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College-Age Female's Wishful Identification and Homophily with a Media Figure Using High versus Low Amounts of Glottal Fry

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COLLEGE-AGE FEMALE'S WISHFUL IDENTIFICATION AND HOMOPHILY WITH A MEDIA FIGURE USING HIGH VERSUS LOW AMOUNTS OF GLOTTAL FRY

ERIN LOGSDON

35 Pages

Glottal fry (GF) is the lowest range of pitches of three speaking registers and is not commonly used throughout conversational speech; however, scholars suggest that GF may be used in modern conversational speech more so than in the past. Thus, there has been increasing interest as to how this register is perceived by listeners. To date, research has been inconclusive as to whether this register is viewed positively or negatively. Further, it is unclear whether its use in media may affect how college-age women connect with and consume media containing it. Thus, this study aimed to determine how college-age females felt about a media speaker who used high versus low amounts of GF. One group of women, known as the low-fry listening (LFL) group, listened to a 4.5-minute audio-media sample containing minimal amounts of GF. The other group, known as the high-fry listening (HFL) group, was exposed to high amounts of GF within the same 4.5 narrative. The verbal content of each sample was identical, with only the predominant vocal register differing. The sample discussed a topic that college-age female listeners should be able to identify with (i.e., loneliness in college). After participants listened to the audio sample, they completed self-report measures to determine how connected and similar they felt they were to the speaker (homophily), how much they wished to be like the speaker (wishful identification), how pleasant they felt the speaker's voice was, and whether they wished to listen to the speaker again. Initial findings indicate that LFL versus HFL participants rated

feeling similarly homophilous in attitude and connected to the LF versus HF speaker. While the LFL group rated feeling more homophilous in background to the LF speaker than the HFL group did toward the HF speaker, this difference was not significant. LFL participants did indicate significantly more wishful identification with the LF speaker than HFL participants indicated for the HF speaker. Similarly, LFL participants indicated a significantly greater desire to listen to the LF speaker again when compared to the HFL participants desire to listen the HF speaker. LFL participants rated the LF speaker's voice as significantly more pleasant than the HFL participants rated the HF speaker's voice. These results suggest that college-age women may perceive minimal vocal fry as more pleasant and desirable indicating the perpetuation of this vocal register. While the facilitation of this vocal register is not inherently harmful or disorderly, it is produced with lower subglottic pressure within the lungs compared to other vocal registers, making it an inefficient way to utilize the voice during speaking tasks.

KEYWORDS: glottal fry, wishful identification, attitude homophily, background homophily, connectedness

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E.L.

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CHAPTER I: INTRODUCTION

Three vocal speaking registers (ranges of phonated frequencies with a similar-sounding vocal quality produced by the vibratory pattern of the vocal folds) are associated with the human voice including falsetto, modal, and pulse (Blomgren, Chen, Ng, & Gilbert, 1998). The modal register is used for typical conversational speech at mid-frequency ranges (100-140 Hz for men and 175-240 Hz for women), while the falsetto register spans frequency ranges that are higher than that of the modal register**.** Men and women typically transition from modal register to falsetto register around 275 Hz and 450 Hz, respectively (Keating, 2014). Finally, pulse register, sometimes called glottal fry or vocal fry, is produced when the vocal folds vibrate slowly enough to produce audible vocal pulses between glottal cycles. Pulse register is the lowest of the three vocal speaking registers, ranging from 20-70 Hz, and is characterized by low subglottic pressure and decreased airflow. Perceptually, pulse register is described as sounding "creaky," or like a "motor boat engine" (Blomgren et al., 1998).

Historically, pulse register, also known as glottal fry (GF), has been associated with a disordered voice, although no research suggests that its use alone causes vocal fold pathology (Hollien, Moore, Wendahl, & Michel, 1966). Instead, GF is potentially inefficient because decreased subglottic pressure and airflow during production is not supportive of optimal vocal fold vibration for expressive communication. In particular, the register can only be produced within a narrow range of low frequencies and soft intensities such that its use limits the flexibility and expressiveness of the voice (Hollien et al., 1966). The inability to vary intensity and intonation during conversational speech can have impacts on social communication and may ultimately promote unhealthy adjustments to vocal technique like excessive muscle tension (Hollien et al., 1966).

