



Conceptualizing Educational Resilience during the COVID-19 Pandemic

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Abstract

In March 2020, the COVID-19 outbreak was declared a global pandemic, prompting an unprecedented series of mandatory lockdowns across countries around the world (WHO, 2020). In a month's time, the COVID-19 pandemic resulted in school closures affecting 180 countries and causing 85% of students worldwide to be out of school (World Bank, 2020). Low and Middle Income Countries (LMICs) were hit harder than High Income Countries (HICs). The global crisis prompted international development agencies to collaborate and commission several large-scale studies to understand the full extent of national educational systems' vulnerability to disruption risk and evaluate their potential to be resilient against future disruptions, such as climate change and other natural or man-made disasters. The aim of this paper is to examine international development agencies' engagement with the term, educational resilience, during the COVID-19 pandemic and its implications on academic discourse around educational resilience. The paper starts with a literature review on how educational resilience evolved as a concept within the four waves of resilience research. The paper then presents findings from four large-scale studies produced by several international development agencies in response to the COVID-19 pandemic and examine how they engaged with the concept of educational resilience. The discussion rounds out the paper by linking international development agencies' engagement of educational resilience to the academic discourse to emphasize the need for a more robust conceptualization of educational resilience that can address vulnerability to disruption risk.

Keywords: Education, Resilience, Risk, COVID-19, International Development

Introduction

In March 2020, WHO declared the COVID-19 outbreak as a global pandemic, prompting an unprecedented series of mandatory lockdowns across countries around the world. By April 2020, schools closed in 180 countries and 85% of students worldwide were out of school (World Bank, 2020). The

pandemic and ensuing school closures came as a shock to children, families, and communities worldwide. An economic impact study projected that school closures in response to the pandemic could result in a loss of between 0.3 and 1.1 years of schooling, and up to 11 million students could drop out due to the income shock of the pandemic alone, with LMICs being more

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likely to lose than HICs (Azevedo et al., 2021). This prompted international development agencies to determine the full extent of national educational systems' vulnerability to disruption risk and evaluate their ability to be resilient to future disruptions, such as climate change and other natural or man-made disasters. To accomplish the objective, international development agencies engaged with the oft-debated term, educational resilience, to determine educational systems ability to ensure learning continuity in future scenarios of mass school closures.

Whereas resilience as a whole is successful adaptation in the context of significant risk or adversity (Masten, 2014), educational resilience can be understood through the academic literature as being *both the exhibition of positive educational experiences and outcomes despite exposure to risk and the product of a multidimensional interaction between the child and their immediate environment* (Aleghfeli & Hunt, 2022). However, in the context of the COVID-19 pandemic, international development agencies engaged differently with the concept of educational resilience. This paper aims to juxtapose both approaches to conceptualizing educational resilience to explore the potential for more robust conceptualizations. In examining the findings, special focus is given to findings on LMICs.

Four Waves of Conceptualizing Educational Resilience

Educational resilience has always been an evolving concept that can be explained within the context of the four waves of resilience research (Masten, 2007). The first wave of resilience research represents initial efforts to descriptively explain the resilience phenomenon and identify characteristics of child, family, relationships, or environment that functioned as resilience correlates. Although mainly health-focused and epidemiological, many

first-wave resilience studies also incorporated the exploration of educational and school-based factors as outcomes and as risk and resilience correlates (Garnezy et al., 1984; Masten et al., 1990; Rutter, 1979, 1987; Werner & Smith, 1977, 1992). Risk correlates, or factors, are often subclassified as proximal, directly experienced by the child, or distal, arising from the child's environment or context (Luthar et al., 2006; Wright et al., 2013). Resilience correlates, or factors, are often subclassified as protective when it improves outcomes (e.g. health, educational, behavioral) in the context of a high probability of poor outcomes or promotive when it improves outcomes as all levels of probability of poor outcomes (Luthar et al., 2006; Sameroff, 2006). In a review of first-wave resilience literature, Masten (2014) presented a 'short list' of the most common resilience correlates that emerged from that wave, outlined in Table 1.

