Qualitative Content Analysis of Code-Switching Behaviors in Kannada-English Bilingual Adults Who Stutter

Vasupradaa Manivannan, Santosh Maruthy

Department of Speech-Language Pathology, JSS Institute of Speech and Hearing, Mysore, India
Centre of Speech-Language Sciences, All India Institute of Speech and Hearing, Manasagangothri, Mysore, India

Correspondence: Vasupradaa Manivannan, Assistant Professor
Department of Speech-Language Pathology, JSS Institute of Speech and Hearing, Mysore-570004, India
Tel: +91-9952476062
Fax: 0821-2548230
E-mail: vasupradaa.1995@gmail.com

Received: December 8, 2023
Revised: March 22, 2024
Accepted: May 9, 2024

Objectives: The present study investigated whether code-switching (CS) behaviors help manage stuttering. If yes, how does CS help manage stuttering in the daily life of Kannada-English bilingual adults who stutter (BAWS)?

Methods: A convenient purposive sample of 35 Kannada-English bilingual adults who stutter, aged 18-40 years, were recruited for the study. The participants completed a Google form which contained a descriptive question. The question was, (a) Is language mixing or switching helpful in managing stuttering?, (b) If yes, describe how managing your stuttering in day-to-day life is beneficial.

Results: 30 of 35 BAWS (85.71%) responded “Yes” to question (a). Furthermore, a significant theme and five sub-themes were created based on their descriptive responses. It includes a significant theme of personal growth and sub-themes such as communication, coping, conceptualization, social image and reputation, and psychological strength.

Conclusion: The present study results suggest that Kannada-English BAWS perceive that their CS behaviors help to avoid stuttering. Furthermore, it builds their speaking skills, management strategies, understanding of others, social image, and confidence—overall personal growth. Nevertheless, avoidance behaviors, such as code-switching, are ineffective long-term stuttering management strategies and lower BAWS self-esteem by preventing individuals from facing challenges or speaking complex words or phrases.

Keywords: Stuttering, Code-switching, Bilinguals, Personal growth, Avoidance behavior

Stuttering is a multidimensional speech disorder characterised by predominant overt symptoms, such as repetitions, prolongation of voiced and voiceless sounds, and blocks. These behaviors vary across a person, place, situation, and language (Savithri, 2020). Along with the core speech characteristics, it may also be associated with escape and avoidance behaviors and changes in feelings, attitudes, and affective reactions. The escape behaviors occur when the speaker exhibits dysfluencies and attempts to terminate the stutter. For example, eye blinks, head nods, or interjections of extra sounds, such as ‘uh’. On the other hand, when a bilingual adult who stutters (BAWS) anticipates stuttering, avoidance behaviors are shown, including the use of new words, postponements (such as uh, well, and you know), changing the word that was planned to say (Vanryckeghem, Brüttten, Uddin, & Van Borsel, 2004), and code-switching (CS) to their comfortable languages (Ganesh, 2022; Medina, Pereira, Muñoz, Palacios, & Perez, 2019).

According to several studies (Blood & Blood, 2004; Yaruss & Quesal, 2004), people who stutter are frequently subjected to peer bullying, criticism, ridicule, and stigmatisation during their formative years. They may also be exposed to several negative attitudes from family members early in life. A person’s social development, communication skills, self-esteem, and overall quality of life may all be negatively affected by these situations, which can lead
to avoidance behaviors and social isolation.

CS is one of the self-management communication strategies bilingual adults use to achieve a specific communication goal (Das, 2012). Pioneer research (Muthuswamy, 1982) described that CS provides precise meaning, ease of conceptualization, facility of production, and sentence completion when the adult speaks. The use of CS holds a high estimation among society (Alenezi, 2010; Das, 2012; Hegde, Alva, Oommen, & Bhat, 2011; Muthuswamy, 1982; Niharika, Suman, Aishwarya, & Harshitha, 2021). Further, among bilingual individuals with communication disorders, CS helps to manage words which are challenging to produce (Ginsberg & Wexler, 2000; Goral, Norvik, & Jensen, 2019; Gutiérrez-Clellen, Simon-Cereijido, & Leone, 2009; Miccio, Hammer, & Rodríguez, 2009; Ponce-lawler, 2017). Moreover, the studies explained how the participants cope with word-finding problems and production deficits using CS.

In stuttering literature, bilinguals have been researched on various successful self-management strategies (Ganesh, 2022; Ginsberg & Wexler, 2000; Lowe et al., 2017; Medina et al., 2019; Saad, 2020; Swartz, Irani, & Gabel, 2014). Few studies on stuttering have discussed helpful communication strategies, like using fluency techniques to manage stuttering, improving self-confidence for speech, and continuing speech therapy recommendations to reduce stuttering. (Boyle, Beita-Ell, & Milewski, 2019; Medina et al., 2019; Saad, 2020; Swartz, Irani, & Gabel, 2014). The literature suggests incorporating questionnaire-based research to understand the participants’ perceptions of their CS behaviors. However, this might not be more accurate, as it has a forced set of answers. One another way to understand the participants’ perceptions is through qualitative research. There are different methods of obtaining participants’ perceptions and thoughts, such as written text, verbal, printouts, semi-structured interviews, focus groups, and narration (Hsieh & Shannon, 2005). Qualitatively analysing the free content of participants’ answers will help understand their perceptions of CS behaviors. In that way, it provides a deeper understanding of crucial concepts from the participant’s perspective (Daher, Carré, Jaramillo, Olivares, & Tomicic, 2017). Further, there is an increasing trend in qualitative stuttering research towards understanding the self-perceived thoughts and beliefs about the life experiences of adults who stutter (AWS) (Alqhazo, Blomgren, Roy, & Abu Awwad, 2017; Andrade, Cunha, Juste, Ritto, & Almedia, 2014; Bricker-Katz, Lincoln, & McCabe, 2009; Connery, McCartin, & Robinson, 2020; Saad, 2020; Sankar et al., 2004).
A recent study stated the stutterer’s perception of stuttering as an entire constellation of behaviors and experiences, including the feeling of being stuck, losing control, or unable to say what they intend; the affective/emotional, behavioral, and cognitive reactions to that sensation; the actual-life restrictions that people who stutter often experience; and the impact that the environment may have on a person’s experiences (Tichenor & Yaruss, 2019). However, an insight into dysfluencies in connection with multilingual and multi-cultural life experiences of bilingual adults who stutter (BAWS) is yet to emerge. The latest published qualitative research thesis (Ganesh, 2022) also pointed out a critical gap in understanding the converging experiences of AWS, who communicate with two or more languages. This gap may be especially apparent within an Indian context, where bilingual stuttering qualitative research is relatively less addressed.

