“IT’S FRUSTRATING, BUT...”: BRAZILIAN AND INDONESIAN TEACHERS’ RESILIENCE TO ASSIST DEAF STUDENTS’ ONLINE LANGUAGE LEARNING

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ABSTRACT

Due to the recent increase in studies on emotions in Applied Linguistics and, especially now, in pandemic times, it opens more discussion to relate teachers’ emotions with several other aspects including resilience. Therefore, this research aims to analyze language teachers’ experience in teaching deaf students in Recife, Brazil, and Malang, Indonesia. The methodology applied was qualitative. This study involved teachers in Recife, Brazil, and Malang, Indonesia. The teachers selected to be interviewed in this study were those who had experience teaching deaf students for at least five years and those who, during the pandemic times taught online. Two teachers were taken from each city. Findings point out, among other things, that decreasing the number of students per class and having parents involved in the process may help improve students’ learning and teachers’ experience and resilience. Based on the data on the implementation of language learning and the teachers’ perception of the benefit, the constraints, and strategies in online language learning, resilience is triggered by the professional, personal, institutional, and community challenges.

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A. Introduction

Being in the spotlight in current research trends, the “affective turn” seems to have caught in,¹ as teacher and learner emotions have become the subject of latest books and journals.² Furthermore,

² Ana Maria F. Barcelos and Maria Ruohotie-Lyhty, “Teachers’ Emotions and Beliefs in Second Language Teaching: Implications for Teacher Education,” in Emotions in Second Language
due to the recent increase in studies on emotions in Applied Linguistics and, especially now, in pandemic times, it opens more discussion to relate teacher’s emotions with several other aspects including resilience. In this case, as Kretchmar mentions, teachers’ adaptability to the education challenge during the COVID-19 pandemics is inseparable from their emotional state and resilience.  

Although it is understood that applied linguistics should deal with language acquisition in inclusive contexts, few researchers have been interested in working with language learning for deaf students. Moreover, it seems to have been left out of research on second language and foreign-language acquisition. Continuing previous studies and strengthening ties between Brazilian and Indonesian researchers, it needs more exploration on how language learning for deaf students continues in both countries, Brazil and Indonesia. To achieve our research objectives and to confirm or not our hypotheses, we will seek to base ourselves on: Csizér and Kontra in 2020; 4 Indah and Chanastalia 2018; 5 Moraes 2018; 6 among others. The expected results relate to identifying the experience of teachers of deaf students from Recife, Brazil, and Malang, Indonesia, in their language classes, to verify their resilience during the pandemic times. Furthermore, this research is expected to contribute to discussions on the topic and, consequently, to contribute to quality education for the deaf in Recife and Malang.

In the last decades, applied linguistics has been studying the teaching-learning process of several students with specific needs, especially those whose realization is impeded by dyslexia or other learning difficulties. 7 In this regard, Widdowson relates it to the perspective of applied interdisciplinary linguistics,
reinforcing the need to advance research on groups considered by many to be linguistic minorities as part of real linguistic problems.\(^8\)

However, this reality is still not satisfactory in the case of deaf students, as pointed out by Moraes in 2018. In this regard, Csizér, Kontra and Piniel state that students with sensory disabilities, particularly the deaf, seem to have remained on the margins of research in acquiring second and foreign languages.\(^9\)

This issue becomes more challenging, particularly in online language learning during pandemic times. As a result, it also brings more consequences for their teachers to assist the deaf students during online language learning.

The foreign language learning of deaf students is complex, as pointed out by Moraes in 2012 in his first research that dealt with the deaf and their process of acquiring a foreign language in an inclusive educational context.\(^10\)

The study was carried out with a group of deaf students attending the National Federation of Education and Integration of the Deaf (FENEIS) and who had finished high school, and discussed the possibility of these subjects acquiring written fluency in English. In the second research on the theme, Moraes in 2018 analyzed the effect of pedagogical practices employed and interactions in English language classes mediated by Sign Language / Portuguese, in Elementary and High School, from the reports of translators and interpreters and teachers of English -- bilingual or not.\(^11\)

In both cases, the researcher realized that the Brazilian Sign Language (Libras) works as a motivating element of learning when brought to the classroom as a mediator. He also realized that deaf people who had successfully experienced Portuguese as a second language had a better acquisition of English as a foreign language.