The second wave of resilience research represents the efforts to explain the long-term processes in which these risk and resilience factors moderate or mediate positive outcomes, thereby enabling resilience. This wave pushed resilience research from being cross-sectionally examined and descriptive of risk and resilience factors to being longitudinally examined and testing associations between different factors to identify mediators and moderators (Feinstein et al., 2008; Masten & Motti-Stefanidi, 2009). Mediation and moderation describe the nature of the effects of risk and resilience factors on educational and other child-level outcomes (Baron & Kenny, 1986). Mediation is when a risk or a resilience factor can have an effect and explain the relationship between an independent variable and a dependent variable, also called a main effect. Moderation is when a risk or a resilience factor can have an effect and explain the strength or the direction of the relationship between an independent variable and a dependent variable, also called an interaction effect.

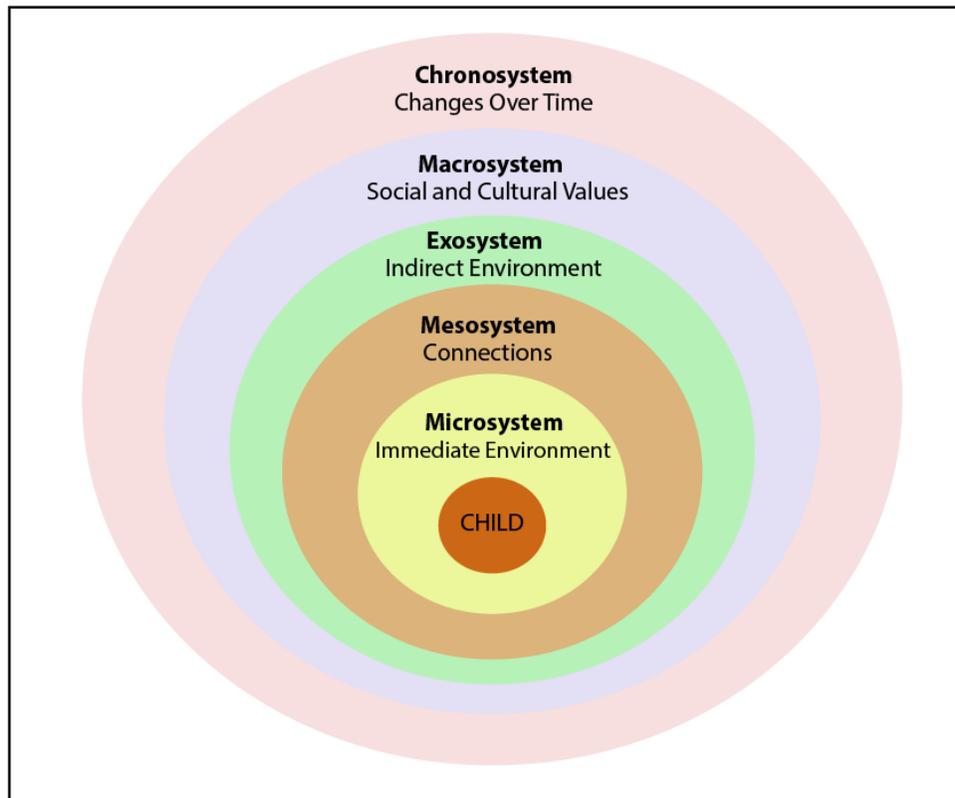
Table 1. Short-list' of Resilience Correlates

Type		Correlates
Internal correlates	child-specific	Problem-solving and executive function skills
		Emotional self-regulation and self-control skills
		Self-efficacy and positive beliefs about self
		Meaning making or beliefs that life has meaning
		Other related aspects, i.e. humor, faith, hope and optimism
External correlates	environmental	Capable caregiving and parenting
		Connections to other competent and caring adults
		Effective schools
		Connections with well-functioning communities