While speakers may be prone to drop into GF at the end of statements when pitch and subglottic pressure decline, mounting research suggests the register may be more ubiquitous in female speakers than expected (Wolk, Abdelli-Beruh, & Salvin, 2011). Scholars have suggested that the use of this register by media figures in reality television are influencing its use to demographics that consume them (Chao & Bursten, 2020; Borrie & Delfino, 2017). In particular, people may subconsciously alter their behaviors to parallel media figures they frequently interact with or admire (Borrie & Delfino, 2017).

Homophily and wishful identification are two constructs that may be associated with behavior changes like adopting the habitual use of GF. Specifically, homophily is the tendency for persons to be attracted to similar others (McPherson, Smith-Lovin & Cook, 2001). Individuals are more likely to adopt the behaviors of individuals, such as media figures, that they already perceive as similar to them (McPherson et al., 2001); in effect driving more likeness in attitudes, behaviors, and beliefs.

Wishful identification, or the desire to be like or act like a media figure who a consumer admires or views positively, may also influence GF use in young women (Hoffner & Buchanan, 2005). The desire to be like an admired individual may lead media consumers to imitate the individual's behaviors or adapt their attitudes, values, and goals, or aspirations (Hoffner & Buchanan, 2005).

Purpose of Investigation

The purpose of this study was to determine if female listeners self-reported significantly different levels of wishful identification and homophily towards a media figure using high versus low amounts of GF. Additionally, listeners' overall perceptions of the speaker's likeability and desire to listen to the high versus low GF speaker again were investigated. Delineating trends in

college-age women's impression of high versus low GF media speakers may determine the potential relationship between listeners' feelings about speakers who use GF which may in turn influence its use. The specific research questions that this study aimed to answer included:

1. Do college-age women indicate greater self-reported feelings of connectedness, wishful identification, and background and attitude homophily with an audio media figure who uses a significant amount versus minimal amounts of GF?
2. Do college-age women indicate a greater desire to listen to an audio media speaker again who uses significant versus minimal amounts of GF?
3. Do college-age women perceive audio media containing greater amounts of GF as more pleasant than minimal amounts of GF?

CHAPTER II: LITERATURE REVIEW

Homophily

Homophily describes one's feelings of connectedness towards another individual based on perceived similarity. In other words, we are drawn to people who we feel are most like us. Questions regarding *how* we feel connected to some, but not others, can be answered when investigating concepts of homophily. McCrosky, Richmond, and Daly (1975) examined the relationship between students' perceived homophily and internal motivation to communicate with peers. Furthermore, McCrosky et al. (1975) controlled the heterogeneity or diversity between participants in a three-part study that featured a group of participants that were previously acquainted with one another, a group that were strangers to one another, and a group of participants that worked together.

In Phase I of McCrosky's study, participants who were already acquainted with one another were arranged in the same room and were asked questions about how similar they felt they were to the person to their left or right. In addition, participants in all phases of this study were asked to complete a homophily inventory on other participants in question, in which they rated how similar various characteristics of that participant were to theirs within the dimensions of attitude, background, value, and appearance. Findings suggested that participants who perceived others' background, attitude, morality, or appearance as similar to their own, viewed those others as most homophilous to them.

Phase II of this study was initiated in an attempt to replicate the results in phase I by measuring the dimensions of perceived homophily in a group of strangers. Participants were only given information about what percentage each stranger spoke in a group setting. Despite the limited amount of information that participants had regarding these strangers, the construct

homophily was still determined based on the assumptions participants made about strangers' perceived similarity to them in attitude, background, appearance, and presumed values. Participants were also asked to complete the homophily inventory in which they rated perceived homophily between themselves and the other participants in terms of attitude, background, value, and appearance. McCrosky et al. (1975) found that the concept of homophily was based on the same dimensions (background, appearance, morality, attitudes) regardless of whether participants were familiar or unfamiliar with those they rated. These dimensions also appeared to be independent of one another; that is, perceived similarity in attitude was distinct from perceived similarity in appearance. Hence, each contributed in distinct ways to the overall perception of homophily.