Moraes in 2018 was also able to observe a triangulation of languages. In the case of classrooms with non-bilingual teachers and with translators/interpreters, from the teaching point of view, the languages circulated as follows: the classes were taught in Portuguese to describe the structure of the English language, which was interpreted into Libras. Also, at times, students were asked to: think (which deaf people do in the sign language); then write in Portuguese (the official National

\(^11\) de Moraes, "A Triangulação Libras-Português-Ingles: Relatos de Professores e Intérpretes de Libras Sobre Aulas Inclusivas de Língua Estrangeira [The Libras-Portuguese-English Triangulation: Reports of Libras Teachers and Interpreters about Inclusive Foreign Language Classes]," 153-156.
language), and finally translate into English (the target language). In the classrooms with bilingual teachers, considering deaf students, sign language and English circulate most of the time.

In turn, Indah and Chanastalia in 2018 found that the deaf students of the researched institution used varied communication methods to interact with the teacher and their fellow students, namely: sign language, lipreading, fingerspelling and Tadoma. As it was a special education school, sign language was used mainly during classes, while lipreading and fingerspelling complemented communication. Tadoma was rarely used and the teacher used this method only to work on the pronunciation of words. Although it is not the central objective of their research, their narratives reveal that there is also a triangulation of languages in the Indonesian reality. For this reason, the authors' research also joins the list of motivations for the development of this project.

In this perspective, Brayner in 2019, in a study which investigated reading in a second language (the national language of their country) by deaf people, found that these subjects, especially those less fluent, resort to sign language (their natural or first language) during reading in the second language, including signaling the text during reading. In turn, Moraes in 2012 and in 2018 showed that the experience lived by the deaf in classrooms where the sign language appears as a mediator and the National language completes the triangulation of languages gave conditions for these students to produce good texts, undoing beliefs about this process, that the deaf would be unable to acquire/learn English or that there would be more urgent issues to be discussed.

We understand language learning for deaf students is inseparable from the role of teachers, particularly in handling the challenge of online learning during pandemic times. In this sense, our objective is to analyze the teacher's experience in assisting deaf students during online language learning in Recife, Brazil, and in Malang, Indonesia, based on the report of the selected teachers. The experiences extracted from the teachers' interviews became the basis for analyzing their resilience as measured by the Xun et al. framework in 2021. The expected impact of the study is to contribute to the expansion of discussions on the online language learning of deaf students from the perspective of teachers. We hope to motivate the renewal of the

teaching practice of educational agents, offering data so that new reflections can assist deaf people in online learning of foreign languages.

Fischer and Kipper in 2016 show the importance of continuing to research new methodologies and increasingly include the use of technologies in the daily lives of deaf students of English, since sign language and the use of technologies are mediators for this student. The researchers' data also demonstrate that technologies are resources that contribute to the teaching and learning process. According to Flórez-Aristizábal et al., when technologies are available and accessible, they represent more than just a transformation for people with disabilities. They represent real opportunities with access to inclusive education, and help overcome the obstacles they find in classical education systems. In this study, technological support for learning is needed for deaf students, especially in the midst of online learning during the pandemic break.

In the same direction, from bibliographical research, Spasiani in 2018 found that resources such as images in their traditional sense, videos and films, and digital technologies can be useful in the process of teaching and learning English as a foreign language for deaf students. Thus, technology and the internet allow these students to practice the target language and interact in it with deaf and hearing people through text applications such as WhatsApp, Facebook Messenger, among others. As Steyer points out, the use of technologies allows the literacies of deaf students, since it provides more access to information. In addition to access to various practices in social networks, videos, cell phones and computers. In addition, the immediacy with which technology reaches us daily can allow us to take advantage of this context to produce an increasingly meaningful, creative visual experience that meets the daily lives of students.

