Adversity Quotient as a Predictor of Early Childhood Education Teachers' Performance amid the Challenges of Educational Digitalization

Sri Utaminingsih, Saiful Anwar, Shella Rachmawaty, Rolando P. Quinones Jr.

[1,2]*Universitas Pamulang, Tangerang Selatan, Banten, Indonesia*
[3]*SMA IT Ar Rahmah Cendekia, Banten, Indonesia*
[4]*College of Social Sciences and Development, Polytechnic University of The Philippines, Philippines*
e-mail: dosen00456@unpam.ac.id, dosen00902@unpam.ac.id,
ppg.shellarachmawaty01130@program.belajar.id, rpquinones@pup.edu.ph

ABSTRACT. This study investigates the relationship between Adversity Quotient (AQ) and teacher performance among Early Childhood Education (ECE) teachers in the context of educational digitalization. Using a quantitative correlational approach, data were collected from a sample of 150 ECE teachers selected through stratified random sampling, representing formal and non-formal institutions from a population of 115 ECE schools in Serpong District, South Tangerang City, Banten. The results of the Pearson product-moment correlation test showed a very strong and significant positive correlation between AQ and teacher performance ($r = 0.982$, $p < 0.01$). These findings indicate that teachers with higher levels of psychological resilience demonstrated through persistence, control, and adaptability tend to perform better professionally. The study emphasizes the importance of integrating AQ development into teacher training programs, especially in response to the dynamic demands of digital transformation in education. Fostering AQ can enhance the sustainability and quality of teacher performance in early childhood education settings. The implications of these results highlight the strategic role of psychological preparedness in shaping effective, adaptive, and future-ready educators.

Keywords: *Adversity quotient, early childhood education, teacher performance*

INTRODUCTION

The foundation for children's intellectual and emotional development is laid by early childhood education, or ECE (Whitaker et al., 2023). Its importance is growing in the dynamic educational environment of today as it fosters the development of young brains holistically. ECE serves as a key element in nurturing both cognitive abilities and social-emotional skills during the formative years (Astuti & Triani, 2024; M. Wahyudi et al., 2024). The significance of this stage lies not only in its role as the entry point to formal education but also in the way it lays the foundation for lifelong learning and character development (Ningrum et al., 2022). The effectiveness of ECE is deeply influenced by the performance, dedication, and resilience of its educators, especially those teaching in ECE. In Indonesia, ECE is categorized into three pathways: formal, non-formal, and informal. Formal ECE includes structured programs for children aged 4–6, such as Kindergarten and Raudhatul Athfal. Non-formal ECE offers flexible learning for children aged 3 months to 6

years through Day Care Centers (*Taman Pendidikan Anak*) and Play Groups. Informal ECE is provided by families or communities and focuses on child development at home from birth to age 6. These pathways reflect the shared responsibility of the government, community, and parents in supporting early education (Rizqiyyatunnisa & Mahdi, 2021; Munafiah & Lukman, 2023; Nurachadijat & Selvia, 2023)

The main problem faced in improving the quality of education, especially at the early childhood education level, is related to the still low performance of teachers (Kawuryan et al., 2021; Latifah, 2024). These educators, especially early childhood education teachers, face various challenges, such as in curriculum implementation (Rahmaningtyas & Wijayanti, 2024), managing behavioral dynamics of young children (Agisthia Lestari, 2022; Anriyani et al., 2024) engaging with parents (Mubarak et al., 2022; Anjani & Mashudi, 2024), and adapting to evolving educational policies (Alamin et al., 2023). Among these challenges, the digitalization of education has emerged as one of the most demanding transformations, requiring teachers to rapidly adapt to new technologies and integrate them into age-appropriate pedagogical practices (Soegoto et al., 2024). In addition to technical expertise, this shift calls for psychological fortitude and emotional intelligence to handle the demands of quick change and rising administrative standards. While using digital technologies that do not always meet the developmental requirements of young children, ECE teachers must continue to adopt a caring, participatory, and communicative approach (Jahreie, 2023).

