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## The Influence of Language on the Spelling Abilities of Children with Disabilities

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### Abstract

This paper offers a comprehensive literature analysis on the topic of the development of English spelling, encompassing both conventional and distorted examples. By understanding that the main purpose of alphabetic writing is to precisely depict phonetic sounds, young persons have a deeper understanding of the connections between these sounds. Through regular exposure to written materials, children can acquire a knowledge of the morphological and orthographic rules that govern a certain language. The authors provide data within the framework, emphasizing the importance of thorough language examinations in determining orthographic proficiency. The results indicate that the method suggested before shows significant potential for both theoretical and practical applications.

**Keywords:** Developing spelling skills and disabilities, language factors

### Introduction

In the fields of speech-language pathology and audiology, the LSHSS Clinical Forum serves as a venue for academic discussion and the free flow of ideas among professionals in those fields. It is recommended that the user's text be modified to have a more academic tone: "Abbreviated form" was the original phrase. Recast as: "The original text" This article presents a comprehensive examination of the available body of literature relevant to the evolution of English spelling. The analysis covers both typical and impaired cases of the history of English orthography. When children come to the knowledge that the primary purpose of alphabetic writing is to accurately capture the sounds of language, it gives them a more profound comprehension of the sound-spelling correspondences. Children have a deeper understanding of the sound-spelling correspondences. Children have the capacity to acquire a knowledge of the orthographic and morphological rules of a language through frequent exposure to printed items in that language. The authors give evidence that, within this comprehensive framework, underlines the necessity of specific linguistic evaluations in appraising a person's ability to spell correctly. According to the findings, the methodology that was described earlier demonstrates a substantial potential for a variety of applications, including theoretical as well as practical ones. The primary objectives of the study are to



investigate the elements pertaining to language, trace the history of orthography's development, and investigate the manifestations of difficulties in language acquisition. The Importance of Linguistic Factors in Impairments in Spelling Development and Disabilities Derrick Bourassa is the name that has been given to the person in question here. \* [DOCUMENT\* \*] Acadia University may be found in the country of Canada, more especially in the municipality of Wolfville, which is located in the province of Nova Scotia. Deborah Treiman is a well-known individual in the industry that she works in. A prestigious educational institution, Wayne University can be found in the city of Detroit in the state of Michigan. It is important to break a word down into its component phonemes in order to correctly spell it. This process is referred to as deconstruction. According to Ball and Blachman (1988), choosing graphemes to represent phonemes in a text needs to be done in a way that is both careful and acceptable. Words like "cat" and "hop" can be easily spelled by an inexperienced speller if they employ the approaches discussed here. Nevertheless, there are a great many more phrases that present difficulties. According to Treiman (1993), researchers have found that the opacity of words can vary depending on the phonemic components. When deciding how to pick candidates, it is essential to take into account the general public's comprehension of the many different written word forms (Bernstein & Treiman, in press; Brown & Loosemore, 1994; Nation, 1997; Varnhagen, Boechler, & Steffler, 1999). This article's primary objectives are to investigate recent studies that apply to the growth of spelling abilities and to provide a comprehensive summary of spelling difficulties. The notion that proposes the progression of spelling development from reliance on phonological information to dependency on orthographic and morphological information has been supported by a substantial body of research in recent years. This research lends credence to the progression of spelling development hypothesis. (Ehri, 1986; Gentry, 1982; Henderson, 1985) Comprehensive theories that are divided into multiple phases, such as those provided by Ehri (1986), Gentry (1982), and Henderson (1985), give a valuable framework for understanding the course of orthographic development. RittleJohnson and Siegler (1999); Treiman and Bourassa (2000); Treiman and Cassar (1997); Varnhagen, McCallum, and Burstow (1997) are just a few of the studies that have shown that



recent research on the development of spelling is improving and refining stage-based approaches. These studies have shown that children use a variety of strategies and types of knowledge when attempting to spell words. This study emphasizes the significance of understanding the differences that exist among children in terms of their capacity to assimilate various forms of linguistic information and the following consequences that this has for the children's development in terms of their ability to spell.

