

PRONUNCIATION OUTPUTS OF USING URDU TRANSLITERATION METHOD FOR EFL VOCABULARY IN PAKISTANI ELEMENTARY SCHOOL TEXTBOOKS

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Abstracts

Oral pronunciation is a foundational feature of foreign language acquisition, especially at primary education, where learner develop their early habits that shape long-term speaking skills (Ayub, Akram, & Khurshid, 2017; Majoka, Khan, & Khan, 2016). Urdu transliteration is a common technique in Pakistani classrooms to support vocabulary recognition. This study investigates how Urdu transliteration in elementary textbooks influences pronunciation development of young learners in Pakistani classrooms. It aligns with phonological interference theory to identify how the use of native-script English words affects sound acquisition.

Its impact on English pronunciation is an ongoing research topic. This study highlighted that native-script usage initiates new phonological patterns and restricts students access to standardised English. It suggests substitute methods for accurate pronunciation. Through a mixed-method approach, two groups (transliteration vs. non-transliteration) of 20 students each from grades 5 to 8. All participants attempted 25 common English words.

Research findings show a pronunciation accuracy difference, with the non-transliteration group achieving 77% accuracy and the transliteration group achieving 58%. Interviews and textbooks substantiate pedagogical reliance on Urdu transliteration by highlighting errors such as consonant substitution, vowel distortion and misapplied stress. The study suggests phonic-based techniques and audio tools for improvement.

Keywords: Transliteration, pronunciation, errors, Urdu, English, consonants, vowels, textbooks, and oral pronunciation.

Introduction

English is a second eye of communication in this rapidly changing secular world. It's become essential for development in career and communication. English becomes a compulsory subject in education and academics. In non-native countries, such as Pakistan, English is a subject and second language that has been taught to young learners from very early educations. English holds a prominent and essential part of education and learning in early stages. From early education, students start learning

and memorising English words and phrases; they start utilising English linguistic units in their conversations. English is not limited only to writing and reading; rather, there are many more important features in English usage, e.g., listening, speaking, and pronouncing words and phrases correctly. For complete and better understanding, correct pronunciation is one of the most important pillars of communication. Through accurate pronunciation we can impact the listener on how he should understand us and what we actually want to convey.

In public and private schools (especially low-cost private schools), English has been taught to children as a second language along with Urdu and regional languages such as Punjabi, Pashto, or Sindhi. Urdu transliteration is a traditional technique to make English easier. In elementary books, Urdu transliteration of English words had been used to help students learn more easily and quickly. We can exemplify it by this example: the English word “school” is written in Urdu transliteration as “اسکول”, and the word “doctor” is written as “ڈاکٹر”. This technique of writing is named as Urdu transliteration.

As Ali & Ijaz (2009) defined transliteration as a method of writing words from one script to another script with phonetic equality. This technique proves to be a benefit for students to understand meaning and pronunciation through script in their native language, but one of its main cons is that it may cause problems while learning the correct pronunciation of words. As we know, Urdu and English sounds are different from each other, and It can create problems by leading towards wrong pronunciation habits and drills of English words. This reflects phonological transfer, the process of applying Urdu phonological patterns (such as epenthesis, segment alternation, and ellipsis) to English speech which often result as systematic pronunciation errors (Farooq & Mahmood, 2023). Previous researchers signify the phoneme-grapheme correlation, the mapping of letters and sounds, it strongly influences pronunciation accuracy. As Share (2008) appraised about how reliance on script often leads to mispronunciation. This habit will stay with them for a long time and will affect their speaking, everyday communications, and confidence.

By transcribing foreign linguistic items in our mother tongue, we can make foreign language learning easy. This technique has more flaws than benefits, especially in pronunciation learning. As Bassetti (2008) argued that when learners depend on such written form which do not accurately reflect the target language phonemes, they produce mispronunciation and cause orthographic interference. There are some sounds and letters that do not exist in Urdu; that’s why it’s hard to transliterate the English language in Urdu sounds and letters. As justified by Zaid (2017), Urdu speakers often use unfamiliar English sounds, which exploit the pronunciation and become a reason for pronunciation errors. For instance, the English sound “v” in words such as “very” and “voice” does not exist in Urdu, and young learners pronounce them as “wery” and “woice”, which is a result of Urdu transliteration and native sound patterns. Such type of substitutions is common in second language acquisition where closest native equivalents are consistently used as substitute for unavailable phonemes (Shahid). These are errors in pronunciations that have been mostly found in young learners learning, and a major reason for these errors could be the Urdu transliteration.