Phase III was designed to examine the stability of the results in phase I and phase II. Because perceived homophily has been previously measured in both a population who had previous knowledge of one another and a population that had minimal previous knowledge of one another, phase III was designed to test the dimensions of perceived homophily across less structured populations. Therefore, phase III evaluated perceived homophily between differing groups including teachers, high school students, and college students. Researchers chose these differing sample populations because they hypothesized that dimensions of homophily would vary between groups. For example, the background factor would differ between high school and college students as the high school student sample contains participants mostly from the same geographical area, which is not the case for the college population.

College and high school students were asked to indicate who they would reach out to for information regarding work/school if they were absent, and who they definitely would not reach out to for information. Participants were also asked questions regarding which classmate they

would discuss information related to an upcoming political election, and who they would turn to in their class if they needed advice. This information would provide researchers with insight on what kinds of similarities participants perceived amongst one another, and was then compared to a completed homophily inventory completed in the same manner as in the previous two phases. Phase III verified that appearance, specifically the participants' sex, is a major factor in perceived homophily, as researchers found that women are more likely to feel perceived homophily towards other women, and vice versa. Finally, this study demonstrated how perceived similarities in appearance, background, morality, and attitudes can drive homophily regardless of population.

When researching the concepts of perceived homophily, some researchers believe that there are different levels and types of homophily. A study conducted by McPherson et al. (2001) examined types of homophily through social networks. These independent constructs of homophily include status homophily, value homophily, and network homophily, and are similar to that utilized in the McCrosky et al. (1975) study. Status homophily, similar to that of background homophily, describes perceptions of connectedness through factors that are unchangeable such as race, ethnicity, sex, gender, and age. Value homophily, similar to the morality dimension discussed in the previous study, describes the connection to others based on religion, education, occupation, behavior, and attitudes. Finally, network homophily is when an individual perceives a connection based on mutual friends, networks, or organizational affiliations they have in common with another individual. These concepts of homophily can help us organize the feelings of connectedness one has towards someone, and are important for researchers in understanding the breadth that homophily can have on social connections.

Homophily has a significant impact on social connections, as similarity facilitates connection. With this, researchers strive to explain exactly how homophily impacts one's communication with others. Researchers Myers and Huebner (2011) sought to understand how homophily may be related to how college students interact and connect with their professors by measuring perceived homophily towards their instructors and their motivation to initiate communication with their instructor.

Myers and Huebner (2011) had college students complete scales and surveys regarding the professor's physical attractiveness and credibility, and the students' perceived homophily (i.e., background, attitude) with the professor. They also asked students to indicate their willingness to connect with their professor with questions or to initiate conversation. Researchers in this study originally hypothesized that the students' likelihood of reaching out to their professor would be positively correlated with their perceived homophily towards the professor; however, this hypothesis was only partially supported. Instead, researchers found that the suggested domains of contact between student and professor only correlated with certain types of perceived homophily. For example, the participatory motive of communication was found to correlate with students perceiving professors as sharing similar attitudes (i.e., attitude homophily). In addition, researchers found that students were more likely to communicate with their instructors in an attempt to relate to the perceived background and attitude homophily towards the professor. This suggests that greater perceived attitude and background homophily may be related to increased communication attempts for a variety of intentions (to participate in class, to relate to the instructor, etc.) (Myers & Huebner, 2011).

Based on the above research, greater perceived homophily may influence the company we keep and communication attempts towards an individual perceived as similar to us on

particular dimensions. Attitude, morality, background, appearance, and sex are all considered to be determinants of homophily. Yet, little research exists to explain how one's perception of others as similar may be driven by perceptions of the human voice or adoption of specific vocal behaviors. This information would be especially useful for vocal specialists, speech-language pathologist, or any voice professional because such research could provide evidence to why or how women develop situational GF.

Wishful Identification

While homophily is the extent with which one identifies with another (i.e., a media figure) based on similar characteristics, wishful identification is one's perceived desire to be like an admired other. Homophily is highly and positively associated with wishful identification (Hoffner & Cantor, 1991; Hoffner & Buchanan, 2005). For example, Hoffner and Buchanan (2005) hypothesized that media viewers would report greater perceived similarity towards television (TV) characters who were the same gender. They also hypothesized that TV viewers' perceived similarity would predict their level of wishful identification with the media figure. To examine these hypotheses, they asked participants to indicate who their favorite TV show character was, the race, age, and gender of this character, and how long they had been watching the character on TV. Participants were given scales to determine wishful identification, perceived similarity, and character attributes. This information was collected by issuing participants surveys rated on a 1 (strongly disagree) to 5 (strongly agree) point Likert scale with questions such as "This person has values similar to mine". Participants were also asked to rate the degree to which they believed their favorite character was intelligent, successful, attractive, humorous, respected, popular, and violent.