Additionally, there has been little research on Indian bilingual adults who stutter, and that research has tended to focus on characteristics of L1 and L2 dysfluencies (Aswini, Selvaraj, Prathiba, & Reji, 2022; Kashyap & Maruthy, 2020; Maruthy, Raj, Geetha, & Priya, 2015) phonological (Jayaram, 1983), and grammatical factors influences on stuttering (Jayaram, 1981), the effect of language-related factors on stuttering (Chaudhary, Maruthy, Guddattu, & Krishnan, 2021), and cross-linguistic generalisation of stuttering therapy (Kashyap & Maruthy, 2020). However, a significant empirical gap exists in the bilingual stuttering literature regarding code-switching behaviors (Manivannan & Maruthy, 2024). Thus, it is essential to understand the self-perceived code-switching behaviors of BAWS to identify whether it is an intentional coping strategy to avoid stuttering. Additionally, it provides a precise understanding of the thoughts, beliefs, and perspectives of BAWS regarding their code-switching behavior. Furthermore, there is a need to understand how CS is helpful in daily situations to avoid stuttering. Therefore, the present study holds the first attempt to understand the self-perceived experiences of CS of Kannada-English BAWS.

**Research Questions**

The study investigated whether (a) the code-switching (CS) behaviors help manage stuttering and (b) how CS helps manage stuttering in the daily life of Kannada-English bilingual adults who stutter (BAWS).

**METHODS**

**Ethical Consideration**

The study proposal cleared the ethical evaluation conducted by the All-India Institute of Speech and Hearing research ethics committee.

**Research Design**

The study had a cross-sectional descriptive survey research design.

**Participants**

The convenient purposive sample of 35 Kannada English BAWS, aged 18-40 years (M = 25.31, SD = 2.50), was recruited for the study. Among the 35 BAWS, 33 were males, and two were females. Each participant was chosen from the All-India Institute of Speech and Hearing in Mysore, where they had initially enrolled for stuttering management. The participants were speakers of Kannada (L1), with English acquired as the second language (L2). The inclusion criteria were that the participants had been diagnosed only with stuttering and did not exhibit academic, cognitive, hearing, emotional, or oro-motor deficits or neurological impairments. Further, to ensure the participant’s information, a demographic questionnaire was administered to obtain information about age, gender, language history, duration of stuttering experience, family history, speech therapy, and comorbid conditions. A family history of stuttering was positive for nine participants. Furthermore, none of the participants had a positive treatment history. Refer to Table 1 for demographic details of all participants.

**Data Collection**

Prior to data collection, informed consent was taken from the participants. Further, they were willing to participate and share their self-perceived experiences and thoughts with the study’s authors.
Materials/Instruments

The stuttering severity instrument fourth edition (SSI-4) (Riley & Bakker, 2009) was administered in both (Kannada) L1 and (English) L2 to document the stuttering severity. This was done because the stuttering frequency and severity may differ between Kannada and English (Kashyap & Maruthy, 2019; Maruthy et al., 2015). Further, using the Indian version of the Language Experience and Proficiency Questionnaire (LEAP-Q IV) (Maitreyee & Goswami, 2009), the language proficiency and linguistic background of the participants was documented. The LEAP-Q IV assesses language proficiency by considering language history, function, proficiency, dialects, experience, and exposure to each language. The questionnaire focuses on four language abilities: understanding, speaking, reading, and writing. The participants have to rate themselves. The rating includes one to four, where ‘one’ indicates ‘zero proficiency’, ‘two’ is ‘low proficiency’, ‘three’