In this context, the concept of Adversity Quotient (AQ), introduced by Paul Stoltz in 1997, has gained recognition as a critical factor that determines an individual's capacity to face, endure, and overcome adversities (Deshmukh & Mutreja, 2022; Lee, 2023; Sharma et al., 2022). AQ encapsulates the ability to remain persistent and constructive in the face of challenges, turning obstacles into opportunities for personal and professional growth. It is composed of four core dimensions: Control, Ownership, Reach, and Endurance (CORE) (Mohd Adnan & Mohd Matore, 2022; Mohd Matore et al., 2020; Pino & Merin, 2021), each of which reflects a particular aspect of how individuals perceive and respond to adversity. The AQ is a psychological construct that has gained increasing attention for its relevance in understanding how individuals endure and recover from life's challenges and setbacks. It serves as a crucial indicator of one's resilience and capacity to cope with adversity (Widodo et al., 2022; Anwar et al., 2024).

The importance of AQ in a variety of professional domains has been highlighted by recent research. For example, Zhao and Sang's research from 2023 showed that those with high AQ levels had far reduced levels of stress at work. Similar results have been reported in the medical field. A study which is conducted (Kumari & Arora, 2023) found that AQ and perceived mental health significantly influence stress and that individuals with high levels of AQ and perceptions of good mental health will be better able to manage the stress that arises from workloads and roles. It demonstrates that AQ is not just a measure of psychological resilience but also plays a significant role in coping with stress and change, enhancing people's adaptability, resilience, and capacity to endure under trying circumstances. Thus, AQ plays a key role in creating human resources who are not only professionally competent but also mentally and emotionally healthy (Saxena & Rathore, 2024).

These findings indicate that AQ is a key predictor of resilience, mental well-being, and overall performance in demanding professions (Zhao & Sang, 2023; Lu et al., 2024). On the other hand, based on research conducted by (Hermawan, Susanti, et al., 2023), Research findings revealed that the AQ positively impacts teacher performance. In other words, teachers with higher AQ levels tend to demonstrate better professional effectiveness better their performance tends to be. Therefore, strengthening AQ can serve as an effective strategy to improve teacher performance, especially in dealing with various challenges and pressures in the workplace.

In the field of education, as per the research findings conducted by Hermawan et al. (2023), the AQ has been proven to have a positive influence on increasing teachers' Organizational Citizenship Behavior (OCB). Teachers with high AQ levels tend to demonstrate greater volunteer work behavior, such as helping coworkers and actively contributing to the school environment, which ultimately has an impact on improving overall organizational performance. However, despite its potential, the literature remains scarce on the role of AQ among ECE teachers, especially those working in ECE. It is a notable omission, considering the unique demands of early childhood education, which require high levels of emotional labor, patience, and adaptability (Purper et al., 2023). Teachers in ECE settings often work under constraints that are not typically encountered at higher educational levels (Ma'wa et al., 2024). These may include limited resources (Yoseptry et al., 2023), large student-to-teacher ratios, and a lack of professional development opportunities (A. Wahyudi et al., 2022). Moreover, the need to address developmental milestones, manage unpredictable behavior, and build foundational learning experiences for children places additional pressure on these educators. In such contexts, the presence of a high AQ could be instrumental in maintaining not only personal well-being but also the quality of educational delivery.

The digital transformation in education has further intensified these challenges, especially for ECE teachers who often have limited access to adequate digital infrastructure, training, and pedagogical resources. Many early childhood educators find themselves unprepared to implement digital tools effectively while maintaining the developmental appropriateness of their teaching strategies. This situation has revealed a critical need for personal attributes such as AQ, which may serve as a buffer against digital-related stress and performance decline.

Adding to this complexity are the rapidly changing global dynamics that have profoundly impacted educational systems worldwide. The integration of digital technologies, increased classroom diversity, and unforeseen disruptions like the COVID-19 pandemic have necessitated the development of adaptive and resilient teaching practices (Bento et al., 2021; Kruszewska et al., 2022; Safi'i et al., 2021). Amid these conditions, educational digitalization stands as both a challenge and an opportunity-requiring ECE teachers to be not only technologically literate but also emotionally resilient. Wu and Forbes (2022) say that AQ can serve as a valuable asset, enabling teachers to navigate uncertainties with greater composure and creativity. Despite the apparent importance of AQ in ECE settings, the current body of research continues to focus primarily on its implications in corporate environments or higher educational contexts. The lack of empirical studies specifically targeting ECE teachers leaves a critical gap in understanding how AQ can influence teaching performance and overall educator well-being in early childhood contexts. Moreover, there is even less scholarly attention directed toward understanding this relationship within the context of educational digitalization, which is increasingly relevant in post-pandemic teaching and learning environments.