Findings suggested that participants indicated greater liking and perceived similarity with TV show characters of the same gender, supporting their initial hypothesis. Female participants also showed greater wishful identification with TV show characters who they perceived as smart, successful, and physically attractive. This indicates that wishful identification will typically be greater among individuals of the same gender and/or who are perceived as having desirable qualities. Taken a step further, because viewers are more likely to watch media including a preferred character (Hoffner & Cantor, 1991), wishful identification for that character will be reinforced by repeated exposure. Such repeated exposure may potentially lead to viewers modifying their behavior, attitudes, or appearance such that they become more similar to their favorite characters.

An additional study conducted by Wenhold and Harrison (2019) discovered that adult women (ages 18-20) had similar career goals and aspirations to their favorite TV news personalities (TVNP)s. In turn, greater wishful identification with the TVNP was related to the participant more frequently viewing the personality on social media and other virtual platforms. This study suggests that wishful identification is related to how often media consumers may choose to interact with particular media figures. As previously stated, repeated exposure to a media figure could have implication of alteration of behavior, even at a large scale such as shaping career goals (Wenhold & Harrison, 2019). Further investigation is warranted to help explain how wishful identification and perceptions of desire could influence one to alter their communication habits or vocal register.

Bandura's Social Learning Theory

Another psychological principle that could help explain how the perceptions of individuals could cause us to alter our behavior is through the social learning theory (SLT)

proposed by Bandura (Bandura, 1977). The SLT suggests that humans may imitate a symbolic model (i.e., characters, real or fictional, that a media consumer may interact with in books, movies, TV shows, etc.) who they observe and identify with. Applied to communication behavior, SLT suggests that adults may alter their communication habits to match others who they closely identify or connect with whether in-person or through media interactions.

Perceptions of Glottal Fry

Perceptions of GF amongst media consumers are relevant, because media consumers are influenced by the media figures with whom they interact and consider to have positive or desirable traits. Research on how people perceive speakers who use GF are widely inconclusive, as some research suggests listeners find it both desirable and undesirable depending on study methods (Ligon et. al, 2019). For example, Yuasa (2010) found that speakers who used fry were viewed as more educated and upwardly mobile. In contrast, other researchers have discovered that listeners perceived speakers using high amounts of fry as uneducated and frivolous (Hageman, 2013). Researchers suggest that this inconsistency is not solely because of differing opinions on the use of GF, but instead because of a combination personal and situational features that impact each listener differently. For example, listeners' perceptions of speakers using glottal fry is impacted by the speaker's rate of speech and vocal pitch (Parker & Borrie, 2018). An additional study's findings suggest that, depending on the age of the listener, women who use fry in professional communication situations may be perceived poorly in work force contexts (Anderson, Klofstad, Mayew, & Venkatachalam, 2014). This brief review of perceptions of GF indicates that the impact fry has on listeners is highly situational and contextual, yet simultaneously effects the first impression of the media figure. The impression the media figure

gives can be lasting, as it could influence the media consumer to identify with, and potentially act more similarly to the media figure.

CHAPTER III: RESEARCH DESIGN

This research is a result of data collected for a larger project in Fall 2019. The bigger project examining whether GF use in connect speech changed when listeners were exposed to an audio media speaker using high versus low amounts of GF as well as listeners' perceptions (homophily, wishful identification, vocal pleasantness, desire to listen to the speaker again) towards media speakers with low versus high GF use. Since the current study focuses on the latter, the methods outlined focused on answering only the research questions presented previously in Chapter 1:

1. Do college-age women indicate greater self-reported feelings of connectedness, wishful identification, and background and attitude homophily with an audio media figure who uses a significant amount versus minimal amounts of GF?
2. Do college-age women indicate a greater desire to listen to an audio media speaker again who uses significant versus minimal amounts of GF?
3. Do college-age women perceive audio media containing greater amounts of GF as more pleasant than minimal amounts of GF?