Table 1. Demographic details of Kannada-English BAWS

<table>
<thead>
<tr>
<th>Participants</th>
<th>Age</th>
<th>Gender</th>
<th>Age of stuttering onset</th>
<th>Education</th>
<th>Current occupation</th>
<th>Family history of stuttering</th>
<th>Treatment history</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23</td>
<td>Male</td>
<td>3</td>
<td>PG</td>
<td>Lecturer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>2</td>
<td>22</td>
<td>Male</td>
<td>4</td>
<td>PG</td>
<td>Student</td>
<td>Positive</td>
<td>Absent</td>
</tr>
<tr>
<td>3</td>
<td>34</td>
<td>Male</td>
<td>3</td>
<td>PhD</td>
<td>Research Scholar</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>Female</td>
<td>2.5</td>
<td>PG</td>
<td>Not working</td>
<td>Positive</td>
<td>Absent</td>
</tr>
<tr>
<td>5</td>
<td>25</td>
<td>Male</td>
<td>3.3</td>
<td>PG</td>
<td>Software engineer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>Male</td>
<td>3</td>
<td>UG</td>
<td>Software engineer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>7</td>
<td>22</td>
<td>Male</td>
<td>6</td>
<td>UG</td>
<td>Software engineer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>8</td>
<td>28</td>
<td>Male</td>
<td>4</td>
<td>UG</td>
<td>Clerk</td>
<td>Positive</td>
<td>Absent</td>
</tr>
<tr>
<td>9</td>
<td>25</td>
<td>Male</td>
<td>3.5</td>
<td>UG</td>
<td>Software engineer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>10</td>
<td>22</td>
<td>Male</td>
<td>4</td>
<td>UG</td>
<td>Student</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>11</td>
<td>26</td>
<td>Male</td>
<td>6</td>
<td>UG</td>
<td>Office staff</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>12</td>
<td>27</td>
<td>Male</td>
<td>3</td>
<td>UG</td>
<td>Software engineer</td>
<td>Positive</td>
<td>Absent</td>
</tr>
<tr>
<td>13</td>
<td>22</td>
<td>Male</td>
<td>4.5</td>
<td>UG</td>
<td>Office staff</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>14</td>
<td>24</td>
<td>Male</td>
<td>4</td>
<td>UG</td>
<td>Customer care service</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>15</td>
<td>26</td>
<td>Male</td>
<td>4</td>
<td>UG</td>
<td>Police</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>16</td>
<td>26</td>
<td>Male</td>
<td>6</td>
<td>PG</td>
<td>Business</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>17</td>
<td>27</td>
<td>Male</td>
<td>12</td>
<td>PG</td>
<td>Pharmacist</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>18</td>
<td>22</td>
<td>Male</td>
<td>2</td>
<td>Diploma</td>
<td>Business</td>
<td>Positive</td>
<td>Absent</td>
</tr>
<tr>
<td>19</td>
<td>28</td>
<td>Male</td>
<td>3</td>
<td>Diploma</td>
<td>Police</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>20</td>
<td>29</td>
<td>Male</td>
<td>4</td>
<td>UG</td>
<td>Auditor</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>21</td>
<td>27</td>
<td>Male</td>
<td>6</td>
<td>UG</td>
<td>Software engineer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>22</td>
<td>25</td>
<td>Female</td>
<td>3.2</td>
<td>UG</td>
<td>Housewife</td>
<td>Positive</td>
<td>Absent</td>
</tr>
<tr>
<td>23</td>
<td>29</td>
<td>Male</td>
<td>3</td>
<td>PhD</td>
<td>Senior Research fellow</td>
<td>Positive</td>
<td>Absent</td>
</tr>
<tr>
<td>24</td>
<td>26</td>
<td>Male</td>
<td>4</td>
<td>UG</td>
<td>Software engineer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>25</td>
<td>25</td>
<td>Male</td>
<td>6</td>
<td>UG</td>
<td>Business</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>26</td>
<td>26</td>
<td>Male</td>
<td>9</td>
<td>UG</td>
<td>Office staff</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>27</td>
<td>25</td>
<td>Male</td>
<td>2</td>
<td>UG</td>
<td>Not working</td>
<td>Positive</td>
<td>Present</td>
</tr>
<tr>
<td>28</td>
<td>26</td>
<td>Male</td>
<td>3</td>
<td>UG</td>
<td>Railway staff</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>29</td>
<td>26</td>
<td>Male</td>
<td>3.3</td>
<td>UG</td>
<td>Software engineer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>30</td>
<td>26</td>
<td>Male</td>
<td>2</td>
<td>UG</td>
<td>Doctor</td>
<td>Positive</td>
<td>Present</td>
</tr>
<tr>
<td>31</td>
<td>22</td>
<td>Male</td>
<td>5</td>
<td>UG</td>
<td>Not working</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>32</td>
<td>24</td>
<td>Male</td>
<td>3</td>
<td>PG</td>
<td>Business</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>33</td>
<td>24</td>
<td>Male</td>
<td>4</td>
<td>UG</td>
<td>Software engineer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>34</td>
<td>22</td>
<td>Male</td>
<td>2</td>
<td>UG</td>
<td>Not working</td>
<td>Negative</td>
<td>Absent</td>
</tr>
<tr>
<td>35</td>
<td>25</td>
<td>Male</td>
<td>3</td>
<td>UG</td>
<td>Mechanical engineer</td>
<td>Negative</td>
<td>Absent</td>
</tr>
</tbody>
</table>

UG = Undergraduate; PG = Post graduate; PhD = Doctor of philosophy.
shows ‘good proficiency,’ and ‘four’ is ‘native-like/perfect proficiency’ for each language skill.

Stuttering severity and language proficiency of L1

The mean SSI-4 scores in the Kannada language (L1) were 26.42 (SD = 5.26). Among the 35 BAWS, 15 participants were diagnosed with mild, 14 as moderate, and 6 with severe stuttering. Further, self-reported language proficiency skills, using the LEAP-QIV, of participants showed native-like/perfect proficiency for understanding (Mean = 4), speaking (Mean = 4), reading (Mean = 4), and writing (Mean = 3.94; SD = 0.23) in their L1 (Kannada language). Refer to Table 2 for language proficiency and SSI-4 scores in Kannada Language.

Table 2. Stuttering characteristics and language proficiency in Kannada (L1) and English language (L2) of BAWS

<table>
<thead>
<tr>
<th>Participants</th>
<th>SSI-4 scores</th>
<th>Stuttering severity</th>
<th>Overall mean scores of language proficiency</th>
<th>Language proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L1</td>
<td>L2</td>
<td>L1</td>
<td>L2</td>
</tr>
<tr>
<td>1</td>
<td>25</td>
<td>27</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>25</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>3</td>
<td>19</td>
<td>22</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>4</td>
<td>29</td>
<td>26</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>5</td>
<td>39</td>
<td>36</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>6</td>
<td>18</td>
<td>22</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>7</td>
<td>32</td>
<td>38</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>8</td>
<td>23</td>
<td>24</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>9</td>
<td>33</td>
<td>39</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>10</td>
<td>31</td>
<td>29</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>11</td>
<td>22</td>
<td>24</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>12</td>
<td>21</td>
<td>23</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>13</td>
<td>25</td>
<td>27</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>14</td>
<td>28</td>
<td>29</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>15</td>
<td>29</td>
<td>31</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>16</td>
<td>22</td>
<td>24</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>17</td>
<td>19</td>
<td>21</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>18</td>
<td>28</td>
<td>29</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>19</td>
<td>25</td>
<td>29</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>20</td>
<td>29</td>
<td>31</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>21</td>
<td>18</td>
<td>22</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>22</td>
<td>27</td>
<td>26</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>23</td>
<td>25</td>
<td>28</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>24</td>
<td>19</td>
<td>24</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>25</td>
<td>33</td>
<td>39</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>26</td>
<td>29</td>
<td>30</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>27</td>
<td>31</td>
<td>29</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>28</td>
<td>21</td>
<td>24</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>29</td>
<td>29</td>
<td>31</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>30</td>
<td>22</td>
<td>21</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>31</td>
<td>23</td>
<td>24</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>32</td>
<td>31</td>
<td>32</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>33</td>
<td>27</td>
<td>30</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>34</td>
<td>34</td>
<td>38</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>35</td>
<td>35</td>
<td>36</td>
<td>Severe</td>
<td>Severe</td>
</tr>
</tbody>
</table>

NLP = Native-like proficiency.
Stuttering severity and language proficiency of L2

The mean SSI-4 English language (L2) scores were 27.82 (SD = 5.13). Further, the stuttering severity of the participants includes 15 mild, 14 moderate, and 6 severe. However, the severity did not vary from L1, even though the SSI-4 scores significantly differed \( t(35) = -4.71; p = .00 \) between L1 and L2 when assessed using a paired t-test. Furthermore, the LEAP-Q IV scores include good proficiency for understanding (Mean = 3.28, SD = 0.45) and speaking (Mean = 3.05, SD = 0.23) and promising to native-like/perfect proficiency for reading (Mean = 3.82, SD = 0.37) and writing (Mean = 3.65, SD = 0.47) in their L2 (English language). Refer to Table 2 SSI-4 scores and language proficiency skills in English Language.