Addressing this gap is essential for several reasons. First, a deeper understanding of AQ among ECE educators can lead to the development of targeted interventions that aim to enhance teacher resilience and job satisfaction. Second, identifying the specific adversities faced by these educators can inform policy reforms and the allocation of support resources. Lastly, integrating AQ development into pre-service and in-service teacher training programs can foster a more resilient educational workforce capable of thriving amidst complex and evolving demands. Therefore, this study investigates the relationship between Adversity Quotient (AQ) and Teacher Performance (TP) among Early Childhood Education (ECE) teachers in the context of educational digitalization.

METHOD

Research Design

This study uses a quantitative correlational approach to investigate the relationship between AQ and ECE teacher performance. A correlational design is appropriate when the goal is to

determine the level and direction of the relationship between two or more variables (Sugiyono, 2020).

Sample

This study was conducted in South Tangerang City, Indonesia. It involved a sample of 150 early childhood education teachers drawn from formal and non-formal institutions located in Serpong District, consisting of a total of 115 ECE institutions. The sample was selected using a purposive sampling technique, taking into account institutional accessibility and the researcher's capacity for controlled data collection.

Instruments

Two main instruments were used in this study. The first is the AQ questionnaire developed based on Paul Stoltz's (1997) theoretical framework, which includes four core dimensions: Control, Ownership, Reach, and Resilience. The second is a teacher performance questionnaire designed by the performance indicators issued by the Directorate of Early Childhood Education, Ministry of Education and Culture of Indonesia. Both instruments used a four-point Likert scale to maintain consistency in participant responses and reduce central tendency bias.

Validation

Prior to primary data collection, the instruments were tested for validity and reliability. Content validity was assessed through expert review by three specialists in early childhood psychology and education. Reliability testing was conducted using Cronbach's Alpha, which yielded $\alpha = 0.87$ for the AQ instrument and $\alpha = 0.91$ for the teacher performance instrument, indicating high internal consistency (George & Mallery, 2003). A pilot test was conducted on a group of early childhood teachers with a minimum of five years of teaching experience to ensure the appropriateness and clarity of the instruments.

Data collection

Data collection was conducted through physical and digital questionnaires, depending on each institution's preference and technological accessibility. To ensure objectivity and accuracy in data interpretation, responses were analyzed using SPSS software. Prior to conducting correlation analysis, the data were tested for normality using the Shapiro-Wilk and Kolmogorov-Smirnov tests. The results of the study showed that the data met the assumption of normality, thus justifying the use of Pearson product-moment correlation to test the relationship between AQ and teacher performance (El Hasbi et al., 2023; Santoso et al., 2024).

Data Analysis

The research data were analyzed using a simple correlation technique through SPSS 24 software. This simple correlation technique is used to determine whether or not there is a relationship (and how strong the relationship is) between two quantitative variables — in this case, between Adversity Quotient (AQ) as variable X and ECE Teacher Performance (TP) as variable Y.

RESULT AND DISCUSSION

Result

The results of the descriptive statistical analysis of the variables AQ and TP indicate that the overall data distribution is consistent and reflects relatively high levels in both aspects. For the AQ variable, the mean score obtained from 150 ECE teachers was 58.62, with a median of 59.00 and a mode of 63, suggesting a relatively symmetrical distribution. The standard deviation was 9.472, and the variance was 89.714, indicating a moderate level of variation in AQ among the participating teachers. For the Teacher Performance variable, the average score was 59.67, with a median of 60.00 and a mode of 55, suggesting that performance scores were also fairly evenly distributed. The

standard deviation of 8.142 and variance of 66.309 reflect a relatively low dispersion, implying that teacher performance levels were generally consistent among participants. Overall, both variables demonstrate stable data distributions with no significant outliers, providing a solid basis for further analysis, particularly correlation testing, to explore the relationship between AQ and TP.