The third wave of resilience research represents the growing interest to test resilience ideas through educational and school-based intervention designs and translate resilience research findings into educational and social policy and practice. This wave is heavily characterized by educationalists and education researchers contributing to the resilience literature. Through the utility of experimental designs, such as randomized control trials of school-based interventions, third-wave resilience studies offered new evidence on the mediating and moderating role of resilience correlates in enabling resilience processes (Cicchetti et al., 2000; Luthar & Cicchetti, 2000; Wang & Gordon, 1994). It was in this wave where the often-cited definition of educational resilience was coined, *“Educational resilience is the heightened likelihood of success in school and other life accomplishments despite environmental adversities brought about by early traits, conditions, and experiences”* (Wang, Haertel, & Walberg, 1994, pp. 46).

The fourth wave of resilience research represents a more critical approach where resilience processes are understood through multiple levels of analysis, and where a wider understanding of contextual and cultural factors is sought. Inspired by previous socio-ecological systems research (Bronfenbrenner, 1977, 1986), fourth-wave resilience studies sought to engage with a socio-ecological understanding of resilience processes, where the child is placed within microsystemic (complex relationships and physical settings experienced by the child, e.g., family, school, friends), mesosystemic (interrelations between the microsystems, e.g., between family and school), exosystemic (social structures that do not contain but may directly influence the child), macrosystemic (cultural norms, values, and ideologies that shape and influence the system around the child), and chronosystemic (change in place, space, and time) contexts (Feinstein et al., 2021; Hart et al., 2016; Ungar, 2004, 2008). Figure 1 illustrates the socio-ecological system of the child (Bronfenbrenner, 1977, 1986).

Figure 1. Socio-ecological System of the Child



Epistemic Traditions in Resilience Research

Several epistemic traditions become visible after examining the literature. The first is the *post-positivistic* viewpoint, where objective knowledge of educational resilience can be obtained through careful, systematic and scientific procedures, but this objective knowledge can only be approximate due to the constant presence of measurement error (Taber, 2013). Rutter (2012) exemplifies this approach, where he defines resilience as:

Reduced vulnerability to environmental risk experiences, the overcoming of a stress or adversity, or a relatively good outcome despite risk experiences ... it is an interactive concept in which the presence of resilience has to be inferred from individual variations in outcome

among individuals who have experienced significant major stress or adversity (p. 336).

Rutter (2006, 2012) states that, since resilience is not a trait of the child, research needs to focus on the processes underlying individual differences in response to exposure to risk (Steeling or Strengthening Effects), to adopt a life-span trajectory approach that can investigate later turning point effects (Life Course Effects), and to combine psychosocial and biological research approaches to understand the combined effect of genetic and environmental factors (Gene x Environment Interaction Effects). Accordingly, a post-positivistic viewpoint of educational resilience would study individual variations in student outcomes in response to risk, investigate effects of turning points in a student's school life, and examine

interactions between internal and external factors.

The second is the *constructionist* viewpoint, which prioritizes social interaction (e.g., between children, families, schools, communities) in the construction of educational resilience (Taber, 2013). This viewpoint is inspired by previous socio-cultural theories of development (Vygotsky, 1967, 1978). Ungar (2008) exemplifies this approach, where he defines resilience as:

In the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways (p. 225).

Ungar (2004) noted that children's own perspective on their culturally embedded pathways to resilience are often silent in resilience research, and that resilience research often emphasizes western-focused outcomes and factors typical of western populations and their definitions of resilience. As such, it is important to incorporate qualitative and cross-cultural approaches to better study the personal agency of the student to seek support and the availability of support sought (Navigation), and the provision of health resources in ways that are meaningful to the child (Negotiation) (Ungar, 2008). Accordingly, a constructionist viewpoint of educational resilience would study the both the process of the student navigating towards educational resources, and the capacity of the student to negotiate for these educational resources on their own terms.