However, we understand that the simple implementation of the use of the new technologies in the teacher's practice will not be enough to obtain good results in the teaching of English. There is a need to change the culture, attitudes, and

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15 Silvia Regina Fischer and Daiane Kipper, "Estratégias e Recursos Visuais Na Aprendizagem Da Língua Inglesa Por Alunos Surdos [Strategies and Visual Resources in English Language Learning by Deaf Students]" (Proceedings of the VI National Seminar in Education Research, Santa Cruz do Sul: the University of Santa Cruz do Sul, 2016), 12-13.


perceptions of teachers. In addition, it is imperative that educational institutions offer the appropriate conditions of access and use of technologies and Internet connection necessary for the development of a good work, at the risk of not only hampering the teaching-learning process but also harming well-being of the actors involved in the classroom. It is necessary that technology be used from an investment in the process, that is, believing in the possibility of the deaf to learn English and promoting active learning in which the student researches and interacts with peers in the construction of knowledge during the online learning.

Therefore, this research aims to analyze how deaf students involve in online language learning from the view of their teachers. In particular, it explicates teachers' experience in teaching deaf students in Recife, Brazil, and Malang, Indonesia.

B. Method

This study involved teachers in Recife, Brazil and Malang, Indonesia. The teachers selected to be interviewed those who had experience in teaching deaf students for at least five years and those who, during the pandemic times taught online. Two teachers were taken from each city.

The teachers from Recife, Brazil, who were selected in this study were from two different schools. One teacher is from a state school, and the other is from a municipal school. One is male and one is female. Both hearing teachers. According to Brazilian law, deaf students must go to regular schools as teaching should be inclusive in all institutions at all levels. Interviews for the two teachers were held on different days based on appointments. Each interview was conducted based on the interview guideline. The language used in the interview is Brazilian Portuguese to let the teachers express themselves freely.

Teachers from Malang Indonesia selected in this study came from two different schools. One teacher is from a state school, and the other is from a private school. Both are female hearing teachers. In special schools in Malang, Indonesia, most teachers are female. Only 5% of male teachers teach deaf students. Interviews for the two teachers were held on different days based on appointments. Each interview was conducted based on the interview guideline. The language used in the interview is Bahasa Indonesia to let the teachers express themselves freely.

The data collection procedure includes an interview followed by a transcript of the interview results. Then the data were analyzed with reference to the framework of Xun et al., which categorizes challenge-based resilience faced by teachers into four types: personal, professional, institutional, and community challenges. The resilience regarding personal challenges deals with regulating emotion, balancing work and life, keeping a healthy mindset, and

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others. Resilience on professional challenges concerns the ability to update lesson plans, enrich instruction repertoires, monitor students' academic progress, etc. Example of resilience in institutional challenges includes principal inspection, performance evaluation, interrupted schedules, etc. While, the community challenge-resilience links with the high expectation from parents, maintaining effective communication with local communities, and the like.

The analysis results from the teacher's perspective were then explored again in the finding and discussion. The final stage of the research was concluding to clarify the answers to the research questions of this study. The conclusion was then reflected to formulate the recommendation as to the implication of the research findings.

C. Results

1. Implementation of online language learning for deaf students in Recife and Malang

In the implementation of learning in Recife, the teachers are responsible for carrying out the activities selected from the platform of Educa-PE classes. The teachers select videos related to the subjects and do the activities based on the proposed theme. As for the technical implementation stage, the device used is the Educa-PE platform, which is facilitated by the government of the State of Pernambuco and implemented during online learning.

Teachers also carry out activities through Google Classroom and WhatsApp. In this case, they do not evaluate or assess language learning. However, this represents an obstacle almost impossible for some students to overcome, as many Brazilian public school students have no access to an internet connection. According to the Brazilian Institute of Geography and Statistics, one in five Brazilians does not have access to the internet. This represents more than 40 million Brazilians without internet access. Of this total, approximately 45% say that the lack of access happens because the service is expensive and for 37% of these people the lack of a cell phone, computer or tablet is also one of the reasons. Therefore, assessment is only be carried out upon the return of face-to-face classes after a thorough revision of school subjects.