Table 1. Descriptive Statistic Result

Statistics		
	Adversity Quotient	Teacher Performance
N Valid	150	150
Missing	0	0
Mean	58.62	59.67
Median	59.00	60.00
Mode	63	55
Std. Deviation	9.472	8.142
Sum	8793	8950

Table 2. Test of Normality

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Adversity Quotient	.055	150	.200*	.995	150	.872
Teacher Performance	.063	150	.200*	.994	150	.795
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

The Kolmogorov-Smirnov and Shapiro-Wilk tests of normality were conducted to assess whether the data for the variables AQ and TP followed a normal distribution. Based on the Kolmogorov-Smirnov test, the statistic for AQ was 0.055, and for Teacher Performance was 0.063, with both variables showing a significance value of 0.200. Similarly, the Shapiro-Wilk test revealed a statistic of 0.995 for AQ and 0.994 for Teacher Performance, both with a significance value of 0.200. Since all significance values (*p*-values) are greater than the threshold of 0.05, it can be concluded that the data for both variables are normally distributed. Therefore, the normality assumption is met, and the data are suitable for further analysis using parametric statistical techniques, such as Pearson's correlation test.

A Pearson product-moment correlation was conducted to examine the relationship between AQ and TP among early childhood education teachers. The results showed a very strong positive correlation between the two variables, with a correlation coefficient (*r*) of 0.982 and a significance value (*p*) of 0.000 (1-tailed).

Table 3. Pearson Correlation Test

Correlations		Adversity Quotient	Teacher Performance
Adversity Quotient	Pearson Correlation	1	.982**
	Sig. (1-tailed)		.000
	N	150	150
Teacher Performance	Pearson Correlation	.982**	1
	Sig. (1-tailed)	.000	
	N	150	150
**. Correlation is significant at the 0.01 level (1-tailed).			

Since the p-value is less than 0.01, the correlation is statistically significant at the 0.01 level, indicating a very strong and significant positive association between the level of adversity quotient and the performance of teachers. It means that teachers with a higher AQ tend to demonstrate better performance in their professional duties. These results strongly support the hypothesis that

AQ is positively and significantly correlated with TP, highlighting the importance of psychological resilience in enhancing the effectiveness and consistency of educators.

Discussion

This study aimed to investigate the role of AQ in predicting the performance of ECE teachers, particularly in light of growing educational demands and digital transformation. The results of the statistical analysis revealed that both variables AQ and teacher performance exhibited relatively high mean scores AQ: *M* = 58.62; TP: *M* = 59.67, with low to moderate levels of variation, as shown by the standard deviations AQ: *SD* = 9.472; TP: *SD* = 8.142). These findings suggest that most participants demonstrated a uniform level of psychological readiness and professional competence. The normality test results (Kolmogorov-Smirnov and Shapiro-Wilk) confirmed that both variables were normally distributed ($p > 0.05$), validating the use of parametric statistical procedures, such as Pearson's correlation test. The Pearson correlation analysis revealed a very strong and statistically significant positive correlation between AQ and teacher performance ($r = 0.982$, $p = 0.000$), indicating that teachers who possess higher levels of adversity quotient tend to show significantly better professional performance.

This finding supports the conceptual framework of Stoltz (Chadha, 2021), who emphasized AQ as the capacity to endure, adapt to, and grow from adversity. AQ embodies psychological traits such as tenacity, control, and resilience (Lu et al., 2024), which are crucial in the dynamic and emotionally demanding context of early childhood education. Teachers who demonstrate these traits are more capable of managing classroom challenges, maintaining professional consistency, and navigating changes such as the increasing integration of technology in teaching practices (Blewitt et al., 2021). The strong positive correlation found in this study is also supported by previous empirical research and concluded that AQ, along with leadership and organizational culture, significantly contributes to teacher performance. Similarly, Hermawan et al. (2023) identified AQ as a significant predictor of teaching effectiveness with a positive path coefficient ($\beta = 0.179$), and Kartikasari and Wiarta (2021) found that both AQ and motivation significantly impact primary school teacher performance. These consistent findings emphasize the pivotal role of AQ in shaping the professional success of educators across various contexts.