### **How Vocalization and Spelling Grow**

In the United States of America, as well as in other countries with strong literacy rates, a sizeable percentage of kindergarten and first-grade students struggle with spelling to a significant degree. Following a significant amount of time spent on the evolution of language comes, in most cases, the appearance of the initial orthographic representations that can be understood on their own. Even before they have a working grasp of the individual letters that make up the alphabet, children of preschool age are able to engage in activities that are considered to be part of the writing process. Some examples of these activities include sketching with a crayon or pencil. According to Lavine (1977), even while children as young as three or four can distinguish between writing and drawing, they do not yet have a developed knowledge of the essential role of alphabetic writing, which is to depict language sounds. This is the case despite the fact that infants can distinguish between writing and drawing at such a young age. On the other hand, it is clear that children, even at a young age, have the idea that words should be written in a way that accurately conveys the meaning that they are intended to express. It has been proposed by a number of academics (Ferreiro & Teberosky, 1982; Levin & Korat, 1993; Levin & Tolchinsky Landsmann, 1989; Lundberg & Torn eus, 1978) that designations for larger entities, such as bears, need to have a greater number of letters than those for smaller entities, such as mosquitoes. The theory that postulates a likeness between the physical properties of words and those of relevant objects eventually loses its validity as infants grow a better acquaintance with print. This theory proposes that there is a relationship between the physical attributes of words and those of relevant objects. For instance, Christopher may be able to gain the skill to correctly spell both his own name and the word "dad." In spite of the fact



that Christopher's father figure is older and larger in stature than Christopher himself, Christopher is perceptive enough to realize that the written form of the phrase "Dad" contains a smaller number of letters when compared to the name "Christopher." Because of this, the child is forced to give up the idea that the written words are exact representations of the meaning, and instead develops an understanding that written language is, in fact, a kind of spoken language. Even when a youngster understands the concept that print is a representation of speech, there are still obstacles involved in the process of translating spoken language into written text. The surrounding context, which can include the phonemes that are close by, can frequently have an effect on how a particular phoneme in a word is perceived. The process of translating individual phonemes to graphemes presents its own unique set of obstacles, which is another factor that contributes to the difficulty of the task. It's possible that certain mappings between phonemes and graphemes will make learning and applying the language more challenging.

### **What Role Do Consonant Clusters Play in Early Spelling?**

Adults who are literate have no trouble hearing the /n/ sound in "note," "hand," or "snow." Therefore, grown-ups know that the letter n appears in the spelling of every word. Younger children typically omit the letter n in words like hand and snow when spelling (Read, 1975; Treiman, 1991, 1993; Treiman, Zukowski, and Richmond-Welch 1995). These illustrations demonstrate how a child's propensity to omit consonants when lettering can be affected by the position of the consonant inside a syllable. Words are broken down into syllables, which are clusters of sounds. Whether or not a consonant is dropped from a word depends on more than just that consonant's identity; it can also depend on the identities of the other consonants in the word. The following illustration will show that these types of mistakes have a rational linguistic foundation. Here's an example of a syllable-final cluster (hand) that was misspelled as "had" because the child could not pronounce the initial consonant correctly. Generally speaking, nasals like n and m and liquids like r and l are dropped more often than obstruents like s, t, and f are dropped (see Treiman, Zukowski, and Richmond-Welty, 1995). Rather than hearing nasals and liquids as distinct phonemes, infants appear to understand them as qualities of the preceding vowel. As youngsters tend to think of nasality as part of the