Participants

A group consisting of 40 total participants were notified and invited to participate in the study via a mass email communication system sent to the entire student body at Illinois State University. Participants in this study were women between the ages of 18-25 who were attending classes at Illinois State University during the Fall 2019 semester. Students studying voice or voice-use related majors, such as theatre, vocal music, and communication sciences and disorders were excluded from participation in this study to account for their potentially greater knowledge and attunement to vocal quality and technique. Students were also excluded from

study participation if they failed a hearing screening or scored an 11 or above on the Voice Handicap Index-10 (VHI-10). The VHI-10 quantifies whether the respondent may be experiencing a vocal handicap (Rosen, Lee, Osborne, & Zullo, 2004). Scores of 11 or above may be indicative of a voice impairment. As participants' voice samples were taken and analyzed in a separate portion of this study that will not be discussed in this thesis, the researchers wished to include only vocally healthy subjects.

Media and Questionnaire

1. Media: Participants listened to 1 of 2 four-and-a-half-minute audio clips of a voice actress reading a New York Time's student opinion article (Bergmann, 2018) as if it were a monologue. The actress consciously used GF throughout her recorded reading of the piece for the high GF condition while avoiding fry use as much as possible in the recorded reading for the low GF condition. The original article and subsequently created media recordings, made for the purposes of this study detailed the original author's advice for college students combatting loneliness. Audio was played directly into the sound booth while the participant listened to the media within a free field.
2. Questionnaires/Testing: Participants recorded speaking samples regarding a topic of their choice after listening to high or low GF media intervention in the full version of the study. For the purposes of this study, we will focus on the methods that allowed for measurements related to the core research questions. Gathering data of the participants' feelings of connectedness, impressions, wishful identification, background homophily, and attitude homophily, towards the media figure will allow the research questions

proposed in this project to be investigated and, therefore, answered. Each questionnaire is further described below:

a. Feelings of wishful identification were measured by asking participants if they wish they could be like, do not want to be like, or want to emulate, the media figure via the Wishful Identification Questionnaire. This questionnaire was adapted from Hoffner & Buchanan (2005) and included five statements that were rated in terms of agreement from 1 (not at all) to 5 (very much). The last item was reverse scored. The items were then added together to generate each participant's wishful identification score with the speaker. Each rating was added together across each of the 5 questions. Thus, maximum wishful identification was denoted by scores of 25.

b. The Attitude Homophily Scale and Background Homophily Scale (McCroskey, Richmond, & Daly, 1975) were used to examine how similar each participant felt they were to the speaker in terms of personal attitudes and cultural, socioeconomic background. Both scales include four bipolar items (i.e., thinks like me/does not think like me) with the numbers one through seven between the two ends of the continuum. Thus, participants rated themselves in the middle or closer to the side of the continuum indicating a greater perceived similarity or a greater perceived difference. Numerical items were added together to generate a composite score with higher scores indicating a greater sense of perceived similarity with the speaker's attitude and background, respectively.

c. Finally, participants rated the degree they felt connected with the speaker, how pleasant they believed the speaker's voice was, and how much they would like to

listen to the speaker again on a scale from 1 to 10 with greater numbers indicating more positive perceptions of the speaker. Wording of questions/scaling was based on questions from Borrie's communicative enjoyment scales (Borrie & Delfino, 2017).

Procedure

Upon arrival to the research lab, participants completed a hearing screening. Persons who did not pass the hearing screening discontinued their participation. Participants who fully qualified and consented to participate, were randomized into the low or high fry media condition, and categorized into a low fry listening (LFL) group or a high fry listening (HFL) group. Next, participants were exposed to either a high fry sample or a low fry sample based on their respective randomized group (LFL or HFL). After listening to the high or low GF media, participants filled out questionnaires, presented to them in randomized order via the survey software Qualtrics, about listener enjoyment, wishful identification, and perceived similarity (homophily) toward the media speaker. They also completed a questionnaire before and after listening to the media described above to assess their current emotional state.