Furthermore, the limited dispersion in AQ and performance scores across the sample suggests a degree of homogeneity among the teachers, potentially attributed to shared professional development programs, institutional goals, or support systems that promote emotional resilience. This observation reinforces the need to incorporate AQ-focused interventions within teacher training and professional development curricula. In summary, the findings of this study underscore the critical importance of Adversity Quotient in enhancing teacher performance, especially within the evolving landscape of digital education. Psychologically resilient teachers are more adaptable, effective, and sustainable in their professional roles. Therefore, future teacher education programs, both pre-service and in-service, should integrate AQ development modules to better equip educators to face current and future challenges.

CONCLUSION

This study confirms that the AQ plays a significant role in predicting the performance of ECE teachers. The results of the Pearson correlation analysis revealed a very strong and positive relationship between AQ and teacher performance, indicating that educators with higher resilience tend to demonstrate better professional effectiveness. These findings validate the initial hypothesis and align with previous research emphasizing the importance of psychological endurance in educational practice. The consistency observed in the AQ and performance scores among the sample further indicates that resilience and professional competence are relatively stable attributes among experienced teachers. Resilience may be developed and strengthened through continuous exposure to the teaching environment, institutional support, and targeted professional development.

Thus, AQ can be considered a measurable and improvable factor that influences teaching quality, especially in early education contexts where emotional demands are high. In light of the growing challenges brought by educational digitalization, this study underscores the urgency of integrating AQ-building strategies into teacher training and evaluation frameworks. Strengthening AQ not only enhances individual teacher performance but also equips educators with the psychological readiness needed to navigate systemic transitions and technological shifts. Therefore, fostering AQ should be a strategic priority in shaping resilient, adaptive, and future-ready teachers.

ACKNOWLEDGMENT

BIBLIOGRAPHY

Agisthia Lestari. (2022). Politik rekognisi sebagai penyelesaian konflik agama di dalam masyarakat multikulturan (Studi kasus di Kabupaten Bantul). *Jurnal Adhikari*, *1*(4), 204–220. https://doi.org/10.53968/ja.v1i4.50

Alamin, Z., Lukman, L., Missouri, R., Annafi, N., Mutmainah, S., Khairunnas, K., & Fathir, F. (2023). Pelatihan guru PAUD dalam penggunaan aplikasi edukasi interaktif untuk peningkatan kualitas pembelajaran. *Taroa: Jurnal Pengabdian Masyarakat*, *2*(1), 45–56. https://doi.org/10.52266/taroa.v2i1.2616

Anjani, R., & Mashudi, E. A. (2024). Keterlibatan orang tua dalam pendidikan anak usia dini perspektif orang tua dan guru. *Kumarottama: Jurnal Pendidikan Anak Usia Dini*, *3*(2), 110–127. https://doi.org/10.53977/kumarottama.v3i2.1246

Anriyani, L., Yandri, H., & Kusayang, T. (2024). Analisis dinamika self efficacy dan motivasi kerja terhadap kinerja guru pendidikan anak usia dini. *As-Sibyan: Jurnal Pendidikan Anak Usia Dini*, *9*(1), 55–72. https://doi.org/10.32678/assibyan.v9i1.9862

Anwar, L., Sa'dijah, C., Murtafiah, W., & Huljannah, M. (2024). Adversity quotient of Indonesian prospective mathematics teachers in solving geometry higher-order thinking skills problems. *Journal on Mathematics Education*, *15*(1), 79–98. https://doi.org/10.22342/jme.v15i1.pp79-98

Astuti, W., & Triani, L. (2024). Peran pendidikan anak usia dini dalam menunjang perkembangan kognitif dan sosial anak. *Early Childhood Education Development and Studies (ECEDS)*, *5*(2), 36–47. https://doi.org/10.35508/eceds.v5i2.18733