The incorrect pronunciation fuels the miscommunication, lack of confidence, misunderstanding, and even embarrassment, not just the incorrect sound uttered. Early stages are the most crucial and important to develop any skill and if students learn wrong pronunciation patterns from early stages, then it will become hard for them to fix these mistakes and errors. As Flege (1995) and later the revised Speech Learning Model (Flege, Aoyama, Bohn, 2021) argue that if earlier incorrect sound patterns are learnt, then it will become harder to replace them with correct ones. For example, the tongue and speech muscles of a student are trained through repeated drills of wrong pronunciation or he or she reads Urdu transliteration of an English word that is incorrect and does not fully reflect correct pronunciations due to missing sounds or any other reason. Then it will become very difficult to fix and retrain him or her later physically and cognitively. These patterns will be hard to unlearn after being established. It will become their habit and they will not realise that they are making pronunciation mistakes. So, it's a crucial matter to discuss and to find a solution. It is compulsory now to study how this habit formed at first, specifically at the early stages of learning.

It is common and justified by many researchers that language learning is built during early stages of learning. If the foundation is full of flaws, then what could be the results, and it will be difficult to fix later? To solve this problem, we have to study and teach Urdu transliteration in elementary English books carefully. A question is raised here: Is this transliteration method helping young learners or damaging their learning? Are there any better and more beneficial technique and method to help students to learn correct pronunciation without confusing them?

Our research aims to investigate the effects of Urdu transliteration of English words on young student learners. This research specifically focuses on elementary class students (5th to 8th) by analysing their pronunciation skills. Additionally, we will also investigate their books to check how English words are written in Urdu transliteration. This investigation will help us to find the link between transliteration and pronunciation and it will also propose better methods and techniques to teach pronunciation.

In modern linguistic research, the practice of writing Urdu in Roman script is widely recognised as a linguistic trend known as Romanisation or "Roman Urdu." The method of Urdu transliteration is a Perso-Arabic script, whereas Roman Urdu is a major communication medium among young learners as they employ it in their text messages, social media, tweets, and informal educational resources (Mahmood & Hussain, 2012). This mixed situation beclouds the frontiers between English and Urdu; it forces learners to overlap sound recognition and pronunciation habits because both Urdu transliteration and Roman Urdu are represented in Roman script. Regardless of its extensive use, the direct influence of Romanisation on English word pronunciation has been researched few times earlier, which creates a research gap our study aims to fill.

Statement of Problem

Elementary books contain Urdu transliteration methods to improve English language learning for learners. This method raised some queries and concerns about the effects of this method on elementary language students, specifically with respect to their pronunciation. No doubt, it is an easy way for students to memorise and recognise English words, but it is exploiting their pronunciation in various aspects and in the long term it will be more damaging. So, this paradoxical situation justifies the need for a comprehensive and authentic investigation of the effects of the Urdu transliteration method on elementary students' pronunciation development. Additionally, there is a clear and big difference in pronunciation between students who learn pronunciation with Urdu transliteration and those who use alternative methods like audio, phonetic charts, etc., to learn pronunciation. Proper and accurate pronunciation should not be overlooked; it's a serious note in phonetics for daily conversation, academic purposes, etc. It is important for pronunciation development and success in academic life too.

Research Questions:

1. How are elementary school learners in Pakistan influenced in their pronunciation development when English words are written in Urdu transliteration?
2. Which specific pronunciation errors commonly occur in students who rely on Urdu transliteration in English learning materials?
3. What alternative methods can be proposed to teach English pronunciation effectively without relying on Urdu transliteration?

Research Objectives:

1. To analyse the impact of Urdu transliteration of English words on the pronunciation development of elementary school learners in Pakistan.
2. To identify and categorise the specific pronunciation errors commonly found among students who rely on Urdu transliteration in English learning materials.
3. To investigate and recommend effective alternative methods for teaching English pronunciation without depending on Urdu transliteration.

Literature Review

Language is not just limited to communication; rather, it is an effective force to shape thoughts, construct identity, and promote social position. The method of Urdu transliteration of English words and phrases, especially at the elementary level of language learning in Pakistan, gives birth to multiple complex phonological and pedagogical questions. This practice of simplifying English word learning with the use of Urdu transliteration for young learners benefits learners, but this practice initiates unintended consequences related to pronunciation development, which is evident in several studies about cognitive development and phonological development.

Phonological Interference Theory is the theoretical foundation of our study, which argued that the learner's first language (L1) phonemic system is often intertwined with second language (L2) phoneme acquisition (Ellis, 1994). Urdu and English both have different sound patterns and inventories. Urdu does not have multiple English sounds such as /v/, /z/, /θ/, and /ð/, and this deficiency of sounds forces the choice of alternative sounds. Those alternative sound choices promote pronunciation errors, and young learners adopt those alternative-sounding words, and mistakes become their habits. As Zaid (2017) gave his remarks about this phenomenon, he argued that due to lack of sound and phonemic mismatches, Urdu-speaking learners

are bound to pronounce “very” as “wery” and “zoo” as “joo.” These distortions get more frequent and common when learners rely on Urdu transliteration, which do not accurately represent the English phonemes.