Qualitative question

Preparation of Qualitative question

Five qualitative questions were developed and given to five speech-language pathologists (SLP) with at least 5 to 10 years of speech and hearing experience and three years in qualitative content analysis for content validation. Among them, three had experience conducting qualitative research. The content rating was conducted using a three-point Likert scale: unsatisfactory, satisfactory, and highly satisfactory. Based on the rating of five SLPs, an Item-content validation Index (I-CV) (Yusoff, 2019) was calculated for all the questions. Further, only one question was rated highly satisfactory (I-CV = 1) by all SLPs. The question is, (a) Is language mixing or switching helpful in managing stuttering? (b) If yes, how it is helpful in managing your stuttering in day-to-day life. Furthermore, the author used the selected question to elicit responses from BAWS.

Choice of qualitative question

The qualitative question describes what the participants feel, perceive, and experience. Further, the methodology of the current study helps to understand the participants’ perspectives about their problems and positive experiences faced due to language switching behaviors, the situations where language switching is helpful, how it is helpful to manage stutter, what made them use mixing and switching behaviors to manage stutter and how it has improved the daily life of BAWS.

Instructions to participants

The participants were asked to fill out a Google form containing a descriptive question, and it was a personal preference to fill out a Google form to write over the paper by 28 of 35 participants. Seven participants agreed to use any mode of expression. Therefore, the question was given to all Kannada-English BAWS through a Google sheet with the answer column left blank. Before answering the Google form, the researcher described the meaning of language mixing or switching with examples. Further, the participants were instructed to read the question clearly and write what they felt and experienced. Participants were allowed to write as much as they wanted. Furthermore, the responses were subjected to content analysis.

Analysis

The responses in the Google form were retrieved in an Excel sheet for further analysis. The “Yes” responses to the question’s first part (a) were considered with a score of “1” and no as “0”. The percentage of Yes or No responses was calculated. Further, the descriptive answers for the second part (b) were analysed using inductive qualitative content analysis described by Graneheim & Lundman (2004). The descriptive responses written by BAWS had an average word count of M = 42.11 (SD = 32.21).

Researchers can get deep insights into the meanings and interpretations hidden within descriptive data by using qualitative content analysis, which offers a systematic approach to data analysis (Hsieh & Shannon, 2005). Inductive qualitative content analysis (Graneheim & Lundman, 2004) is a type of content analysis used to analyse textual data to identify meaningful units, themes, and categories without preconceived theories or predetermined codes. It allows themes and categories to emerge directly from the data itself. Inductive content analysis allows for a flexible and exploratory approach to data analysis, making it particularly useful for understanding the concepts from participant’s perceptions when existing theories are limited.

During the analysis, the first author (VM), who had extensive experience in doing the content analysis, read the descriptive answers keenly, word by word, to understand the content. Further, the contents were repeatedly read to gain a comprehensive meaning related to the study’s aim. The meaning units were generated
from the participants’ statements. The generated meaning units were assessed for codes. Once the codes were created, the similarities and differences between the reflections were identified. Further, the related codes were categorised to form sub-themes. Similarly, with the related sub-themes, the major themes were created. The procedure was repeated by another researcher (AJD) with expertise in qualitative content analysis to improve the reliability of the results. AJD also had experience in doing qualitative content analysis (Dsouza, Manivannan, & Maruthy, 2024). Further, the results were compared and discussed among the current study’s authors (VM & SM) and a researcher (AJD) to agree on the theme and sub-themes.

RESULTS

BAWS provided concrete examples of code-switching behaviors that oblige stuttering during their daily life experiences. Of the 35 participants, 30 (85.71%) responded yes to the question (a) Is language mixing or switching helpful in managing stuttering? It shows that the BAWS believe code-switching helps manage stuttering. The individuals who answered “yes” provided a detailed response.

Theme: Personal Growth

The data created one central theme (Personal growth) and five sub-themes (Communication, coping, conceptualization, social image and reputation, and psychosocial strength). Refer to Figure 1 for the theme and sub-themes created. Figure 2 represents the percentage of respondents in each sub-theme. The use of code-switching for BAWS is meant to help their personal growth. Further, BAWS regarded code-switching as helping to improve communication, social image and reputation, psychological strength, coping skills, and explicating thoughts (conceptualization). Only two adults believed their code-switching behavior was not supportive in the workplace. The examples of codes, sub-themes, and themes created are illustrated in Table 3.

Sub-theme 1: Communication

There were 18 BAWS (51.40%) who felt CS enhances a stutter-free conversation across places, people, and situations. The example statements given by the BAWS are as follows:

It helps to have a conversation with friends. I stammer when speaking with friends, and changing from Kannada to English

Sub-theme 2: Social image and reputation

Eight BAWS (22.85%) held the view that CS improves their social image and reputation. The given statements are:

It improves my social image and reputation. Everyone understands me better when I switch from Kannada to English.

Sub-theme 3: Psychological strength

Six BAWS (17.14%) believed that CS improves their psychological strength. The example statements are:

It boosts my psychological strength. I feel more confident when I switch from Kannada to English.

Sub-theme 4: Conceptualization

Four BAWS (11.43%) regarded CS as a tool for explicating thoughts. The statements are:

It helps me explicate my thoughts better. Switching codes assists in expressing my ideas more effectively.

Sub-theme 5: Coping

Two BAWS (5.71%) felt that CS helps in coping with stuttering. The statements include:

It helps me cope with my stuttering. Changing codes improves my ability to manage my stuttering.

Figure 1. Theme and sub-themes revealed by the qualitative content analysis with perceptions of BAWS on their code-switching behaviors.

Figure 2. Percentage of respondents in sub-themes.
helps others understand my speech.