Bento, F., Giglio Bottino, A., Cerchiareto Pereira, F., Forastieri de Almeida, J., & Gomes Rodrigues, F. (2021). Resilience in higher education: A complex perspective to lecturers' adaptive processes in response to the covid-19 pandemic. *Education Sciences*, *11*(9). https://doi.org/10.3390/educsci11090492

Blewitt, C., O'connor, A., Morris, H., Nolan, A., Mousa, A., Green, R., Ifanti, A., Jackson, K., & Skouteris, H. (2021). "It's embedded in what we do for every child": a qualitative exploration of early childhood educators' perspectives on supporting Children's social and emotional learning. *International Journal of Environmental Research and Public Health*, *18*(4), 1530. https://doi.org/10.3390/ijerph18041530

Chadha, D. N. (2021). Adversity quotient: Surviving rather than giving up. *Psychology and Education Journal*, *58*(2), 5942–5947. https://doi.org/10.17762/pae.v58i2.3068

Deshmukh, M., & Mutreja, C. S. D. L. (2022). Measuring the effectiveness of intervention program on adversity quotient of the college students. *International Journal of Early Childhood*, *14*(03), 2022. https://doi.org/10.9756/INT-JECSE/VI413.198

El Hasbi, A. Z., Damayanti, R., Hermina, D., & Mizani, H. (2023). Penelitian korelasional (Metodologi penelitian pendidikan). *Al-Furqan: Jurnal Agama, Sosial, Dan Budaya*, *2*(6), 784–808. https://doi.org/10.35931/alfurqan.v2i6

Hermawan, A., Fatih Ghozali, A., & A. Sayuti, M. (2023). Optimization for increasing teacher performance through strengthening teamwork, interpersonal communication, adversity intelligence, and work motivation. *International Journal of Scientific Research and Management (IJSRM)*, *11*(10), 5239–5248. https://doi.org/10.18535/ijsrm/v11i10.em06

Hermawan, A., Indrati, B., & Rohmah, M. S. (2023). Optimasi organizational citizenship behaviour (OCB) guru sekolah menengah kejuruan (SMK) melalui penguatan knowledge management, kecerdasan adversitas, efikasi diri, budaya organisasi dan motivasi kerja. *Jurnal Syntax Dmiration*, *4*(11), 227–228. https://doi.org/10.46799/jsa.v4i11.777

Hermawan, A., Susanti, E., & Briliantina, I. (2023). Teacher performance improvement optimization through teamwork strengthening, interpersonal communication, adversity quotient and work motivation. *IJEMS: Indonesian Journal of Education and Mathematical Science*, *4*(1), 2715–2985. https://doi.org/10.30596%2Fijems.v4i1.13305

Jahreie, J. (2023). Early childhood education and care teachers' perceptions of school readiness: A research review. *Teaching and Teacher Education*, *135*(February), 104353. https://doi.org/10.1016/j.tate.2023.104353

Kartikasari, N. P. D., & Wiarta, I. W. (2021). The contribution of adversity quotient dan working motivation to teachers' performance. *Proceedings of the 2nd International Conference on Technology and Educational Science (ICTES 2020)*, *540*(Ictes 2020), 469–477. https://doi.org/10.2991/assehr.k.210407.280

Kawuryan, S. P., Sayuti, S. A., Aman, & Swiningrum, S. I. A. (2021). Teacher's quality and educational equality achievements in Indonesia sekar. *International Journal of Instruction*, *14*(3), 463–480. https://doi.org/10.29333/iji.2021.14245a

Kruszewska, A., Nazaruk, S., & Szewczyk, K. (2022). Polish teachers of early education in the face of distance learning during the COVID-19 pandemic–the difficulties experienced and suggestions for the future. *Education 3-13*, *50*(3), 304–315. https://doi.org/10.1080/03004279.2020.1849346

Kumari, K., & Arora, R. (2023). Adversity quotient, perceived mental health, and role stress of college teachers. *E3S Web of Conferences*, *453*. https://doi.org/10.1051/e3sconf/202345301021

Latifah, E. F. (2024). *Hubungan kompetensi pedagogik dengan kinerja mengajar guru satuan paud sejenis se-kecamatan Wanayasa kabupaten Purwakarta*. *05*(01), 1–7.