Data Analysis

Results were analyzed statistically using Statistical Package for the Social Sciences (SPSS) software. Demographics (age, race, and year in school) were generated via crosstabs descriptive analyses. Group differences were examined between college-age females' self-reported feelings of connectedness with the speaker, desire to listen to the speaker again, impression of the speaker's vocal pleasantness as well as wishful identification, background

homophily, and attitude homophily with the speaker. Two participants were excluded from analysis in the LFL group due to being extreme outliers across several dependent variables (i.e., age, wishful identification, speaker connection). Further by eliminating these two participants, each group had an identical number of participants (20) versus differing amounts per group (i.e., 22 in the LFL and 20 in the HFL group). Group differences were examined via a Mann-Whitney U test due to small sample size and violations of normality across the majority of dependent variables (i.e., desire to listen to the speaker again, perceived connection with the speaker, attitude homophily, and vocal pleasantness). The significance level was set at $p < .05$.

CHAPTER IV: RESULTS

Demographics

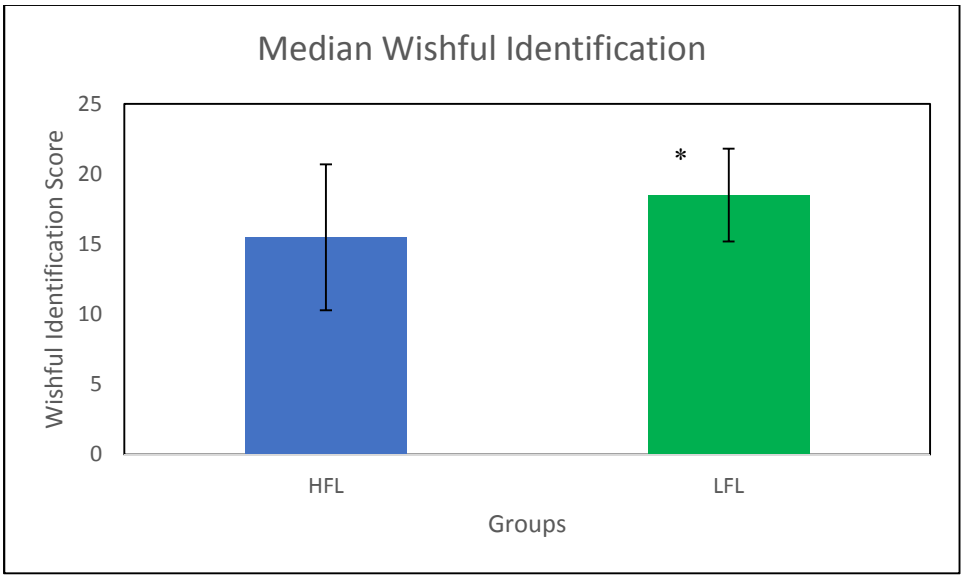
The HFL group's average age was similar to that of the LFL group's average age at 20.90 and 20.85, respectively. No statistically significant difference was found between the age of the HFL (*Mdn*=20.5) and LFL (*Mdn*=20.0) groups U=258, z=1.60, p=.11.

The HFL group consisted of 1 Asian-American participant (5%), 4 Black/African-American participants (20%), 1 Hispanic/Latina Participant (5%) and 14 white/Caucasian participants (70%). The LFL group consisted of 0 Asian-American participants (0%), 0 Black/African-American participants (0%), 3 Hispanic/Latina participants (15%), 1 African participant (5%), and 16 white/Caucasian participants (80%). Thus, the LFL group was slightly less heterogenous than the HFL group. The HFL consisted of 30% graduate students, 15% seniors, 10% juniors, 25% sophomores, and 20% freshman whereas the LFL consisted of 25% graduate students, 25% seniors, 10% juniors, 25% sophomores, and 15% freshman. Thus, the LFL group consisted of slightly more upper division students than the HFL group.

1. **Do college-age women indicate greater self-reported feelings of connectedness, wishful identification, and background and attitude homophily with an audio media figure uses a significant amount versus minimal amounts of GF?**

   Ratings of connectedness to the audio media speaker were not significantly different between the LFL (*Mdn* = 8.5) and HFL (*Mdn* = 8) groups (U = 258, z = 1.60, p = .11). Ratings of background homophily between the LFL (*Mdn* = 19) and HFL (*Mdn* = 16) groups were also not significantly different (U = 257.5, z = 1.56, p = .12). Attitude

homophily ratings were not significantly different between LFL (*Mdn* = 16) and HFL (*Mdn* = 16) groups ($U = 227$, $z = .74$, $p = .46$). The LFL group showed significantly greater wishful identification towards the speaker in their audio sample (*Mdn* = 18.5), than the HFL group did with the speaker in their audio sample (*Mdn* = 15.5) ($U = 276$, $z = 2.06$, $p = .04$).