BAWS described CS as playing a major role in having conversations with their higher officials, such as eminent persons, higher officers, managers, supervisors, teachers, and professors. Five adults described how it helps them to face the people they meet during their daily routine. Such persons were taxi drivers, bus conductors, and strangers. For example, one participant stated that they use CS to help somebody who asks for a direction or route on the road. In their view, they could face and address the need without stuttering to whomever they met accidentally or as part of their daily routine. Including the above examples, there were statements relating to expressing thoughts and feelings without dysfluencies to loved ones, such as immediate family members and friends, because of CS behavior.

It is very much helpful in many places like supermarkets. I usually go to the supermarket to buy some stuff. Occasionally, I switch to another language when I cannot tell the stuff’s name due to stammer.

BAWS explained their valuable experiences of switching behaviors in varied places. They specifically mentioned the places and incidents where the CS is helpful. The places where CS is predominantly used include shops, homes, hotels, offices or workplaces, colleges, supermarkets, and public places (roads, platforms, and parks). Some BAWS believe that CS helps to provide suggestions in classrooms or colleges. Regarding the scenario above, three adults thought that CS might help them convey the name of the item they wanted to purchase from the store—additionally, five of the BAWS reported having greater dependence on CS at work. However, one BAWS believed that CS is more effective in the home environment than in workplaces. Moreover, they acknowledged that CS is helpful in getting what they need and fulfilling others’ needs at home.

Table 3. Examples of statements of BAWS, meaning units, codes, sub-themes, and themes

<table>
<thead>
<tr>
<th>Statements of Kannada-English BAWS</th>
<th>Meaning units</th>
<th>Number of meaning units</th>
<th>Codes</th>
<th>Sub-themes</th>
<th>Frequency of responses in each sub-theme</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I will. Mixing languages is very much helpful in my daily life. I used to mix my mother tongue (Kannada) and English to improve my speech and confidence in public. Mixing between two languages, either from Kannada to English or vice versa, is helpful in conveying my thoughts to others and gives me the confidence to voice out. Also, it helps to interact with strangers by managing my stutter.</td>
<td>Improve public speaking skills, helpful in conveying thoughts, confidence to voice out, and interact with strangers.</td>
<td>21</td>
<td>Build effective communication with people and situations</td>
<td>Communication</td>
<td>18</td>
<td>Personal growth</td>
</tr>
<tr>
<td>Language switching is helpful in expressing my thoughts comfortably without stuttering at the workplace.</td>
<td>Helpful in conveying thoughts at workplace.</td>
<td>12</td>
<td>Transforming ideas</td>
<td>Conceptualization</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Sometimes the Kannada word doesn’t come, so I switch to English words because I will not stammer more in English. Usually, in college situations.</td>
<td>Helps overcome the stuttering in the Kannada language (L1).</td>
<td>13</td>
<td>Elimination of L1 dysfluencies</td>
<td>Coping</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Switching between languages helps me to frame a sentence easily without any gaps or pauses. Also, it helps to make a conversation without much hesitation and start a conversation with others. Also, due to language mixing, most people do not understand that I have stuttering issues due to language mixing. They think I am a fluent speaker of two languages and educated, and it gives me a social image.</td>
<td>Build conversation without hesitation. Helps initiate a conversation, masks my stuttering, provides a social image as a fluent speaker.</td>
<td>3</td>
<td>Award a social image</td>
<td>Social image and reputation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mixing the English language in Kannada sentences is helpful to avoid my dysfluencies. Further, it builds confidence in me. By doing language mixing or following this technique, I have overcome situations that would end up mocking or bullying me.</td>
<td>Helpful to overcome mocking or bullying situations which occurs due to dysfluencies, and build confidence.</td>
<td>8</td>
<td>Handle bullying and mocking circumstances and build confidence</td>
<td>Psychological strength</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Examples of statements of BAWS, meaning units, codes, sub-themes, and themes

<table>
<thead>
<tr>
<th>Statements of Kannada-English BAWS</th>
<th>Meaning units</th>
<th>Number of meaning units</th>
<th>Codes</th>
<th>Sub-themes</th>
<th>Frequency of responses in each sub-theme</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I will. Mixing languages is very much helpful in my daily life. I used to mix my mother tongue (Kannada) and English to improve my speech and confidence in public. Mixing between two languages, either from Kannada to English or vice versa, is helpful in conveying my thoughts to others and gives me the confidence to voice out. Also, it helps to interact with strangers by managing my stutter.</td>
<td>Improve public speaking skills, helpful in conveying thoughts, confidence to voice out, and interact with strangers.</td>
<td>21</td>
<td>Build effective communication with people and situations</td>
<td>Communication</td>
<td>18</td>
<td>Personal growth</td>
</tr>
<tr>
<td>Language switching is helpful in expressing my thoughts comfortably without stuttering at the workplace.</td>
<td>Helpful in conveying thoughts at workplace.</td>
<td>12</td>
<td>Transforming ideas</td>
<td>Conceptualization</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Sometimes the Kannada word doesn’t come, so I switch to English words because I will not stammer more in English. Usually, in college situations.</td>
<td>Helps overcome the stuttering in the Kannada language (L1).</td>
<td>13</td>
<td>Elimination of L1 dysfluencies</td>
<td>Coping</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Switching between languages helps me to frame a sentence easily without any gaps or pauses. Also, it helps to make a conversation without much hesitation and start a conversation with others. Also, due to language mixing, most people do not understand that I have stuttering issues due to language mixing. They think I am a fluent speaker of two languages and educated, and it gives me a social image.</td>
<td>Build conversation without hesitation. Helps initiate a conversation, masks my stuttering, provides a social image as a fluent speaker.</td>
<td>3</td>
<td>Award a social image</td>
<td>Social image and reputation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mixing the English language in Kannada sentences is helpful to avoid my dysfluencies. Further, it builds confidence in me. By doing language mixing or following this technique, I have overcome situations that would end up mocking or bullying me.</td>
<td>Helpful to overcome mocking or bullying situations which occurs due to dysfluencies, and build confidence.</td>
<td>8</td>
<td>Handle bullying and mocking circumstances and build confidence</td>
<td>Psychological strength</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
It is helpful when I get blocks while speaking on the phone, answering lecture questions, speaking to groups of people, telling jokes, or even having casual conversations.

Situations like telephonic conversations often have code-switching behaviors according to BAWS. The BAWS also talked about the classroom situations where they experience answering questions or providing lectures, and they depend on CS. For instance, explaining a chapter or lesson during class without any hindrance is a primary use of CS. Another example reported by a BAWS was that CS helps them share their views in group discussions, further making them feel deeply fulfilled. Nearly eight BAWS reported that their public speaking skills are improved by code-switching. Further, it encourages casual speech with family and friends during gatherings or functions. Because of CS, the role of BAWS increased in social networks.