Data on the implementation of online language learning in special schools in Malang obtained several similarities and differences in the learning process between primary and secondary schools. The primary school teacher explained that learning preparation involves evaluating the previous week's learning results to find out what materials have been mastered and which still need repetition or enrichment. The teacher looks for relevant video materials and then develops a simple module or worksheet. The main material is to increase the vocabulary of the sign language of the targeted communication model. Materials are sent early so that parents can also
study them. As for junior high school teachers, more structured assignments are arranged weekly.

In online learning of sign language at primary school, the technical problem is when deaf students have difficulty in lipreading and need assistance from parents. Thus, parental assistance is a determining factor for the success of online language learning. Meanwhile, learning in junior high school requires less parents’ involvement. Discussions are carried out through WhatsApp groups, and deaf students can download videos or audiovisual materials from the links shared by the teacher.

The assessment technique given to primary school deaf students focuses more on assessment during the online learning process. It includes worksheet scores, two-way communication assessments, and assignments in the form of videos. At the junior high school level, the assessment of assignments and tests is via a google form. However, in this case, the teacher also does not deny parental involvement during the test, as shown in the following excerpt:

“Yaa...., it's actually not ideal for online assessments because I can't be sure whether students are really working independently. Surely their parents are more dominant in helping answer the test questions. But it's okay, the important thing is that the child continues to learn. Right or wrong in responding is only number two. Because there must be great help from parents in completing the task. So yes, it is certain that many of the answers are correct, even though they are not purely the student's learning result” (Interview with T2, 24/9/2020).

Therefore, the assessment also involves active participation in online discussions. The description of the implementation of online language learning in Malang and Recife is summarized in Table 1.

| Table 1. Implementation of online language learning for deaf students |
|------------------------|------------------------|------------------------|
| **Stage**              | **Recife teachers**    | **Malang teachers**   |
| Preparation            | Video selection from available resources | Construct worksheet and structured assignment |
| Implementation         | Educa-PE platform, Google Classroom | Whatsapp videocall, Whatsapp group chat |
| Evaluation             | No assessment          | Scoring worksheet sent to school, evaluating online class interaction, assessing from video assignment |

2. Benefits of online language learning for deaf students in Recife and Malang

The benefit of online language learning as informed by teachers in Recife is minimal since teachers and deaf students did not have the culture of remote education. In addition, deaf students feel disinterested in remote classes, so they want to return to face-to-face interactions in offline classes. Not only do teachers and deaf students feel
this way, but remote education is also seen as not providing significant benefits for parents.

It is different from what teachers in Malang said.

“To be honest, this online learning is still far from ideal, but well... what can I do. Because it is not possible for face-to-face learning, teachers certainly cannot work alone without the help of parents accompanying students to learn online. Maybe in offline learning, parents do not totally understand the learning material, but instead, by accompanying students' learning, parents are forced to understand the technique of teaching sign language. That's the wisdom.” (Interview with T1, 14/1/2021)

Online language learning facilitates communication between the primary school teachers and parents regarding the direction of learning and what has been and will be learned. The teacher can further strengthen deaf students' learning by supporting parents. The perceived benefits for junior high school teachers are flexibility to arrange learning programs and assignments. Especially for teachers who live far from school, online learning makes it easier for teachers to teach from home. Another benefit that deaf students feel is when the given assignments involve their hobbies, such as making videos with their parents' help. This activity increases the cooperation and active family participation of primary and junior high school deaf students. Likewise, parents who previously had more trust in schools during offline learning also increasingly understood the challenges of education for their children. Even the parents of primary school deaf students also add to sign language vocabulary when accompanying deaf students to learn. The description of the benefit of online language learning in Malang and Recife is summarized in Table 2.