The final viewpoint is the *pragmatist* viewpoint, which believes that resilience is a useful framework for social policy and intervention design. This viewpoint is best exemplified by Luthar and Cicchetti (2000)

who proposed several guiding principles to translate resilience research into social policy and practice. Intervention designs must be anchored in sound theoretical framing that recognizes the mutual, interactive and transactional influences between children and their environment and context. Interventions must have a strong basis in theory and research on child participants and their environment and context. Interventions must be designed not only to reduce negative outcomes or risk factors, but also the promotion of dimensions of positive adaptation or competence and capitalizing on specific resources within target populations. Interventions should target salient risk and resilience processes operating across multiple levels of influence. Interventions must have a strong child development focus, while ensuring contextual relevance of intervention aims and strategies. Although it may be perceived that these viewpoints are different from each other, in fact, they can be complimentary. More than one tradition can be incorporated into the same project, whether it is in research, policy, or practice.

Educational Resilience and COVID-19

In 2015, United Nations' General Assembly (UNGA) adopted the Sendai Framework for Disaster Risk Reduction (2015-2030) with the goal of setting common standards to reduce global vulnerabilities to disaster risk and climate change. In particular, one of the goals of the Sendai framework is "...investing in the economic, social, health, cultural and educational resilience of persons, communities and countries and in the environment" (UNGA, 2015, p. 6). The COVID-19 pandemic prompted international development agencies to collaborate and commission several large-scale studies to understand the full extent of national educational systems' vulnerability to disruption risk and evaluate their ability to be resilient to future disruptions, such as climate change and other natural or man-made disasters. Given

the COVID-19 pandemic and in line with the Sendai Framework, international development agencies began to engage with

educational resilience as a concept. Table 2 lists the conceptualizations by international agencies.

Table 2. Conceptualizations of Educational Resilience in COVID-19 Studies by International Agencies

Reports	Conceptualizations of Educational Resilience
ILO et al., 2020	Educational resilience is the ability of TVET providers in a country to ensure TVET provision and skills development continuity during the COVID-19 pandemic and other future disruptions
UNESCOa et al., 2020; UNESCO et al., 2021	Educational resilience is the ability of national education systems to adapt to fluid environments such as localized and widespread school closures due the COVID-19 pandemic and future disruptions
UNICEF, 2021	Educational resilience is the ability of national education systems to ensure equitable learning continuity through remote channels at times when environmental factors and disaster risks, such as the COVID-19 pandemic, substantially affect the ability to deliver in-person education
UNESCO, 2021	Educational resilience must center gender-responsiveness, whereby national education systems are able to address barriers and bottlenecks to girls' education during school closures resulting from future disruptions

In May 2020, ILO, UNESCO, and World Bank released findings of a large-scale survey on Technical and Vocational Education and Training (TVET) and skills development during the pandemic (ILO et al., 2020). The survey collected responses from 1,349 individual respondents in 126 countries on TVET provision. The findings conceptualized educational resilience as the ability to ensure TVET provision and skills development continuity during the COVID-19 pandemic and other future disruptions. However, the report found that most systems reported that they did not have the distance learning infrastructure necessary for continued operation during the pandemic. This resulted in most respondents witnessing a lack of motivation from the students and

teachers, and postponement of most practical training modules, exams, and assessments. These findings were especially pronounced in LMICs, where a higher proportion of respondents reported full closure of technical and vocational education colleges and training centers, as opposed to partial closures, which were more common in HICs.

In October 2020 and June 2021, UNESCO, UNICEF, World Bank, and OECD released two reports of the large-scale Survey on National Education Responses to COVID-19 School Closures (UNESCOa et al., 2020; UNESCO et al., 2021). The survey collected responses from national ministries of countries on their responses to mass

school closures from pre-primary to upper secondary levels. The two reports conceptualized educational resilience as the ability of national PK-12 education systems to adapt to fluid environments such as localized and widespread school closures due the COVID-19 pandemic and future disruptions. The first report, which captured responses for two iterations of the survey covering 118 and 149 countries in each iteration, found that most LMICs used broadcast media (e.g., television, radio) and take-home learning materials to provide remote learning (UNESCOa et al., 2020). The second report, which captured responses for a third iteration of the survey covering 134 countries, found that, in LMICs, PK-12 schools were closed for an average of 115 instruction days, most primary school children were often not reached by broadcast media, and additional support was often needed to implement complex and resource-intensive safety measures to reopen (UNESCO et al., 2021).