Sub-theme 2: Coping

Secondly, 31.4% participants (eleven BAWS) agreed that CS is helpful in coping with dysfluencies. They meant that code-switched words are introduced whenever they find dysfluencies while speaking a particular language.

I switch languages with friends because if I anticipate stuttering in a word, I will switch to replace the expression in another language. Alternatively, sometimes, I switch to another language if I need help remembering the word. Further, it helps to improve my speech.

Of the eleven, six BAWS stated that they use CS to eliminate L2 dysfluencies. However, others reported switching either way (L1 to L2; L2 to L1). Further, they described using their English proficiency whenever they anticipate stuttering in L1 (Kannada). Furthermore, the BAWS elaborated that they code-switch on a few topics which are comfortable to explain without dysfluencies in the respective language.

When talking with friends, I shift to Kannada if I cannot speak English continuously due to stammering in most words, sometimes from Kannada to English. I have some of my friends who know only Kannada; with them, I would switch to Kannada, and while talking, if I had difficulty in Kannada, I would shift to English again.

One of the BAWS was concerned that lack of facility in one language encourages CS. In other words, difficulty finding words to speak continuously in one language, which does not induce stuttering, results in CS. Another example was reported by one adult, which depicts pragmatic reasons for CS. The BAWS reported that the conversation partner’s inefficiency in understanding a specific language makes them cope with CS. However, the participant also said that they CS to another language if dysfluencies persist.

When I am speaking, I switch languages because some initial letters to start a conversation in Kannada are challenging, so I switch to English when initiating a conversation. I frequently switch languages to reduce anxiety.

The BAWS described switching languages as helping to avoid the initial syllable repetition that occurs in them. Two adults, like the above example, described that they start with one language (L1 or L2) (majorly nouns) and continue to speak the sentences or phrases with another language (L1 or L2). It helps avoid dysfluencies when they initiate phrases or sentences. However, two other examples described whether it is initial words or mid, whenever the person finds dysfluencies, they will switch to another language. Moreover, if they cannot cope with language-switching behaviors, they may eliminate the anticipated words or syllables which are supposed to stutter. The examples given by the BAWS are as follows:

There are a few words which I use from the Kannada language. It is just because of my stuttering. I replace words and pronouns with other languages, for example. If I want to say, “A boy went to school”, suddenly if I stutter the word “boy”, I replace his name (Arjun), and sometimes I may stutter in the word “went”, so I use hogudha (‘went’ in Kannada). Further, I proceeded to complete the sentence for school. Also, if I know I am about to stutter some word, I immediately switch it or replace it with an easy word in another language.
Stuttering happens at the beginning of the sentence and rarely in the middle, so I start with one language and switch to another whenever necessary. If I feel like I am about to stutter while speaking Kannada, I immediately change to English. However, it is challenging to exchange between languages in a few situations, for instance, when calling a person’s name. Moreover, those situations increase my anxiety when I cannot switch or avoid my stammer, especially in front of a crowd. Otherwise, I quickly switch between languages to avoid my stutter.

Further, four BAWS believe that CS helps to complete sentences, cope with the words they do not remember, replace difficult words that are complex to pronounce, name things or persons, manage critical words, and maintain conversations with complex topics. An example is as follows:

When my mother asked me to bring or check any item from the storeroom, sometimes I could not initiate the item name or say if it was present due to stuttering. In that situation, I always switch between languages. I tell the item name in both languages, whichever is easy to name, and I use that language.

Overall, BAWS agreed that using CS improves stutter-free conversations.

Sub-theme 3: Conceptualization

Here, 29% of BAWS believe that CS facilitates better speech understanding between conversation partners. That is, ten adults believe CS improves the understandability of the listener, especially in the workplace. They used various descriptions with similar meanings, such as CS helps transform the information, explicate speech, convey thoughts, and increase the listener’s understandability. Altogether, it led to a sense of content that the BAWS was conceptualized by listeners using CS. Refer to the example given below:

When I speak with my colleague who knows Kannada and English, if I get dysfluencies, I try to switch from English to Kannada or vice-versa to make them understand what I am trying to convey.

In addition, a BAWS described how CS helps address the needs of others by being comprehensive. The adult had suggested:

Yes, language switching helps me to talk with classmates and friends. Also, to host some concerts for the college functions. It is helpful when asking doubts to teachers and answering questions during class. Further, it helps when talking to strangers who ask for help (for example, when asking for an address).

However, the statements gathered for this sub-theme are limited compared to other sub-themes.

Sub-theme 4: Social image and reputation

Three BAWS (8.57%) were aware of their improved identity in social situations due to CS. For instance, two BAWS stated that they receive value from others, especially in social situations due to CS. Further, they believe that CS masks their stuttering. In addition, they specifically appreciate that CS brings a good image by eliminating dysfluencies in front of relatives. BAWS felt that they had been shown respect when they used CS. They said that the CS brings recognition and acceptance at family gatherings.

….. Most people do not understand my stuttering issues due to language mixing. They think I am a fluent speaker of two languages and educated, and it gives me a social image.

Furthermore, two adults were also worried that CS might reduce their reputation at work. However, they agreed that CS helps in various public situations and in the home environment rather than in the workplace. Preferably, the BAWS want to switch whenever they feel they have dysfluencies, however, to maintain their reputation at the workplace, they avoid CS. Moreover, they fear people will laugh at them if they use their L1 at the workplace. Refer to the following example.

I mix a few words from Kannada in English sentences. I will use language switching occasionally when I need fluent speech. Otherwise, I avoid using it during office hours. Even if I want to switch to reduce my stuttering, I neglect it because I am scared of people who laugh at me when I use Kannada at the office.
Sub-theme 5: Psychological strength

Six BAWS (17%) experienced greater confidence in speaking when using CS. Three adults felt that CS builds self-confidence while speaking and presenting seminars in the workplace and other public places. They also pointed out that CS helps to vent feelings to immediate family members. Such experiences acknowledge happiness when expressing personal feelings to parents. Further, CS acts as a relaxant during pressured times in the life of two BAWS. Further, an adult felt that CS helps overcome bullying and mocking situations. In other words, CS helps to avoid dysfluencies, which cause them to face adverse reactions (bullying or mocking) from others. However, these avoidance behaviors may erode their psychological strengths as they escape from situations to hide their dysfluencies (Boyle, 2013b; Coleman & Scott Yaruss, 2014; Yaruss, 1998).