<table>
<thead>
<tr>
<th>Benefit toward</th>
<th>Recife teachers</th>
<th>Malang teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>No benefit as students do not have the culture of remote education</td>
<td>More involvement of parents help teacher Teacher can freely arrange the learning</td>
</tr>
<tr>
<td>Student</td>
<td>No benefit as students do not interest more in online learning</td>
<td>Enjoy video making</td>
</tr>
<tr>
<td>Parent</td>
<td>No benefit</td>
<td>More involvement to learn sign language</td>
</tr>
</tbody>
</table>

3. Perception of online language learning for deaf students in Recife and Malang

As in the teacher's perspective in Recife, online language learning has several obstacles. The first constraint is the lack of infrastructure in the State, which results in difficulties for teachers and deaf students. In addition, there are no benefits in this model of education implemented by the State. It is due to the fact that teachers cannot publish activities
in the Virtual Learning Environment (VLE). Based on the interview, the teacher stated that the Secretary of Education of the State is responsible for all publications and does not consider the specifics and reality of each class and deaf students. Since the beginning of the remote classes, there have been very few English language classes. Several factors contribute to the fact that deaf students do not have access to the VLE provided by the State. Such difficulties range from guidance on the VLE to a lack of internet connection.

From the perspective of primary and junior high school teachers in Malang, the constrain deals with declining deaf students' enthusiasm for online learning. It is worsened by the fact that some parents might also get impatient easily and begin to get emotional. As a result, the deaf students become lazy to learn.

In dealing with these obstacles, teachers in Recife and Malang have their own views on the steps or strategies that need to be taken. According to the teacher at Recife, it needs several steps, as stated in the excerpt below.

“I don’t think it will be effective... It’s frustrating! First, we have to have qualifications and training on how to work remotely. Many teachers are not in the habit of using technological tools as facilitating tools for learning. So, they should start qualifying us more. As well as reducing the workload in the classroom. Decreasing the number of students per class.” (Interview with T3, 17/3/2021)

Some strategic action needed is to decrease the number of deaf students per class because online learning that involves large classes is not very effective. A decreasing number of deaf students will reduce the workload in the classrooms. Moreover, teachers do not have qualifications and training for working remotely. As for overcoming the problem that many teachers are not in the habit of using technological tools as facilitating devices for learning, they need a teacher competency improvement program. In addition, several policies are needed to follow up on the need to take into account the specific reality of each class or deaf student.

Primary school teachers in Malang believe that the enthusiasm of deaf students and parents becomes the key to effective online language learning. With the assistance of parents, deaf students will be able to achieve learning targets. However, the results will be different if parents passively direct children to refocus on the learning material. Meanwhile, junior high school teachers in Malang believe that involving deaf students in doing assignments according to their hobbies will be a solution to keep their mood stable. It receives more attention, especially if the assignment is shared on deaf students' social media and gets feedback from their friends.

In addition, the key to learning success also depends on the way the teacher disciplines in giving assignments that should be interesting and meet deaf students’ needs. The description of the perception of online language learning in Malang and Recife is summarized in Table 3 below.
Table 3.
Perception of online language learning for deaf students

<table>
<thead>
<tr>
<th>Perception</th>
<th>Recife teachers</th>
<th>Malang teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstacles</td>
<td>Lack of infrastructure, internet connection for OL, not all students can access VLE</td>
<td>Students get bored easily</td>
</tr>
<tr>
<td></td>
<td>Teachers cannot publish activities on the VLE</td>
<td>They do not understand the materials</td>
</tr>
<tr>
<td></td>
<td>Teachers do not have qualification and training on remote education/distant learning</td>
<td>Impatient parent</td>
</tr>
<tr>
<td>Strategies</td>
<td>Need decreasing number of students per class</td>
<td>Relating to student’s hobbies and interest</td>
</tr>
<tr>
<td></td>
<td>Need to take into account the specific and reality of each class/student</td>
<td>Encouraging parents</td>
</tr>
</tbody>
</table>

1. Brazilian teachers’ resilience to assist deaf student’s online language learning

As mentioned in Table 1, the teachers in Recife are responsible for selecting activities from the Educa-PE classes, looking for videos related to the subjects, and doing the activities based on the proposed theme. Despite the difficulties and constraints they face during online language learning, the teachers performed the resilience toward professional challenges by trying to prepare their best for assisting deaf students’ online language learning.