In October 2021, UNICEF released a findings report of the Remote Learning Readiness Index, a new composite indicator developed with the stated aim of giving a country-level assessment of educational resilience in relation to crises and measuring their readiness to deliver remote learning in response to school closures or disruption of in-person learning (UNICEF, 2021). The index is composed of three domains: households, the national government's policy response capacity, and the emergency preparedness of the national education sector. The report conceptualized educational resilience as the ability of national education systems to ensure equitable learning continuity through remote channels at times when environmental factors and disaster risks, such as the COVID-19 pandemic, substantially affect the ability to deliver in-person education. The report found that 31 out of the 67 country educational systems assessed have below-average remote learning readiness, all of whom are LMICs, impacting more than 200

million students residing in those countries. The vulnerability to disruption risk is even greater at the pre-primary level, with 33 educational systems having below-average remote learning readiness. Vulnerability to disruption risk is also amplified by the combined effect of long school closures and low remote learning readiness on children.

In October 2021, UNESCO, in partnership with Global Partnership for Education (GPE), released findings of a global multi-stage study of the Gendered Impacts of COVID-19 Closures, to uncover the gender dimensions of school closures and how girls and boys were impacted differently (UNESCO, 2021). The study captured findings from a systematic literature and database review, an online survey with 55 respondents representing organizations in 25 countries, 24 of whom are LMICs, key informant interviews with 22 gender and education experts, and in-depth mixed-methods case studies conducted in five LMICs. The report believes that educational resilience must center gender-responsiveness, whereby national education systems are able to address barriers and bottlenecks to girls' education during school closures resulting from future disruptions (UNESCOb et al., 2020). The report presents several key findings related to LMICs (UNESCO, 2021). Girls' participation in learning remotely is often limited by expectations of domestic responsibilities at home, while boys' participation is often limited by expectations of them to earn an income. Adolescent girls were often less likely than adolescent boys to have used the internet or owned a mobile phone, both of which are key for remote learning. Girls reported more stress, anxiety, and depression than boys in 15 countries, LGBTQI+ learners reported higher levels of isolation and anxiety, and boys in crisis-affected contexts reported increased crime and violence.

The Need for A Robust Discourse on Educational Resilience

On one hand, after four waves of resilience research, academic consensus reached a definition of educational resilience as being *both the exhibition of positive educational experiences and outcomes despite exposure to risk and the product of a multidimensional interaction between the child and their immediate environment* (Aleghfeli & Hunt, 2022). On the other hand, in response to the COVID-19 pandemic, international development sought conceptualizations of educational resilience that helped in understanding the full extent of national educational systems' vulnerability to disruption risk and evaluate their ability to be resilient to future disruptions, such as climate change and other natural or man-made disasters. When comparing the two, differences in priorities can be noted. The academic consensus on educational resilience prioritizes systems proximal to the child: the microsystem and the mesosystem. In contrast, international development agencies conceptualization of educational resilience prioritizes systems distal to the child: the exosystem and the macrosystem.

Such divergence in conceptualizing educational resilience between research and practice is likely to continue in the face of changing global circumstances. As vulnerability to disruption risk increases, the burden on the child's exosystem and macrosystem becomes greater, in turn, affecting the child's microsystem and mesosystem. For example, at the start of 2022, UNESCO, International Association for the Evaluation of Educational Achievement (IEA), and the European Commission intend to publicly release the Responses to Educational Disruption Survey database, the first-ever internationally comparable data on the impact of the COVID-19 pandemic on secondary education, with the aim of showcasing 'educational resilience and transformation' internationally (IEA, 2022). As such, academic discourse must continue to engage with practice, and vice-versa, to ensure a more robust conceptualization of educational resilience in the face of changing global circumstances. Moreover, future research on educational resilience is needed in LMICs to ensure that any conceptualization of educational resilience is contextually relevant to children cross-culturally.