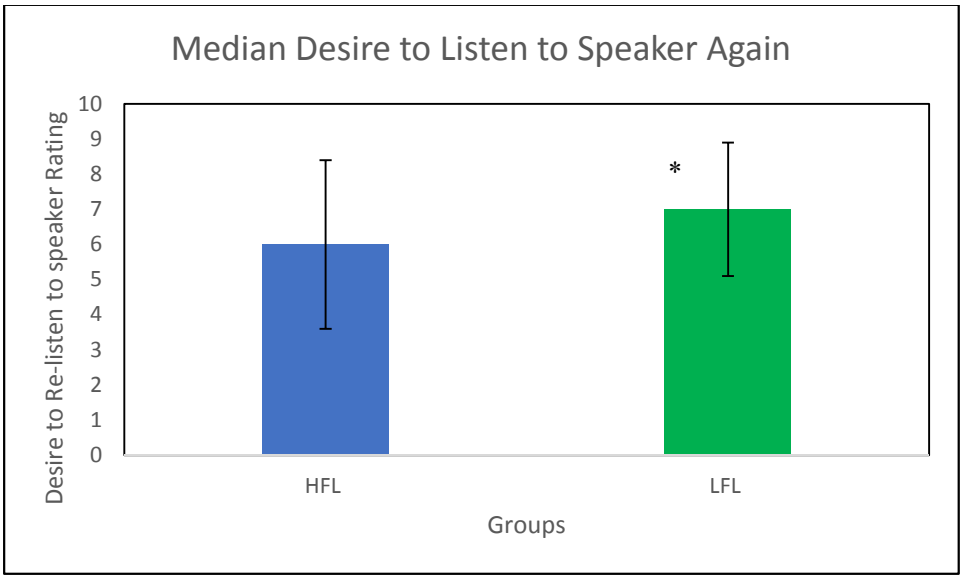
(*$p<.05$)

Figure 1: Wishful Identification

The LFL group's median rated wishful identification with the speaker on the LF audio sample was significantly greater than that of the HFL group with the speaker on the HF audio sample. These results suggest that the LFL group desired to emulate the LF speaker more than the HFL group desired to emulate the HF speaker. Figure 1 presents median wishful identification scores of HFL and LFL groups.

2. **Do college-age women indicate a greater desire to listen to an audio media speaker again who uses significant versus minimal amounts of GF?**

Participants within the HFL (*Mdn* = 6) group indicated significantly less desire to re-listen to the audio speaker when compared to those in the LFL (*Mdn* = 7) group (*U* = 274.5, *z* = 2.04, *p* = .04).



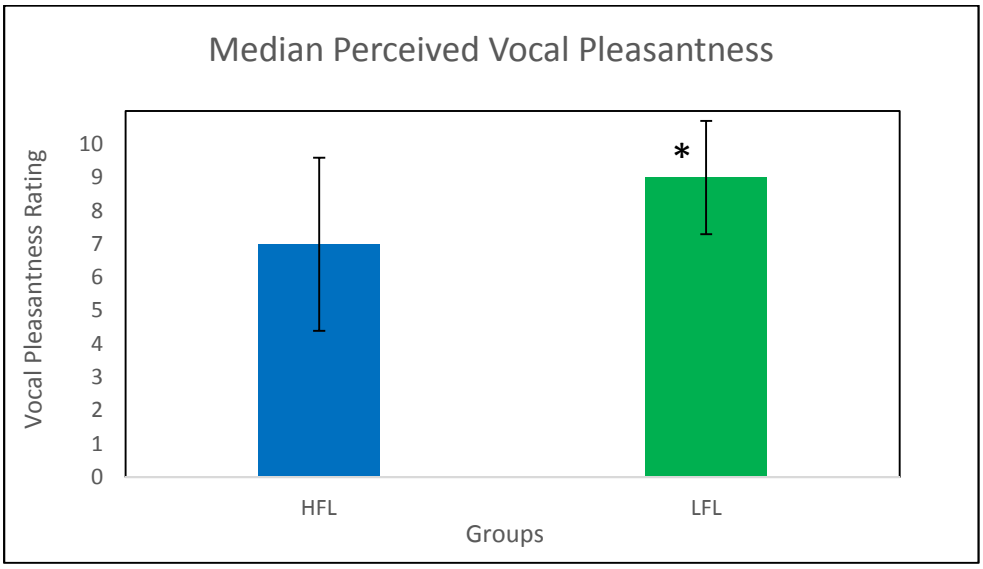
(*p<.05).