This fact shows that the shift from offline to online learning requires teachers’ resilience to sustain their educational purposes and successfully manage the unavoidable uncertainties. At the same time, this type of resilience enriches teachers' professional capital as what the COVID-19 pandemic has taught in the educational context.

Table 3 mentioned the severity of the challenges of online teaching that teachers feel because they do not have qualifications in distance learning teaching. It is in accordance with what is mentioned by Reimers as one of the most significant stressors for teachers to keep pace with the demands of Education. In addition, the lack of infrastructure as mentioned by Brazilian teachers as an important factor that hinders the smooth running of online learning leads to inequality of opportunity to access learning materials which results in disparity, especially for students with disabilities or special needs. According to Azevedo et al., 48% of children in Brazil...

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experience learning poverty. In Brazil, the level of connectivity, resources, and bandwidth is considered low, this is what then clarifies the reality of teachers' difficulties on transition of remote instruction.

Concerning the resilience on the institutional challenge, the teachers in Recife cannot publish activities on the VLE, since it becomes the responsibility of the Secretary of Education of the State. However, the teachers tried their best to select the activities and learning media related to the subjects based on the proposed theme (see Table 3). They also prepared extra materials to be made available on Google Classroom and on WhatsApp groups. McKeown & McKeown point out that teacher's meticulous selection of clear learning materials, using plain language and supporting materials and resources can improve the comprehension of deaf students.

With respect to resilience toward the community, although teachers in Recife admit that establishing a good relationship with parents would be a useful key for the maintenance of online language learning, it represents a challenge and does not bring any benefits at the moment as parents in poorer contexts tend not to get involved in their children’s learning process. Therefore, the interviewed teachers in Recife cannot rely on collaboration with parents as an important aspect of supporting teachers' resilience.

2. Indonesian teacher’s resilience in assisting deaf student's online language learning

In the implementation of online language learning, a junior high school teacher in Malang faced challenges in the objectivity of the assessment as stated below:

“Surely all assignments are done by students, but I am not sure that they will be able to do it without the assistance of their parents. If the parents are impatient, it seems that the assignments were done by parents, not the student. Actually, I’m not comfortable with this kind of assessment, but the situation doesn't allow it. But, how else…”

The teacher showed the expression of a personal challenge, where she maintained positive thinking even though it was not in accordance with the expected assessment. It is in line with Fabelico and Afalla’ opinion which view that individuals' qualities such as noble motives and high self-efficacy become the critical factor in teacher’s resilience. The personal

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attributes and supportive context will influence their professional performance and occupational wellbeing.\textsuperscript{27}

In terms of resilience toward the professional challenge, teachers in Malang show their persistence in preparing the online language learning by selecting instructional videos, constructing modules or worksheets, reading passages, and tasks for building new vocabulary. In addition, they also prepare structured assignments to meet the learning needs of deaf students (see Table 1). In this case, resilience toward professional challenges cannot be separated from the ability of teachers to overcome personal challenges to be more resilient and resistant.\textsuperscript{28} Or in other words, contextual influences on teachers' ability to thrive within the profession are just as important as individual factors to support their resilience.\textsuperscript{29}

In Table 3 the teachers convey their views on the constraints and strategies to cope with the issues during online language learning. It is part of the self-reflection stage, which is also crucial to enhancing their personal resilience.\textsuperscript{30} In line with that, Drew and Sosnowski also stated that resilient teachers embrace uncertainty, reframing negative experiences into learning experiences that lead them to adapt despite the constraints they faced.\textsuperscript{31}

Concerning the resilience toward the community challenge, teachers in Malang admit that mutualistic relationships with parents are an essential key for the sustainability and success of online language learning (see Table 2). It shows that a mutually sustaining relationship with students' families is one aspect of the community challenge that the teacher has successfully conquered.\textsuperscript{32} Therefore, teachers really cannot deny the role of collaboration with parents as an important aspect of supporting teachers' resilience.