Language learning is deeply rooted in social interaction and cultural tools, as argued by Vygotsky’s Sociocultural Theory (1978), and this theory makes an addition to the justification of this issue. If we shift our focus to Pakistani classroom contexts, where ratification, rote memorisation, and native-script transliteration dominate. Mostly students internalise incorrect phonological models, which are designed and shaped by social imitations rather than those that are proved by scientific linguistic principles. Through this non-scientific practice, the classroom became a place where errors are neither corrected nor addressed; rather, they get institutionalised. As such, Urdu transliteration acts as a cultural scaffold that supports memory but fails to develop authentic pronunciation skills.

Behaviourist theory, particularly Skinner’s (1957) view on repetition and reinforcement, explains how Urdu transliteration reinforces incorrect pronunciation patterns. Once students repeatedly see “school” written as “اسکول,” they associate the English pronunciation with Urdu phonetics. These habits are not easily undone. As Flege (1995) points out in his Speech Learning Model, phonetic categories formed in childhood become increasingly rigid with age, making it difficult for learners to acquire accurate L2 pronunciation after early exposure to incorrect forms.

Pakistani research further elaborates on the prevalence and consequences of Urdu transliteration in school curricula. Rehman (2002) asserts that the colonial legacy and hybrid language policies in Pakistan have led to a fragmented linguistic pedagogy where English is emphasised but not adequately taught. Urdu transliteration is often used as a shortcut for comprehension without adequate attention to its pedagogical drawbacks. In low-cost private schools, this is even more prominent due to the lack of trained teachers and phonics-based resources (Rehman, 2004).

Transliteration is the symbolic representation of speech, yet in practice, there is a deficiency of phonetic precision in Urdu transliteration, which is required for accurate language acquisition (Crystal, 2008). Urdu and the International Phonetic Alphabet (IPA) have different sounds; Urdu does not have distinct symbols for various English vowel and consonant sounds. It causes approximations rather than accurate articulations. This problem, created due to the unavailability of sounds in Urdu, leads to a situation that is mentioned as intelligibility deficits by Derwing and Munro (2005). They addressed that students can speak, but proficient English speakers misunderstand students due to their flawed pronunciation.

Furthermore, studies have explored alternatives to Urdu transliteration for English learning. Javed and Mukhtar (2019) advocate for the use of phonics and audio-assisted learning, suggesting that students exposed to sound-symbol correspondence and pronunciation drills show significantly better oral proficiency. In contrast, learners reliant on Urdu transliteration demonstrate fossilised errors, reduced intelligibility, and low self-confidence when communicating in English.

Language ideology also plays a role in shaping the use of Urdu transliteration. In his work on critical discourse analysis, Fairclough (2013) mentioned the power structures that are embedded within educational practices and reflect broader societal hierarchies. Urdu is a native and national language in Pakistan. The majority of the country use Urdu as the medium of their daily conversations. It is used as a bridge between a regional language and English, which has a higher status. Educational

textbooks are a victim of this hierarchy as well. It encourages English proficiency by relying on Urdu transliteration, which initiates a contradiction in national language proficiency.

According to cultural perceptions, the phenomenon of “linguistic nativization,” in which English is employed to fit local norms, is Kachru (1992). We can assume Urdu transliteration is a form of such adaptation, which we can only achieve at the cost of accurate pronunciation. It restricts students so that they cannot make a transition into global English standards. Rather, it localises English in such ways that it limits future academic or professional success and global accessibility.

A great amount researcher has investigated the Urdu written Latin script which is renowned as Romanisation, a major informal communication medium among young learners at several platforms such SMS, social media and informal discussion setting. A large dataset of students’ messages shows the extensive use of Roman Urdu as a communication medium among university students and the quantitative results shows the spelling variation, for example students spell a specific word differently by their own choice (Bilal et al., 2017). Previous studies and literature validate its extensive use but its impact on pronunciation development is still an ignored topic which creates a research gap. Similar previous researches, highlights the inaccurate sound pattern which leads to mispronunciation initiated due to Urdu-transliteration of English words such as “کیٹ” for cat (Ishtiaq, 2022). This study aligned the method of Urdu transliteration with the renowned term, Romanisation which highlights the lack of understanding about how script and transliteration-based practices exploiting young learners English pronunciation development and proficiency.