About the author

Yousef Khalifa Aleghfeli is a DPhil candidate at the Rees Centre, part of the Department of Education at the University of Oxford. Their work focuses on conceptualizations of Educational Resilience and its applications on LMIC contexts, with a special focus on refugee and migrant children and youth.

References

- Aleghfeli, Y. K., & Hunt, L. (2022). Education of unaccompanied refugee minors in high-income countries: Risk and resilience factors. *Educational Research Review*, 100433. <https://doi.org/10.1016/j.edurev.2022.100433>
- Azevedo, J. P., Hasan, A., Goldemberg, D., Geven, K., & Iqbal, S. A. (2021). Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates. *The World Bank Research Observer*, 36(1), 1–40. <https://doi.org/10.1093/wbro/lkab003>

- Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research. Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531. <https://doi.org/10.1037/0003-066x.32.7.513>
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723–742. <https://doi.org/10.1037/0012-1649.22.6.723>
- Cicchetti, D., Rappaport, J., Sandler, I., & Weissberg, R. P. (Eds.). (2000). *The promotion of wellness in children and adolescents*. Child Welfare League of America.
- Feinstein, L., Aleghfeli, Y. K., Buckley, C., Gilhooly, R., & Kohli, R. K. S. (2021). Conceptualising and measuring levels of risk by immigration status for children in the UK. *Contemporary Social Science*, 16(5), 538–555. <https://doi.org/10.1080/21582041.2021.2007279>
- Feinstein, L., Duckworth, K., & Sabates, R. (2008). *Education and the Family: Passing Success Across the Generations*. Routledge.
- Garnezy, N., Masten, A. S., & Tellegen, A. (1984). The Study of Stress and Competence in Children: A Building Block for Developmental Psychopathology. *Child Development*, 55(1), 97–111. <https://doi.org/10.2307/1129837>
- Hart, A., Gagnon, E., Eryigit-Madzwamuse, S., Cameron, J., Aranda, K., Rathbone, A., & Heaven, B. (2016). Uniting Resilience Research and Practice with an Inequalities Approach. *SAGE Open*, 6(4). <https://doi.org/10.1177/2158244016682477>
- International Association for the Evaluation of Educational Achievement. (2022). *Responses to Educational Disruption Survey (REDS)*. <https://www.iea.nl/studies/iea/REDS>
- International Labour Organization, United Nations Educational Scientific and Cultural Organization, & World Bank. (2020). *ILO-UNESCO-WBG Joint survey on technical and vocational education and training (TVET) and skills development during the time of COVID-19*. https://labordoc.ilo.org/permalink/41ILO_INST/j3q9on/alma995088492902676
- Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12(4), 857–885. <https://doi.org/10.1017/S0954579400004156>
- Luthar, S. S., Sawyer, J. A., & Brown, P. J. (2006). Conceptual issues in studies of resilience: Past, present, and future research. *Annals of the New York Academy of Sciences*, 1094, 105–115. <https://doi.org/10.1196/annals.1376.009>
- Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, 19(1), 921–930. <https://doi.org/10.1017/S0954579407000442>