Lee, M. F. (2023). Psychological resilience of employees in adversity quotient: Malaysian perspective in facing challenges. *Journal of Technical Education and Training*, *15*(1), 93–101. https://doi.org/10.30880/jtet.2023.15.01.009

Lu, L., Ye, C., Xu, R., Feng, H., & Liu, B. (2024). Psychological resilience and perceived stress among Chinese medical students: mediation between optimistic intelligence quotient and adversity quotient. *BMC Medical Education*, *24*(1), 1358. https://doi.org/10.1186/s12909-024-06287-0

Ma'wa, J., Novitawati, N., & Noorhapizah, N. (2024). Pengaruh self-eficacy guru, beban kerja, dan stres kerja terhadap profesionalitas guru TK di Kecamatan Bati-Bati Kabupaten Tanah Laut. *Journal of Education Research*, *5*(2), 2138–2149. https://doi.org/10.37985/jer.v5i2.1096

Mohd Adnan, R., & Mohd Matore, M. E. E. (2022). Development of adversity quotient (AQ) index of pre-service teachers in institute of teacher education (IPG). *Frontiers in Public Health*, *10*, 940323. https://doi.org/10.3389/fpubh.2022.940323

Mohd Matore, M. E. E., Rahman, N. A., Idris, H., Khairani, A. Z., & Mohd Al Hapiz, N. (2020). Is adversity quotient (AQ) able to predict the academic performance of polytechnic students? *Journal of Critical Reviews*, *7*(3), 393–398. https://doi.org/10.31838/JCR.07.03.75

Mubarak, A. F., Noor, W. N., Widat, F., Wafiroh, K., & Hayati, N. (2022). Upaya guru dalam membangun kecerdasan intrapersonal pada anak usia dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *6*(4), 3782–3792. https://doi.org/10.31004/obsesi.v6i4.2124

Munafiah, N., & Lukman. (2023). Lembaga pendidikan formal anak usia dini di Indonesia: Mengenal TK, ABA dan RA. *Pelangi: Jurnal Pemikiran Dan Penelitian Islam Anak Usia Dini*, *5*(1), 65–81. https://doi.org/10.52266/pelangi.v5i1.1242

Ningrum, N. P. W., Pane, F. M. J., & Yani, S. I. (2022). Pendidikan anak usia dini: Perannya dalam membangun karakter dan tumbuh kembang anak usia dini. *Tematik: Jurnal Penelitian Pendidikan Dasar*, *1*(1), 59–63. https://doi.org/10.57251/tem.v1i1.429

Nurachadijat, K., & Selvia, M. (2023). Peran lembaga pendidikan Anak Usia Dini dalam implementasi kurikulum dan metode belajar pada anak usia dini. *Jurnal Inovasi, Evaluasi Dan Pengembangan Pembelajaran (JIEPP)*, *3*(2), 57–66. https://doi.org/10.54371/jiepp.v3i2.284

Pino, Z. A. N., & Merin, J. A. (2021). Educators' adversity quotient: rising above challenges in the time of pandemic. *Education Journal*, *10*(4), 119–125. https://doi.org/10.11648/j.edu.20211004.12

Purper, C. J., Thai, Y., Frederick, T. V, & Farris, S. (2023). Exploring the challenge of teachers' emotional labor in early childhood settings. *Early Childhood Education Journal*, *51*(4), 781–789. https://doi.org/10.1007/s10643-022-01345-y

Rahmaningtyas, H., & Wijayanti, I. (2024). Kendala guru PAUD dalam menerapkan dan mengembangkan materi kurikulum merdeka. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, *10*(1), 361–368. https://doi.org/10.36989/didaktik.v10i1.2428

Rizqiyyatunnisa, R., & Mahdi, N. I. (2021). Penyelenggaraan PAUD Formal, Non Formal dan Informal di KB TK IK Keluarga Ceria. *Buhuts Al Athfal: Jurnal Pendidikan dan Anak Usia Dini*, *1*(1), 54-74. https://doi.org/10.24952/alathfal.v1i1.3242