As we wrap up our discussion, the published research and studies spotlight that Urdu transliteration may help in rote memorisation and initial recognition of English words. But on the other shore, it hinders pronunciation development, fuels up phonological errors, and creates a clear contradiction with global standards of English at several positions. Transition towards IPA-integrated, phonics-based, and audio-supported learning becomes an urgent requirement now, chiefly in low-income educational institutes in Pakistan.

Theoretical Framework

We have analysed our research problem by reviewing and using various concepts and theories of different scholars. This broad examination of various theories gave us a detailed understanding about the impact of Urdu transliteration on the development of English pronunciation, specifically at the elementary level in Pakistan.

First of all, we’ll start with the Phonological Interference Theory (Ellis, 1994). This theory helped us in explaining the phonemic system of the first language (L1) of a learner and how it interferes with the second language (L2) phoneme acquisition. This theory gave evidence about how Urdu-speaking learners experienced pronunciation challenges, for example, alternative English sounds that do not exist in Urdu (/v/, /z/, /θ/, /ð/). We have applied this theory to our current study, and it shed light on how depending on Urdu transliteration exploits English pronunciation, increases error chances, and also restricts speaker’s pronunciation accuracy development and phoneme acquisition.

Vygotsky’s Sociocultural Theory (1978) is theoretical evidence from a phonological perspective. It highlights shaped and socially mediated language learning, which is deeply submerged in interpersonal and cultural interaction. Urdu transliteration, cramming, and rote memorisation are dominant in Pakistani classrooms.

Students internalise incorrect phonological articulations and patterns via social limitations and neglect of scientific linguistic principles. This theoretical skeleton helps to enlist the errors that are institutionalised in classrooms and show Urdu transliteration. It supports cramming and memorisation and ultimately neglects authentic pronunciation development.

Skinner's Behaviourist Theory (1957) comments on these insights by highlighting the role of repetition and reinforcement in solidifying language habits. When students repeatedly use English words written in Urdu transliteration, such as "school" transliterate as "اسکول", it develops entrenched associations that increase the chances of incorrect pronunciation. Flege's Speech Learning Model (1995) supports it by describing that phonetic categories established in childhood become rigid. Learners experience difficulty in correcting mispronunciations that are established in early education via Urdu transliteration.

By intertwining global theories with authentic domestic realities, Rehman (2002) critiques Pakistan's fragmented language policies and colonial legacy because the Pakistani language framework promotes English without appropriate pedagogical support. Low-income and under-resourced Pakistani schools commonly use Urdu transliteration as a shortcut and circumvention. This makes pronunciation and articulation faults more common and increases error chances because there are no phonic teaching or trained teachers available to help. This local study offers a theoretical framework by making it suitable, applicable, and relevant for Pakistani contexts.

Furthermore, by using the lens of Fairclough's Critical Discourse Analysis (CDA) (2013), we can understand how pedagogical practices have been shaped by language ideologies. In Pakistani educational institutes and other language contexts, the Urdu language is in action as a mediating language between regional dialects and English. We can explain the contradictory use of Urdu transliteration in English textbooks and helping books with the purpose of promoting English proficiency. It restricts authentic English pronunciation rather than keeping language inequalities.

Last but not least, Kachru's concept of linguistic nativisation (1992) is included in this study to investigate the English adaptation to local linguistic norms. Urdu transliteration may be used as a form of adaptation, but it results in deviation from global English pronunciation fundamentals and limits learner pronunciation development, plus future academic or professional opportunities.

Cooperatively, we used these theories to make a well-rounded framework to achieve our research goals. By using these theories, we critically investigate the effects of Urdu transliteration on English pronunciation development. We highlight the requirement of more beneficial and effective phonics-based pedagogical techniques. This theoretical ideology facilitates both descriptive analysis and critical reflection on current language teachings in Pakistani language learning institutes.

Methodology

Research Design

This research has been designed in a mixed-method way, including both qualitative and quantitative techniques to investigate the impact of Urdu transliteration on elementary school language learners and their English pronunciation development. Through a quantitative approach, we analyse the accuracy and also identify particular phonological errors by discussing research questions 1 and 2. The qualitative

component explored teachers' insights on the use of Urdu transliteration and alternative pronunciation teaching strategies within low-resource Pakistani classrooms, addressing Research Question 3.

This research has been conducted in urban and semi-urban low-cost public and private elementary educational institutes, where Urdu transliteration is a common method for English language development.

Students:

From 5th to 8th grade, we purposively collected 40 students and divided them into two equal groups to enable a comparative analysis:

- **Group A – Transliteration-Supported Group** (20 students): Students of this group are instructed in English by utilising the Urdu transliteration method for English words. The Urdu transliteration method is a shortcut way for memorisation and word recognition.
- **Group B – English-Only Group** (20 students): On the contrary, Group B students do not use Urdu transliteration; rather, they solely rely on English material. Oral modelling, repetition, and basic phonic drills appropriate for the resource-constrained contexts are the instructional techniques.

