden epidemic. New York: Cambridge University Press, 2010.
27. Foschino Barbaro MG, Mancini F. Terapia cognitive comportamentale del trauma interpersonale infantile. Milan: Franco Angeli, 2017.
28. Migliore A. Lo stress tossico. Available at: https://www.medicitalia.it/blog/psicologia/7477-lo-stress-tossico.html/, last access: 2018.
29. Toni R. La sindrome dello Pseudo-Cushing. L'Endocrinologo. 2017;18(2):86-9.
30. Selye H. The general adaptation syndrome and the diseases of adaptation. J Clin Endocr. 1946;6(2):117-230.
31. Berardi C, Paglino Berardi C, Paglino A. Il bambino neglect: cosa deve sapere il pediatra. Quaderni ACP. 2017;24(4):150-7.
32. Ceccarelli E, Gallina M, Mazzucchelli F. Tutela sociale e legale dei minorenni: interpretazione e applicazione del diritto minorile. Milan: Franco Angeli, 2018.
33. Holmes J. La teoria dell'attaccamento. John Bolwby e la sua scuola. Milan: Raffaello Cortina, 1994.
34. Axia V, Capello F. La comunicazione. In: Axia G (Ed.). Elementi di psico-oncologia pediatrica. Rome: Carocci, 2004.
35. Carr A, Pike A. Maternal scaffolding behavior: Links with parenting style and maternal education. Dev Psychol. 2012;48(2):543-51.
36. Hendry LB, Kloep M. Conceptualizing emerging adulthood: Inspecting the emperor's new clothes? CDP. 2007;1:74-9.
37. Malagoli TM, Lubrano LA. Dinamiche relazionali e ciclo di vita della famiglia. Bologna: Il Mulino, 2002.
38. ISS. Rapporto ISS COVID-19 n. 43/2020. Indicazioni ad interim per un appropriato sostegno della salute mentale nei minori di età durante la pandemia COVID-19. Available at: https://www.iss.it/documents/20126/0/Rapporto+ISS+COVID-19+43_2020.pdf, date of publication: 31 May 2020, last access: 30 January 2022.
39. Crivelli D, Balconi M. Agentività e competenze social: riflessioni teoriche e esperienza per il management. Ricerche Psicologia. 2017;3:349-63.
40. Bogdanov S, Brookes N, Epps A, Naismith SL, Teng A, Lah S. Fatigue in Children With Moderate or Severe Traumatic Brain Injury Compared With Children With Orthopedic Injury: Characteristics and Associated Factors. J Head Trauma Rehabil. 2021;36(2):E108-17.
41. Marchetti A, Intra FS. Mentalizzazione e tempo. La comprensione della mente attraverso le età e le relazioni. Riv Internazionale Filos Psicol. 2015;6(2):198-211.
42. Foer SF. Molto forte, incredibilmente vicino. Parma: Guanda, 2005.
43. Lucangeli D. A mente accesa. Milan: Mondadori, 2020.

44. Balconi M. Neuroscienze delle emozioni. Alla scoperta del cervello emotivo nell'era digitale. Milan: Franco Angeli, 2020.
45. Candace BP. Molecole di emozioni. Il perché delle emozioni che proviamo. Milan: TEA, 2016.
46. Ledoux J. Il cervello emotivo, alle origini delle emozioni. Milan: Baldini e Castoldi, 1986.
47. Lipton BH. La biologia delle credenze. Come il pensiero influenza il DNA e ogni cellula. Cesena: Macro Edizioni, 2012.
48. Damasio AR. Emozione e Coscienza. Milan: Adelphi, 2000.
49. Disnan G. I percorsi evolutivi dei bambini e indicatori di rischio, leggere, capire, intervenire. Trento: Provincia autonoma di Trento, Dipartimento della Conoscenza, Servizio Infanzia e Istruzione del primo grado, Ufficio Infanzia, 2014.
50. Perricone G. Pediatric Psychology. Ped Rep. 2021;13(1):135-41.
51. Tingire M. Life Skills: modelli formativi di prevenzione e promozione della salute. Consultori Familiari Oggi. 2017;25(2017/1):39-57.
52. Antonietti A, Confalonieri E. Il ruolo delle life skills nella promozione del benessere. Ricerche Psicologia. 2015;1:97-107.
53. Marmocchi P, Dall'Aglio C, Zannini M, Educare le life skills. Come promuovere le abilità psico-sociali e affettive secondo l'Organizzazione Mondiale della Sanità. Trento: Erickson, 2004.
54. Marcoli A. Passaggi di vita. Le crisi che ci spingono a crescere (Vol. 753). Milan: Mondadori, 2004.
55. Marcoli A. Il bambino perduto e ritrovato. Milan: Mondadori: 2018.
56. Bianchi DW, Maron JL, Johnson KL. Insights into fetal and neonatal development through analysis of cell-free RNA in body fluids. Early Hum Dev. 2010;86(11):747-52.
57. Perricone G. Sense and Meaning of Evolutionary Transitions in Pediatric Psychology. In: S.I.P.Ped. Transition Times. Supporting the Child and Adolescent's Transitions in Pediatric Condition. Proceedings of the S.I.P.Ped. 2nd International Conference, 7-9 November 2019, Palermo, Italy. Pediatr Rep. 2020;12(S2):8758.
58. Rutter M, Rutter M. L'arco della vita: continuità e discontinuità e crisi nello sviluppo. Florence: Giunti Editore, 1995.
59. Venturelli E, Cigala A. Lo sviluppo psicologico tra continuità e cambiamento. Verso un sistema integrato 0-6 anni. Bergamo: Junior, 2017.
60. De Carlo NA. Teorie & strumenti per lo psicologo del lavoro e delle organizzazioni (Vol. 2). Milan: Franco Angeli, 2002.
61. Walter J, Lechner C, Kellermanns FW. Learning activities, exploration, and the performance of strategic initiatives. J Manag. 2016;42(3):769-802.
62. Polizzi C. Pensarsi psicologo pediatrico. Modelli, percorsi e strategie di una formazione. Milan: Franco Angeli, 2011.
63. Seligman ME. Positive psychology in practice. Hoboken, NJ: John Wiley & Sons, 2012.
64. Wilson DK, Lawman HG. Health promotion in children and adolescents: An integration of the biopsychosocial model and ecological approaches to behavior change. In: Roberts MC, Steele RG (Eds.). Handbook of pediatric psychology. New York: Guilford Press, 2009.
65. Perricone G, Rotolo I, Beninati V, Billeci N, Ilarda V, Polizzi C. The Lègami/Legàmi Service – An Experience of Psychological Intervention in Maternal and Child Care during COVID-19. Pediatr Rep. 2021;13(1):142-62.