vowel rather than a distinct feature, they often omit the letter n when writing words like "hands," leading to the incorrect spelling "had." Whenever there is uncertainty, the obstruent /s/ is more likely to be spelled than when it is associated with the vowel. Phonemic awareness exercises provide this corroborating evidence since they rely on the child's ability to recognize or manipulate speech units. Treiman, Zukowski, and Richmond-Welts (1995) had children register one token per unit and recite nonwords word for word as part of their research. Non-words like wamp that end in a nasal consonant cluster are particularly difficult for young children to pronounce correctly since they require more than three tokens. These are the /w/, /m/, and /p/ tokens. When given syllables that did not contain the problematic composites, the same children performed exceptionally well on the phoneme counting test (also see van Bon & Uit De Haag, 1997). When you factor in the type of consonant that follows the initial consonant in a cluster of syllables, the picture becomes more convoluted. When the stop consonant that follows the nasal is voiceless, as /nd (see also Read, 1986; Snowling, 1994), more nasal consonant omissions occur than when the stop is voiced. This was the situation with the /nt/ and /mp/ clusters. Treiman, Zukowski, and Richmond-Welt (1995) confirmed this finding and additionally demonstrated that the inflectional effect is restricted to nasals. The elimination of liquids has nothing to do with the voicing of the consonant that comes next. When writing, children often omit the consonants that naturally occur in words, leading to misspellings like "snow" for "so." Treiman (1993) found that more than 25% of the time, students failed to incorporate the second consonant in two-consonant syllable-initially clusters in their written submissions. Some words have many meanings; "set" might mean "sweat," "afad" can mean "terrified," and "sak" could mean "serpent." However, after the merger, the initial consonant in starting clusters almost never disappeared. Several studies (Bruck & Treiman, 1990; Miller & Limber, 1985; Treiman, 1991) have also uncovered the elimination of inner consonants in start clusters. The cited research is available in the Appendices. Some children, according to Treiman's research from 1991, rarely make these mistakes, whereas others do so frequently. Phonological composition has been shown to affect omission of consonants in end clusters (Treiman, 1991, 1993), but this effect has not been demonstrated for initial clusters.



Regardless of the sort of syllable-initial cluster, phonemes positioned on the interior of the syllable are more likely to be lost than those located on the exterior. The difficulty to spell these consonants in the first cluster does not appear to be related to the child's mispronunciation of these consonants, as suggested by the research of Bruck and Treiman (1990) and Treiman (1991). Furthermore, it does not seem that they depict serial position effects. Treiman (1985b) found that although the letter l is the second letter in each of these five-character words, children are much more likely to eliminate the letter l in strikes than the letter l in along. Studies of children's spelling have shown that young learners tend to blend together initial syllable clusters into a single phoneme rather than treating them individually. The word "snow" is pronounced by youngsters with the onset consonant unit /sn/ and the final vowel /o/. Research on phonological awareness suggests that onsets form cohesive units in both adults and children (Bowey & Francis, 1991; Fowler, Treiman, & Gross, 1993; Kirtley, Bryant, Maclean, & Bradley 1989; Treiman, 1985a, 1989, 1992). Bowey & Francis, Fowler, Treiman & Gross, and others conducted these studies. The data fits well with this hypothesis.

### **Effects Of Phonetics on Early Spelling**

There is a possibility of a gap between a child's skill level in phonemic segmentation of spoken words and their capacity to correctly spell words. This gap exists because phonemic segmentation is a skill that develops through time. Numerous investigations have repeatedly proven that youngsters have a tendency to spell words using ways that are phonetically plausible but orthographically incorrect. These findings are consistent with the observation that children have this inclination. Please refer to the work that Treiman and Bourassa (2000) have done in order to gain access to a full evaluation of this subject. According to Treiman (1993), young students in their first year of school may have a propensity to express the phoneme /d/ as the grapheme "j" (for example, writing "dry" as "jrie") and the phoneme /t/ as the grapheme "ch" (for example, spelling "trap" as "chrap") in their writing. An example of this would be writing "dry" as "jrie". These mistakes are understandable if you consider them from a phonetic point of view. When producing the /d/ sound, the tongue can be placed in a variety of positions within the oral cavity, notably in relation to the position at which it makes contact with the upper palate.