Teachers:

Semi-structured interviews have been taken from ten language teachers from participating institutes. They give their remarks about why Urdu transliteration techniques have been used in teaching, the challenges they faced and their views on other pronunciation development teaching methods.

Ethical research standards, institutional permission and parental consent were the priority during data collection.

Instruments and Data Collection

i. Pronunciation Test and Audio Recording

We enlisted the 25 most highly frequented English words which are commonly transliterate in Urdu. Students were asked to read the list aloud and got recorded. Recordings were later transcribed and examined according to the International Phonetic Alphabet (IPA) to spot and categorise the most frequent pronunciation errors.

ii. Phonological Error Checklist

An organised checklist based on British English phonemes was designed. The purpose of creating the checklist is to register the types and frequency of phonological errors, with a particular focus on omissions, substitutions, stress patterns and vowel distortions.

iii. Teacher Interviews

Semi-structured interviews of 10 teachers were conducted to discuss the pedagogical role of Urdu transliteration, the availability of pronunciation tools and suggested improvements. Audio recordings of the interviews are thematically analysed.

iv. Textbook Analysis

The textbooks used by both groups were examined to assess how many times Urdu transliteration appeared, how constantly it was concerned with, and what educational objectives it served. Several aspects were spotted out, such as phonetic support, visual aids and pronunciation cues.

Data Analysis

Quantitative Analysis

Pronounced words of each student were analysed and scored by comparing their spoken words with the IPA standard representation. Both groups were calculated by

their error frequency; a t-test was conducted to examine the statistical importance of pronunciation variation between Group A and Group B ($p < 0.01$ indicating statistical significance over random variation). The errors were classified on the basis of their type and phonological attributes.

Pronunciation accuracy was scored by comparing each student's spoken word to its standard IPA form. Error rates were calculated for both groups, and a t-test was applied to assess the statistical significance of differences in pronunciation accuracy between Group A and Group B ($p < 0.01$ was considered significant). Error frequencies were then categorised by type and phonological feature.

Qualitative Analysis

Interviews were transcribed through thematic analysis to find out repeated patterns related to Urdu transliteration, pedagogical complexities, and teacher beliefs. Inductive techniques were used for thematic coding to categorise data. Books containing Urdu transliteration techniques were examined to improve pronunciation and instructional focus.

Pronunciation Errors by Urdu Transliteration Learners

To answer the RQ2, the most common errors of pronunciation by Group A were categorised in the following list in a systematic way.

Consonant Substitution Errors

Table 1: Consonant Substitution Errors

Target Sound	Example Word	Urdu Transliteration	Student Error	Error Pronunciation	Cause
/v/	Very	ویری	/w/	wery	Urdu lacks /v/, uses و which maps to /w/
/z/	Zoo	زو	/s/	soo	/z/ weakly marked; resembles س
/θ/	Think	تھنک	/t/	tink	Urdu lacks /θ/, uses تھ = /t ^h /
/ð/	This	دس	/d/	dis	Urdu uses د; /ð/ does not exist
/ʃ/	Shoe	شو	/s/	soo	ش sometimes pronounced like س
/ʒ/	Genre	ژانرا or جنرا	/z/ or /ʃ/	zanra or shanra	ژ is rare and unfamiliar

/dʒ/	Jungle	جنگل	/z/	zungle	Urdu ج and ز confusion
/ŋ/	Sing	سنگ	/n/ + /g/	sing-g	Urdu doesn't treat /ŋ/ as one sound
/tʃ/	Chair	چیر	/s/ or /ʃ/	shair	Confused with س or ش
/g/	Girl	گړ	/k/	karl	Voicing distinction unclear

Absence and confusion of particular English consonants in Urdu become the reason for these common errors. Certain English consonants are substituted with familiar native equivalent due to the absence of accurate sounds in Urdu, such as /v/, /θ/, and /ʒ/. Learners have to be dependent on Urdu transliteration and sounds, which are not fully reflecting accurate English sounds and limiting it to approximated sounds; this leads to constant pronunciation errors.

There are repeated Urdu sound substitutions that lack phonemic equivalents.

/v/ → /w/: very → wery

/θ/ → /t/: think → tink

/ð/ → /d/: this → dis

/ʒ/ → /z/: genre → zanra

Urdu phonological limitations were aligned with these substitutions and the impact of substituted Urdu letters.

For instance, /v/ and /w/ both have one Urdu letter, /و/.