3. Teacher's resilience and education challenges for deaf students during the pandemic

Online learning during the COVID-19 pandemic is an excellent opportunity to be familiar with the advance of remote education technologies. However it also results in some constraints for deaf and


hard of hearing students as well as their teachers. The challenges faced by the teachers of deaf students in Recife and Malang have directly built resilience, which can turn into resistance. All the constraints of the findings in this study are as evaluation materials to improve the system involved in online learning, particularly on the language learning concerning the complexities faced by deaf students in terms of their language acquisition. Although the continuity of online learning is seen by most teachers of deaf students in Recife and Malang as frustrating, in reality, teachers are trying to do their best to manifest their resilience toward the education challenges (see Table 1).

The education challenges faced by deaf students in Recife and Malang were also experienced by teachers of deaf students in various other countries. For example, in Pakistan, online education services for disabilities also experience technical problems, as it requires a lot to provide education inclusion for disabilities in such a low-income country. The urgent need is to provide resources for digitalization to teachers and students as well as to ensure the availability of the infrastructure for them.33 In a country with poor technology literacy and less internet connectivity, of course, it has consequences for a stronger teacher's resilience in facing such significant challenges.

The education challenge for deaf students in Recife and Malang, occurs not only in the context of special schools but also in inclusive institutions. Whereas in Recife, teachers find it difficult to post activities through VLE, in the Philippines, the education challenges faced by deaf students are using the Learning Management System (LMS), content-course materials, communication, and internet accessibility.34 Socioeconomic factors that affect internet access is general, as experienced in many other countries.

In this study, the education challenges concern the context of primary and secondary schools that requires teachers' resilience toward professional challenges. In the context of higher education, it is also not much different. For example, in teaching chemistry classes for deaf and hard-of-hearing students during this pandemic, the professional challenge involves the teacher's ability to present online lecture materials that are engaging and present laboratory activities approximate a hands-on experience.35


This study shows that both in Brazil and Indonesia, the success of online language learning for deaf students is strongly influenced by the teacher's resilience. What distinguishes the two countries concerns parent involvement in the implementation of online language learning, where the mutual relationship between Indonesian teachers and parents is more dominant. What is quite surprising is the expression of the Brazilian teacher when describing the severity of the challenges in the online language learning process. This fact shows that the challenges faced by teachers of deaf students in Recife are more severe than those faced by teachers in Malang.

The findings of this study are limited to teachers in urban areas in Brazil and Indonesia, which of course, cannot be generalized to the context of education for those in other areas. For this reason, other research is still needed that elaborates on the findings of this study to see whether teachers' resilience also shows the same trend across gender, cultural background, socioeconomic, religious, and various other aspects. By understanding more comprehensively the aspects that affect the teacher's resilience, it will be more concrete to determine strategic steps toward improving the quality of language learning for deaf students.

D. Conclusion

This study concerns the resilience of teachers in Recife, Brazil, and Malang, Indonesia, in assisting the online language learning of deaf students and overview the challenge-based resilience in the COVID-19 pandemic. Based on the data on the implementation of language learning and the teachers' perception of the benefits, constraints, and strategies in online language learning, resilience is triggered by professional, personal, institutional, and community challenges. Although some teachers believe that online language learning for deaf students is frustrating, they perform their best so that the challenges do not bring uncertainties, helplessness, and depression to the teachers in both cities. They also talked about the strategies to cope with the constraints.

Some implications come up from the findings of this study. First, teachers for deaf students develop resilience to contribute and construct their professional identities. It confirms the previous findings that professional teachers make their contextual influences to strengthen their resilience, and resilient teachers embrace uncertainty and reframe their learning experience. Second, this study suggests that administrators and policymakers need to use their authority to support the facilities of online language learning for deaf and hard of hearing students in Brazil and Indonesia. It includes some efforts to meet the needs of qualified teachers for online learning and to provide special training for teaching deaf and hard of hearing students at the primary to tertiary education levels.

Attention is drawn to the scarcity of studies on the use of technologies in teaching English to the deaf and the need to create pedagogical alternatives based
on applications that favor this process. Therefore, there is room for investment in research and the production of knowledge on the subject. It also seems necessary for us to develop technologies to help the teaching of English to deaf students to provide new and better experiences and conditions for both teachers and students.

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