In day-to-day conversation, language switching helps overcome stuttering, such as in conversations with family members or shopkeepers at grocery stores. Mixing the English language into Kannada sentences helps avoid my dysfluencies. Further, it builds confidence in me. By doing language mixing or following this technique, I have overcome situations that would end up mocking or bullying me.

Code-switching increases my confidence when I talk with higher officers or unknown persons. Also, it hides my speech difficulty. So, I usually mix languages while speaking with colleagues and other officials.

Even though five BAWS appreciate the strength of CS’s behaviors, an adult was concerned that his anxiety increases whenever he could not switch languages to mask his dysfluencies in social situations.

In certain social situations, my anxiety increases when I cannot use switching or avoid my stammer, especially in front of a crowd...

However, the BAWS expressed their positive outcomes and strengths of using CS behaviors. The results showed faith in BAWS about their CS switching behaviors (avoidance strategy) to manage dysfluencies.

DISCUSSION

In the present study, we collected written descriptions from BAWS regarding whether CS helps to manage stutter and, if so, how it is functional. We did so to understand Kannada-English bilingual AWS’s self-perceived thoughts, beliefs, and experiences about their CS behaviors on dysfluencies. The first result of the current study showed a more significant “Yes” response for CS, a helpful strategy to manage stuttering. It indicates that 85.71% of the Kannada-English BAWS use the CS strategy to avoid dysfluencies in their daily life. The current result supports one of the recent thematically analysed research studies (Medina et al., 2019), which means that CS appears to be a fluency strategy in the lives of Spanish-English bilingual AWS. However, in the Indian context, the current study is the first to indicate the self-perceived observation of CS dysfluencies as a coping strategy in Kannada-English bilingual AWS.

Communication

Kannada-English BAWS reported CS as a helpful communication strategy in daily life because they use CS to avoid dysfluencies across situations. The current results support previous qualitative findings (Boyle, 2013b; Boyle et al., 2019; Plexico et al., 2009a), which show that AWS report perceptions of stuttering changing as a result of using a communication strategy, as well as benefits from the experience (such as increased self-assurance, willpower, empathy, and compassion for others). However, these helpful strategies for interaction may prove to be ineffective over time (Boyle et al., 2019; Manivannan et al., 2023; Medina et al., 2019) and lead to social and self-stigma (Boyle, 2013a; Carter, Breen, Yaruss, & Beilby, 2017; Constantino, 2016; Daniels & Gabel, 2004).

In addition, the AWS exhibit varied dysfluencies depending on the person to whom they are speaking, where they are standing, and how intense the situation is (Savithri, 2020). For example, if a BAWS speaks with his or her higher authorities, the dysfluencies may increase more than when speaking to family members. Further, greater dysfluencies may be noticed more in public places than at home. Also, situations like classroom presentations may
have higher dysfluencies than telephonic conversation, or vice-versa. This effect becomes less severe when CS occurs. Therefore, the BAWS felt that CS built effective communication by managing the dysfluencies across persons, places, and situations. This finding was consistent with that of Das (2012), who found CS is a strategy to maintain the appropriateness of the context or situations and depends on the communication partner. Furthermore, they indicate that CS is a tool to emphasise social relationships. However, their findings mainly dealt with adults who do not stutter. San
car et al. (2004) showed that CS behaviors could help reduce the dysfluencies during conversation across different interlocutors in MAWS.

Conceptualization

Kannada-English BAWS, in the present study, gave a few examples that indicated their awareness of the CS effect in transforming ideas. The AWS always find difficulty in expressing their thoughts due to the interruption of dysfluencies. Sometimes, they need help to make the partners understand what they want to convey. While introducing CS behaviors, they can ease their struggle to transform information. Das (2012) also found that CS helps reiterate the messages and make the speech clearly understood by the listeners. Pioneer research (Muthuswamy, 1982) also described that CS provides precise meaning, ease of conceptualization, facility of production, and sentence completion when the adult speaks. Furthermore, the demand for CS at the workplace is high in order to make colleagues understand what is being said. Due to avoiding negative workplace experiences whenever dysfluencies occur, these perceptions were well accounted for in a previous qualitative study (Klompas & Ross, 2004).

Coping

Many BAWS experiences indeed showed CS as a coping behavior. They felt CS is a speech enhancer, which eliminates stuttering. Furthermore, they believe CS contributes to managing words they struggle to produce. The results were consistent with studies on a few other communication disorders (Ginsberg & Wexler, 2000; Goral et al., 2019; Gutiérrez-Cleenlen et al., 2009; Miccio, 2009; Ponce-Lawler, 2017), which explains that the bilingual individuals with communication difficulties cope with word-finding problems and production deficits using CS. Concerning stuttering and CS, only one qualitative published research has been available to quote CS as a coping strategy in BAWS (Medina et al., 2019). Furthermore, the perceptions are consistent with few quantitative results (Klugman, 2003; Saad, 2020; Sankar et al., 2004). Therefore, despite variations in cultural, societal, and economic situations as well as in beliefs and confessions, the literature highlights the point that CS being utilized as a coping method by bilingual AWS is relatively universal. Furthermore, a recent study found that coping with dysfluencies was perceived as a positive experience in AWS (Manivannan et al., 2023).

Few studies on stuttering, however, have discussed effective coping mechanisms such as utilising fluency techniques to manage stuttering, enhancing one’s perceptions of oneself and continuing speech treatment recommendations to reduce stuttering (Boyle et al., 2019; Medina et al., 2019; Plexico et al., 2009a, 2009b). Avoidance behaviors like code-switching, on the other hand, are considered to be ineffective coping mechanisms that cause listeners to react and evaluate negatively, worsening the AWS’s self-esteem (Corcoran & Stewart, 1998; Daniels et al., 2006; Klompas & Ross, 2004; Swartz et al., 2014).