- Masten, A. S. (2014). *Ordinary magic: Resilience in development*. The Guilford Press.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2(4), 425–444. <https://doi.org/10.1017/S0954579400005812>
- Masten, A. S., & Motti-Stefanidi, F. (2009). Understanding and promoting resilience in children: Promotive and protective processes in schools. In T. B. Gutkin & C. R. Reynolds (Eds.), *The handbook of school psychology* (4th ed., pp. 721–738). Wiley.
- Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), *Social Competence in Children - Primary Prevention of Psychopathology* (Vol. 3, pp. 49–74). Blackwells.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57(3), 316–331. <https://doi.org/10.1111/j.1939-0025.1987.tb03541.x>
- Rutter, M. (2006). Implications of Resilience Concepts for Scientific Understanding. *Annals of the New York Academy of Sciences*, 1094(1), 1–12. <https://doi.org/10.1196/annals.1376.002>
- Rutter, M. (2012). Resilience as a dynamic concept. *Development and Psychopathology*, 24(2), 335–344. <https://doi.org/10.1017/S0954579412000028>
- Sameroff, A. J. (2006). Identifying Risk and Protective Factors for Healthy Child Development. In A. Clarke-Stewart & J. Dunn (Eds.), *Families count: Effects on child and adolescent development* (pp. 53–76). Cambridge University Press. <https://doi.org/10.1017/CBO9780511616259.004>
- Taber, K. S. (2013). *Classroom-based Research and Evidence-based Practice: An Introduction*. SAGE.
- Ungar, M. (2004). A Constructionist Discourse on Resilience: Multiple Contexts, Multiple Realities among At-Risk Children and Youth. *Youth & Society*, 35(3), 341–365. <https://doi.org/10.1177/0044118X03257030>
- Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work*, 38(2), 218–235. <https://doi.org/10.1093/bjsw/bcl343>
- United Nations Children's Fund. (2021). *Ensuring equal access to education in future crises: Findings of the new Remote Learning Readiness Index*. <https://data.unicef.org/resources/remote-learning-readiness-index/>
- United Nations Educational Scientific and Cultural Organization. (2021). *When schools shut: gendered impacts of COVID-19 school closures*.
- United Nations Educational Scientific and Cultural Organization, United Nations Children's Fund, Plan International, United Nations Girls' Education Initiative, & Malala Fund. (2020). *Building Back Equal: Girls Back to School Guide*.

- United Nations Educational Scientific and Cultural Organization, United Nations Children's Fund, & World Bank. (2020). *What have we learnt? Overview of findings from a survey of ministries of education on national responses to COVID-19*.
- United Nations Educational Scientific and Cultural Organization, United Nations Children's Fund, World Bank, & Organisation for Economic Co-operation and Development. (2021). *What's next? Lessons on education recovery: findings from a survey of ministries of education amid the COVID-19 pandemic*.
<https://unesdoc.unesco.org/ark:/48223/pf0000379117>
- United Nations General Assembly. (2015). *Sendai Framework for Disaster Risk Reduction 2015–2030*. A/RES/69/283. <https://undocs.org/en/A/RES/69/283>
- Vygotsky, L. S. (1967). Play and Its Role in the Mental Development of the Child. *Soviet Psychology*, 5(3), 6–18. <https://doi.org/10.2753/rpo1061-040505036>
- Vygotsky, L. S. (1978). Interaction between learning and development. In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind and Society: The Development of Higher Psychological Processes* (pp. 79–91). Harvard University Press.
[https://doi.org/10.1016/S0006-3495\(96\)79572-3](https://doi.org/10.1016/S0006-3495(96)79572-3)
- Wang, M. C., & Gordon, E. W. (Eds.). (1994). *Educational resilience in inner-city America: Challenges and prospects*. Lawrence Erlbaum Associates, Inc.
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1994). Educational resilience in inner cities. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects*. Lawrence Erlbaum Associates, Inc.
- Werner, E. E., & Smith, R. S. (1977). *Kauai's children come of age*. University of Hawaii Press.
- Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Cornell University Press.
- World Bank. (2020). *The COVID-19 Pandemic: Shocks to Education and Policy Responses*.
- World Health Organization. (2020). *WHO Director-General's opening remarks at the media briefing on COVID-19*. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
- Wright, M. O. D., Masten, A. S., & Narayan, A. J. (2013). Resilience processes in development: Four waves of research on positive adaptation in the context of adversity. In S. Goldstein & R. B. Brooks (Eds.), *Handbook of Resilience in Children* (2nd ed., pp. 15–37). Springer.
https://doi.org/10.1007/978-1-4614-3661-4_2