1. Vowel Substitution Errors

Table 2: Vowel Substitution Errors

Target Sound	Example Word	Urdu Transliteration	Student Error	Error Pronunciation	Cause
/æ/	Cat	کیٹ	/ɑ:/ or /e/	kaat or ket	Urdu lacks /æ/, replaces with اے or ای
/ɪ/	Sit	سٹ	/i:/	Seet	Urdu does not mark vowel length clearly
/ʌ/	Bus	بس	/ɑ:/	Baas	/ʌ/ not present in Urdu
/ə/	Ago	آگو	/a/ or /e/	aago, ego	Schwa /ə/ is fully vocalized

/ɒ/	Hot	ہاٹ	/ɑ:/	<i>Haat</i>	Urdu lacks short rounded vowels
/eɪ/	Name	نیم	/e/	<i>Nem</i>	Urdu lacks diphthongs
/aɪ/	Smile	سمائل	/i:/	<i>Smeel</i>	/aɪ/ reduced to /i:/

There is massive deficiency of English short vowels and diphthongs in Urdu transliteration. Learners are bound to use unfamiliar vowel sounds instead of accurate vowel sounds. The phonological sound schwa /ə/, a common unstressed English syllable, is mostly pronounced as a full vowel because of a deficiency of unstressed vowel reduction in Urdu.

Common errors such as

/æ/ → /ɑ:/: cat → kaat

/ʌ/ → /ɑ:/: bus → baas

/ə/ → /a/: ago → aago

These errors are the evidence that Urdu lacks short vowels and schwa sounds, which leads to excessive articulations or vowel elongation.

2. Stress and Intonation Errors

Table 3: Stress and Intonation Errors

The fundamental rhythmic difference between Urdu and English were evidenced by stress and intonation. Both language scripts use different features, such as relying on syllable timing but English prefer stress timing and pitch variation, which

Error Type	Example Word	Urdu Transliteration	Error	Effect	Cause
Incorrect word stress	Doctor	ڈاکٹر	<i>docTOR</i>	Misplaced stress	Urdu has no stress marks
Monotone intonation	Please	پلیز	Flat tone	Robotic or flat speech	Urdu is syllable-timed
Syllable insertion	Blue	بلو	<i>balu</i>	Vowel insertion	Urdu avoids clusters with epenthesis

leads to pronunciation with flat delivery and wrong stress placement.

Students are bound to use incorrect word stress or monotonous speech due to the reason that Urdu lacks stress markers and also has limited prosodic practices.

Following examples is evidence:

“doctor” articulated as “docTOR.”

Please use flat intonation during delivery.

3. Consonant Cluster Errors

Table 4: Consonant Clusters Errors

Target Cluster	Example Word	Urdu Transliteration	Student Error	Error Form	Cause
/sk/	School	اسکول	/sək/	səkool	Urdu inserts vowel after /s/
/bl/	Blue	بلو	/bəlu/	balu	Urdu splits consonant cluster
/gr/	Green	گرین	/gərin/	gareen	Consonant cluster broken with vowel

Urdu speakers prefer simplifications by inserting a vowel in consonant clusters, which is called the process of *Epenthesis*. Just because Urdu syllable structure excludes intricate clusters, student might mispronounce English words by breaking these intricate clusters into simpler forms.

For instance:

school → səkool

blue → balu

This is the evidence of avoiding initial clusters by inserting vowels in Urdu.

4. Word Final Errors

Table 5: Words Final Errors

Target Ending	Example Word	Urdu Transliteration	Student Error	Error Form	Cause
Final /t/	Cat	کیٹ	Dropped	ca	Final stop omitted
Final /d/	Cold	کولڈ	Voiced to voiceless or dropped	cole, col	Urdu softens or omits final /d/
Final /s/	Bus	بس	Omitted	bu	Final /s/ unstressed or skipped

Urdu-speaking learners often ignore final consonants such as stops and fricatives due to repeated mispronunciations. This repetition became the reason for error consistency.

Most Common Error Types Summary

Table 6: Common Error Types

The summary table of errors validates key patterns and reasons for the pronunciations challenges that Urdu-speaking learners have to bear. It also outlines the factors, such as structural differences in phonetics, syllable timing, and writing patterns,

Error Type	Cause	Common Words	Urdu Transliteration Issues
Consonant Substitution	Phoneme gaps	very, this, zoo	No equivalent for /v/, /ð/, /z/
Vowel Substitution	Schwa loss, diphthong flattening	name, bus, ago	Long vowels overused
Cluster Simplification	Epenthesis	school, blue	Clusters split with vowel
Stress and Intonation Errors	No stress symbols	doctor, please	Stress not indicated
Final Consonant Omission	Morphophonemic rules	cat, cold	Final stops dropped
Misreading Schwa /ə/	Over-articulation	ago, banana	Fully voiced vowels used instead

and how they lead learners to errors.