This diversity in tongue placement contributes to the articulation of the /d/ sound. In contrast to its pronunciation when it comes before a vowel, this variant of the sound occurs when the consonant /d/ is followed by the /r/ sound. In addition, in contrast to the situation when /d/ comes before a vowel, the relaxing of the closure is observed to take place over a longer period of time. The occurrence of turbulence or frication in the /d/ sound that comes before the /r/ sound is very comparable to that of the /dʒ/ sound, despite the fact that it is less apparent. Likewise, when the phoneme /t/ comes before the phoneme /r/, it goes through a change that makes it sound more like the phoneme /t/. This occurs because it is followed by the phoneme /r/. Therefore, it is possible to comprehend the presence of these spelling errors, which serves as evidence of the child's recognition of the phonetic features contained in the words. When stop consonants come after the phoneme /s/ in a word's spelling, there is a similar tendency to use spellings that are phonetically plausible but orthographically unorthodox. This is because the stop consonants are positioned after the phoneme /s/. When they appear at the beginning of words, voiced stops (/b/, /d/, /g/) and voiceless stops (/p/, /t/, /k/) display a clear phonetic difference from one another. Because of this, people who speak English recognize a difference between the words "got," which begins with the phoneme "g," and "cot," which begins with the phoneme "k." In spite of the fact that these plosives are represented orthographically as voiced (for example, the letter "c" is used in the word "Scot" rather than the letter "g," which is more phonetically appropriate), their actual pronunciation is voiceless when they come after an initial consonant that begins with a "s." As a consequence of this, it is possible to hear young toddlers mispronounce certain words, such as saying "sgie" instead of "sky" (Treiman, 1985c). Another illustration is found with the value of the variable r. The word "her" is articulated in a manner that does not include the production of a distinct vowel sound. It would appear that the consonant "r" operates as a syllabic element in this situation, effectively substituting the sound of the vowel that would normally be there. In written contexts, it is typical for young people to omit vowels, which can lead to a variety of errors. For example, "fr" can be interpreted as "fur," and "brutr" can be interpreted as "brother" (Treiman, Berch, Tincoff, & Weatherston, 1993). These examples are illustrative of the problem.



## Conclusion

Young children actively engage in attempts to describe the phonological composition of spoken words when they are in the early stages of gaining an understanding of the alphabetic principle; yet, these attempts are frequently incorrect. Children's spelling abilities grow to incorporate a greater range of morphological and orthographic patterns as they mature. This is because spelling is closely related to language acquisition. This research suggests that many language phenomena can be used to understand and explain the misspellings made by young children. These findings are based on a review of previous research on the topic. The material that has been supplied can act as a useful resource for the development of remedial methods that are targeted at improving a child's ability to break down spoken words into the phonemes that make up those words and choose correct spellings that are in line with the linguistic orthographic and morphological rules. According to Brown et al. (1996), the acquisition of these skills can be assisted by providing structured chances for the learner to encounter and absorb the normal links between spelling and sound patterns in the language. This will allow the student to become more proficient in the language. In addition, metalinguistic tasks, such as those involving phonological and morphological awareness, can be deployed to encourage the child to participate in reflective thinking about the structure of language (e.g., Apel & Masterson, 2001; Treiman, 1998) [Citations needed for Apel & Masterson, 2001; Treiman, 1998]. When using this strategy, it is essential to keep in mind that the process of orthographic development does not occur in a standardized manner. This is something that must be kept in mind at all times. For instance, children who are proficient at naming the letters of the alphabet may not necessarily have the same degree of expertise in recognizing all of the letter sounds. This is because children's brains develop at different rates. In addition, it's possible that their expertise in spelling particular orthographic patterns, like the "-ake" in the word "sake," or morphological patterns, like the word "tuned," isn't considerably higher than their proficiency in other patterns. Components of language have an immediate impact on the formation of spelling, which occurs at an earlier level. In addition, by utilizing substantial linguistic study on spelling errors, it is simpler to identify between children who are





developing normally and those who are having difficulties with their spelling. This is because children who are developing normally tend to have less spelling errors. The examination of the linguistic characteristics of the system enables professionals to not only identify the problem areas that are likely to call for concentrated efforts during the process of repairing the system, but also to gain an understanding of the underlying factors that contribute to developmental discrepancies. Therefore, it may be advantageous to provide phonological awareness education that is individualized to address a child's specific obstacles, such as problems with nasals in final consonant clusters. This can help address the child's specific difficulties. According to Apel and Masterson (2001), the use of a pattern-based approach has the potential to provide children with the most favorable means of acquiring the essential skills that are required for reaching optimal spelling proficiency. This possibility exists because of the authors' discussion of the pattern-based approach.

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