Safi'i, A., Muttaqin, I., Sukino, Hamzah, N., Chotimah, C., Junaris, I., & Rifa'i, M. K. (2021). The effect of the adversity quotient on student performance, student learning autonomy and student achievement in the COVID-19 pandemic era: evidence from Indonesia. *Heliyon*, *7*(12). https://doi.org/10.1016/j.heliyon.2021.e08510

Santoso, V. O., Darmiyanti, A., & Rukajat, A. (2024). Implementation of the principal's transformational leadership in improving teacher performance at SMP Amal Mulia 2 Kabupaten Karawang. *Indonesia Research Journal on Education*, *2*(3), 1030–1037. https://doi.org/10.31004/irje.v4i4.1061

Saxena, S., & Rathore, B. (2024). Adversity quotient as determining factor of mental health and professional quality of life among healthcare professionals: A systematic review. *Annals of Neurosciences*, *32*(1), 58–65. https://doi.org/10.1177/09727531241231055

Sharma, A., Pandey, P., & Padmawati, K. (2022). Adapted adversity quotient program–oxymoron or opportunity. *A Study of Special Education Teachers in Raipur, Chhattisgarh. Sch J Arts Humanit Soc Sci*, *12*, 532–541. https://doi.org/10.36347/sjahss.2022.v10i12.001

Soegoto, E. S., Albar, C. N., Luckyardi, S., Abduh, A., Asnur, M. N. A., & Haristiani, N. (2024). IT and management strategies for language education: Lessons from the digitalization of education activities. *International Journal of Language Education*, *8*(4), 807–835. https://doi.org/10.26858/ijole.v8i4.70019

Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif dan RnD*. Penerbit Alpabeta.

Sulastry, H., Harapan, E., & Rahman, A. (2023). The influence of leadership effectiveness, adversity quotient, and organizational culture on teacher's performance. *Journal of Social Work and Science Education*, *4*(1), 167–175. https://doi.org/10.52690/jswse.v4i1.370

Wahyudi, A., Alaslan, A., Yunesti, D., Haris, Usmaedi, Switri, E., Mustakim, U. S., & Husna, A. (2022). Analisis problematika implementasi pengembangan keprofesian berkelanjutan (PKB)

pada guru pendidikan anak usia dini (PAUD). *Jurnal Pendidikan Dan Konseling*, *4*(1), 1663–1671. https://doi.org/10.31004/jpdk.v4i6.8429

Wahyudi, M., Arisanti, F., & Muttaqin, M. (2024). Pendekatan holistik dalam pendidikan anak usia dini: menyelaraskan aspek kognitif, emosional dan sosial. *Journal of Early Childhood Education Studies*, *4*(1), 33–72. https://doi.org/10.54180/joeces.2024.4.1.33-72

Whitaker, A. A., Yoo, P. Y., Vandell, D. L., Duncan, G. J., & Burchinal, M. (2023). Predicting adolescent and young adult outcomes from emotional support and cognitive stimulation offered by preschool-age home and early care and education settings. *Developmental Psychology*, *59*(12), 2189–2203. https://doi.org/10.1037/dev0001576

Widodo, W., Gustari, I., & Chandrawaty, C. (2022). Adversity quotient promotes teachers' professional competence more strongly than emotional intelligence: Evidence from Indonesia. *Journal of Intelligence*, *10*(3). https://doi.org/10.3390/jintelligence10030044

Wu, X., & Forbes, K. (2022). Multilingual identity in schools: A q methodological study with Chinese LOTE-as-L3 learners in international and public high school contexts. *Journal of Language, Identity and Education*, *24*(2), 361–377. https://doi.org/10.1080/15348458.2022.2134138

Yoseptry, R., Nuryati, E., & Aisyah, W. S. (2023). Manajemen sumber daya guru dalam meningkatkan mutu pendidikan anak usia dini di TK Al-Hidayah Pesanggrahan. *Al-Afkar*, *6*(2), 542–552. https://doi.org/10.31943/afkarjournal.v6i2.569.Teacher

Zhao, Y., & Sang, B. (2023). The role of emotional quotients and adversity quotients in career success. *Frontiers in Psychology*, *14*, 1128773. https://doi.org/10.3389/fpsyg.2023.11287