Findings

1. Quantitative Findings

i. Compare Pronunciation Accuracy

20 students per group, both groups A and B, were tested for pronunciation accuracy. Group A contains those students who learnt with Urdu transliteration and in contrast, Group B students learnt without Urdu transliteration by relying on other pronunciation development techniques like audio samples, phonetic transcription etc.

Table 7: Pronunciation Accuracy Comparison

Group	Number of Students	Average Pronunciation Accuracy (%)	Standard Deviation (SD)
Group A (with Urdu transliteration)	20	58%	6.2
Group B (without Urdu transliteration)	20	77%	5.5

The statistical t-test showed a significant result difference between both groups ($t = 7.45$, $p < 0.01$) and authenticated the negative impact of Urdu transliteration on English pronunciation.

ii. Highly Frequented Phonological Errors

The students of Group A showed a constant huge amount of pronunciation errors due to reliance on Urdu-based phoneme substitution.

Table 8: Highly Frequented Phonological Errors

English Sound	Urdu-Based Error	Example	IPA Shift	Frequency (%) Group A	Frequency (%) Group B
/v/	/w/	"very" → "wery"	/vəri/ → /wəri/	85%	18%
/θ/	/t/	"think" → "tink"	/θɪŋk/ → /tɪŋk/	72%	25%
/ð/	/d/	"this" → "dis"	/ðɪs/ → /dɪs/	68%	21%
/z/	/s/	"zoo" → "soo"	/zu:/ → /su:/	64%	19%
/ʒ/	/z/	"genre" → "zanra"	/ʒɒnrə/ → /zanrə/	53%	14%

2. Qualitative Findings

i. Teacher Interviews

Teacher interviews helped us to identify some themes, which are described below:

● First Theme: Reliance on Urdu Transliteration

According to teachers, Urdu transliteration helps students to understand and memorise English terminologies and vocabulary. But it leads towards pronunciation errors.

For instance, we use Urdu transliteration / اسکول / for / school /, and they never learn accurate sounds. (Teacher A)

● Second Theme: Pronunciation resources Deficiency

There is no formal teaching training for tutors, plus there are no audio tools, phonic-based textbooks, pronunciation charts or drills.

For instance, the word “doctor” is an Urdu-transliteration word; students memorise it in Urdu written form, without ensuring its accurate pronunciation. (Teacher C)

Third Theme: Blind Imitation over Phonemic Awareness

Students just blindly imitate teachers instead of searching for accurate English sounds, even though most teachers were taught by Urdu transliteration while they were students.

For instance, when students pronounce the word “fruit” or “place”. They pronounce it in an Urdu-transliteration way due to the wrong instructions in early education. (Teacher D)

Textbook Analysis—Instances of Urdu Transliteration

Students of Group A used Urdu transliteration-containing books to learn English vocabulary and pronunciation, such as

Table 9: Instances of Urdu Transliteration

English Word	Urdu Transliteration	Common Pronunciation error
School	اسکول	"iskool" (/sk/ → /isk/)
Doctor	ڈاکٹر	"daaktar" (/dɒktə/ → /daaktar/)
Place	پلیس	"plaas" (/pleɪs/ → /pla:s/)

These instances validated that the pronunciation errors arise due to transliteration.

Group B students did not use the Urdu transliteration technique or Urdu transliteration-containing books. Rather, they learn pronunciation through audio tools and teacher modelling in English. Whether they have a deficiency of structured phonic material, their audio tools still help them develop the habit of a more accurate pronunciation.

3. Comprehensive Analysis of Research Findings

Our research findings reflect the Phonological Interference Theory and describe how the acquisition of accurate English pronunciation is restricted due to Urdu phonemes. Additionally, Urdu transliteration supports orthographic transfer instead of phonemic awareness promotion, leading toward error consistency in pronunciation.

It also spotlights factors such as mediating tools and classroom practices and how they contribute to shaping learning. While Urdu transliteration supports comprehension, it still reinforces mispronunciation patterns.

At last, Fairclough's Critical Discourse Analysis, the research findings, described how linguistic hierarchies and restrictions over learners towards standardised English were triggered by the use of Urdu in classroom settings. This outlines the comprehensive results of language choices in academic content and teaching activities.

Discussion

The present study explored the impact of Urdu transliteration in elementary English learning materials on learners' pronunciation development. The findings revealed a significant contrast between students who learnt English using Urdu transliteration (Group A) and those who learnt without Urdu transliteration (Group B), relying instead on teacher-led pronunciation or audio tools. The analysis shows Urdu transliteration as one of the major restrictions for the development of accurate English pronunciation among learners.