Social Image and Reputation

Getting a social image was another benefit of CS that BAWS experienced. AWS typically suffer from identity formation because of their dysfluencies (Daniels & Gabel, 2004; Kathard, 2006; Nang et al., 2018); therefore CS was beneficial. According to the current study, CS can help people hide their social anxiety and get acceptance from others. CS supported societal values. This conclusion was in line with earlier research on AWNS (Alenezi, 2010; Das, 2012; Hegde et al., 1997; Muthuswamy, 1982; Niharika et al., 2021); the stuttering literature, however, offers no support for this finding.

A BAWS who works as a software engineer addressed the issue that switching to L1 may impact one’s reputation at work. The participant stated that he always combines his L1 and L2 to improve his speaking ability when he finds it challenging to communicate in L2, reducing his work value. Additionally, the participant desires to move to L1 to prevent dysfluencies brought on by self-restraint due to a fear of losing their value at work. In the present study, the participants are highly proficient in L1 (Kannada) and L2 (Eng-
lish), qualified with at least a degree, and most of them are working, as shown in Table 1. Regardless of the work field, speaking in English (L2) generally provides a reputation at work (Clement, 2018). Even though CS benefits BAWs in many ways, there were times when they wished to switch to avoid their dysfluencies but were unable to do so, such as in the workplace. However, only a single adult talked about it. More evidence from the stuttering literature is also needed to corroborate the results.

**Psychological Strength**

Unlike previous stuttering literature reports, the current results identified greater confidence in BAWs due to CS. CS allows BAWs to face public situations without fear, and this result was consistent with the previous study, which explains that self-devised techniques of older AWS increase self-confidence and reduce fear (Bricker-Katz et al., 2009). Moreover, the result of overcoming the bullying and mocking situations due to CS explains that delivering a fluent speech with CS helps avoid negative experiences. The issues of negative attitudes and reactions toward stuttering are commonly perceived by AWS (Alqhazo et al., 2017; Connery et al., 2020; Klompas & Ross, 2004). Current perceptions of BAWs, however, indicated that the benefit of CS is that it helps prevent negative reactions.

Further, CS is a relaxant in BAWs when expressing their struggles with family members. This will help BAWs indeed reduce their negative thoughts and attitudes toward stuttering. The conclusions drawn from this one qualitative study are unsupported by most current stuttering research.

**CONCLUSION**

Kannada-English BAWs believe code-switching induces fluent speech (communication), understanding of others (conceptualization), social image (social value), confidence (psychological strength), and management strategies (coping). Further, the BAWs attempting to use known languages as a communicative strategy to avoid or compensate for the dysfluencies emphasises the advantages of being a multilingual adult. Additionally, BAWs perceive CS behaviors as beneficial for fluent utterances. However, avoidance behaviors, like CS, are unhelpful in long-term stuttering management (Boyle et al., 2019; Corcoran & Stewart, 1998; Klompas & Ross, 2004; Medina et al., 2019; Plexico et al., 2005, 2009a, 2009b; Starkweather, 1987; Swartz et al., 2014).

**Clinical Implications**

Researchers who studied Kannada-English bilingual stutterers claimed that the frequency and severity of dysfluencies vary across languages due to language proficiency and linguistic structure differences (Kashyap & Maruthy, 2020; Maruthy et al., 2015). However, based on the present study results, the dysfluencies may vary with CS behaviors. For instance, if dysfluencies are avoided in a particular language by switching words from another, the accuracy in calculating the stuttering frequency is affected. Therefore, clinicians need to control the involvement of language-switching behavior to identify the accurate stuttering frequency and severity in the respective languages. It would be possible to ask the BAWs to limit intentional CS further to speak one language at a time (L1 or L2) while collecting samples for stuttering assessment and following them with another language. The clinicians should also observe the CS levels in the word, phrase, or phonological level. If the Kannada-English BAWs uses CS in the initial words or more with content words, they may suspect it is due to dysfluencies. It might be because Kannada-English BAWs report a higher frequency of dysfluencies on initial syllables and content words (Kashyap & Maruthy, 2020; Maruthy et al., 2015). Moreover, not all the code-switching behaviors are avoidance behaviors because even the adults who do not stutter express CS in initial words or content words; however, the frequency would be higher in BAWs (Neeraja, 2004; Sankar et al., 2004). Clinicians should ask the BAWs during stuttering assessments whether they intentionally switch to avoid dysfluencies. Further, it can be monitored during therapy. SLPs must additionally counsel BAWs to limit intentional CS while receiving therapy for stuttering in either L1 or L2, their preferred languages. Furthermore, applying cross-linguistic treatment generalisation from L1 to L2 or L2 to L1 can aid in the BAWs’s ability to speak both languages fluently (Kashyap & Maruthy, 2019).

**Limitations**

The current study includes only two female participants due to...
lesser participant availability. Additionally, the objective evaluation of language proficiency was not included in the current study, which may have a significant impact. Nonetheless, the study explored positive effects alone. Additionally, the authors suspect that participants’ positive responses to CS may be prompted by the question “how code-switching is helpful in stuttering.” We thus concur that this would be one of the study’s limitations and other than the triangulation approach, the authors did not use any additional measures to prevent researcher bias. Furthermore, the present study did not interrogate the use and self-perceived experiences of CS in bilingual adults who do not stutter (BAWNS) and how it differs from BAWS.

Future Directions

There is an existing gap in stuttering literature regarding code-mixing and code-switching (Manivannan & Maruthy, 2024). There is a need to compare code switching with other avoidance behaviors and identify its merits and downsides. Future studies should study the difference in the use of CS behaviors between BAWS and BAWNS. Furthermore, qualitative studies need to be done on BAWS to understand their perceptions and feelings towards stuttering. This will make clinicians focus on the stutterer’s needs.

REFERENCES


Crichton-Smith, I. (2002). Communicating in the real world: accounts from


Ganesh, B. (2022). Perceptions and experiences of Indian and Indian-American multilingual and multicultural adults who stutter (Master’s thesis). Honors College University of Maryland, Maryland, USA.


국문초록

칸나다어-영어 이중언어 말더듬 성인의 코드전환 행동에 대한 질적 연구

Vasupradaa Manivannan1·Santosh Maruthy2

1JSS Institute of Speech and Hearing, 2All India Institute of Speech and Hearing


핵심어: 말더듬, 코드전환, 이중언어 사용자, 개인적 성장, 회피 행보

ORCID

Vasupradaa Manivannan (https://orcid.org/0000-0002-0551-8613); Santosh Maruthy (https://orcid.org/0000-0002-4621-0316)