The study offers a critical result by showing inconsistent pronunciation between both groups: Group B shows a more correct pronunciation rate of 77%, while Group A attains 58%. This numerical difference provides quantitative evidence that learners who receive authentic pronunciation guidance, such as teacher modelling or audio recordings, show more developed phonic skills as compared to those who rely on Urdu transliteration for phonological development, which fails to represent the accurate English sound system.

The research findings and Phonological Interference Theory are closely intertwined and highlight the interference of first-language phonemes with second-language acquisition. Urdu transliteration promotes Urdu sound patterns (e.g., writing "very" as ویری), which fuels up constant pronunciation errors just like /v/ pronounced as /w/ and /θ/ as /t/. The higher error frequency of Group A is evidence that the Urdu transliteration prefers and promote Orthographic (such as literal form, spellings, and written form) and phonological transfer from the native language while neglecting English pronunciation development.

Furthermore, The study praises Vygotsky's Sociocultural Theory by arguing that learning is shaped and mediated by cultural tools and social interactions. Textbooks, classroom scripts, and teacher practices all function as mediational means. In Group A, the Urdu transliteration acts as a scaffold for comprehension but unintentionally becomes a barrier to pronunciation accuracy. Teacher interviews further confirmed that most educators rely on Urdu transliteration due to a lack of phonological training and absence of phonetic teaching aids, which further entrenches these issues.

The textbook analysis underscored the issue: materials used by Group A frequently included Urdu transliteration, often inaccurately approximating English phonemes. For instance, the word “school” written as "اسکول" reinforces the pronunciation /iskool/. Similarly, another example is the word “doctor” transliterated as "ڈاکٹر", promoting pronunciation /daaktar/ instead of /'dɒktə/. Books of Group B learners with no Urdu transliteration still have the deficiency of structured pronunciation instruction, highlighting the need for a broader phonetic system in elementary education.

The concept of Critical Discourse Analysis by Fairclough reflects these patterns, which condemn the social inequality used in language practices. Rote memorisation dominates over linguistic competence, which has been prioritised by using Urdu transliteration in English material. This inequality impacts students in low-resourced educational institutes, especially females, by restricting their access to English phonological standards and promoting linguistic hierarchies.

One more essential theme that comes out is the culture that promotes rote memorisation and oral imitation. Many students idealised their teachers and always tried to mimic them; teachers may have poor pronunciation as well because they learn pronunciation from the same Urdu transliteration technique. This builds a cycle of incorrect phonological forms. Deficiency of proper tools to develop phonemic awareness leads to repetition and, further, to no pronunciation development.

20 participants per group restrict broader generalisation; the constant alignment of quantitative trends with qualitative insights strengthens the findings reliability. More diverse and broad sample could be a beneficial research choice for future researchers, plus long-term monitoring to investigate sustained pronunciation improvement.

Conclusion

This study highlights the influence of Urdu transliteration and how it hinders young learners' pronunciation development by promoting inaccurate phonological sounds and patterns. This research was necessary due to a lack of focus on the basic, elementary level of education, because this is the stage where children start pronouncing words and if they mispronounce them from the beginning, then it will be difficult for them to develop pronunciation later. This study also highlights the pronunciation variation between two groups, one taught with the traditional Urdu-transliteration method and the other with audio-based and phonic-based methods, with the latter group achieving more accuracy than the first group. Our research focus was Urdu-transliteration but it is essential to align our research with a widely recognised term, Romanisation, which is also a linguistic practice of reshaping and altering script choices. Both terminologies, 'Urdu transliteration' and 'Romanisation', reflect how local writing practices intersect with pronunciation development, yet there's a lack of research about their influence on young learners' phonological development. By addressing the aims of our research, we emphasise the urgent need to replace old and traditional script-based shortcuts with more authentic and beneficial phonics-driven and audio tools. The inclusion of alternative transcription methods in the curriculum and teacher training also needs updating to ensure accurate English pronunciation from an early stage.

Recommendations

1. **English Textbooks free from Urdu Transliteration:** Further recommendations is the deletion of Urdu transliteration for English textbooks and helping books for pronunciation development.

2. **Employing Audio and Visual Phonetic Tools:** Researchers should consider such material, which includes IPA-based guides, pronunciation flashcards, and digital audio support for pronunciation development.
3. **Teacher's Phonological Training:** Teachers must be skilled with English phonetics and pronunciation and have advanced training to minimise reliance on Urdu-based teaching.
4. **Pronunciation-based Curriculum:** The Curriculum should be designed with a priority of vowel contrast, stress patterns, and consonant bundles.
5. **Prioritise Listening and Speaking Drills:** Through Incorporating native-like English inputs, teachers should prioritise listening, comprehension, and speaking tasks in the classroom.

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