Figure 2: Desire to Re-listen to the Speaker

The LFL group's median desire to re-listen to the speaker on the LF audio sample was significantly greater than that of the HFL group's median desire to re-listen to the speaker on the HF audio sample. Figure 2 presents the median desire to re-listen to the speaker rating score of HFL and LFL.

3. **Do college-age women perceive significant amounts of GF as more pleasant than minimal amounts of GF?**

The HFL (*Mdn* = 7) group perceived the HF audio media speaker's voice as significantly less pleasant than the LFL group perceived the LF audio media speaker's voice (*Mdn* = 9; $U = 291.5$, $z = 2.52$, $p = .01$).



(*p<.05).

Figure 3: Vocal Pleasantness

The LFL group's median rating of the pleasantness of the LF speaker' s voice was significantly greater than that of the HFL group's median rating of the pleasantness of the HF speaker's voice. Figure 3 presents the median perceived vocal pleasantness rating score of HFL and LFL.

CHAPTER V: DISCUSSION

Summary of Study

The purpose of this study was to examine whether college aged women's perceptions of homophily, wishful identification, and connectedness with an audio media speaker differed depending on whether the speaker used high versus low amounts of GF. Findings suggested that perceived background homophily, attitude homophily, and connectedness did not significantly differ between the HFL and LFL participants. However, the LFL group rated wishful identification with and vocal pleasantness of the LF speaker significantly higher than the HFL group rated these variables for the HF speaker.

The clinical implications of this study indicate that perceived homophily and wishful identification towards an individual who uses fry may increase interaction with this individual, and could lead to the adoption of an inefficient vocal register.

Connectedness

There were no significant differences between the LFL and HFL group's perceived connectedness with the media speaker. The audio media was only 4.5 minutes which might not have provided listeners with enough exposure to each speaker sample to form different levels of connectedness solely on the basis of vocal quality. It's also possible that vocal quality does not strongly influence listener connectedness with a speaker, rather, emulating the speaker's communication style allows us to feel more connected to the speaker. Borrie and Delfino (2017) found that persons who, consciously or subconsciously, chose to match the characteristics (e.g., vocal quality, intonation pattern) of their speaking partner felt more connection to the speaker,

and enjoyed the conversation more so than participants who did not match the conversational pattern of the speaker. These findings may suggest that connection is not necessarily driven by a preferred vocal quality, but fostered by interaction in which speakers match each other's vocal quality, gestures, and facial expressions. As this study had participants listen to audio media rather than specifically interact with a conversational partner, it remains unclear exactly how connected a college-age woman may feel to a speaker utilizing GF in live conversation.

Wishful Identification

The LFL group noted greater perceived wishful identification with the media figure than the HFL group. In other words, participants desired to become more like the speaker in the LFL group than in the HFL group. Individuals are more likely to wishfully identify with someone they perceive as having positive qualities (i.e., attractiveness, intelligence charisma, etc). Therefore, the LFL group likely viewed the media figure's voice as more attractive than the HFL group. Also mentioned in chapter two, however, is the idea that aspirations may be shaped through wishful identification and vice versa. That being said, it could be that, coincidentally, more people in the LFL group than in the HFL admired the message or aspirations conveyed by the media speaker. These findings could be caused by extraneous variables unaccounted for such as the topic used in the listening task, or distinct differences in HFL group compared to LFL group. These findings may also be attributed to the differences in homogeneity present between the participants within the LFL and HFL groups. However, these findings could also be explained by participants' overall preference for speech with minimal GF. It remains unclear why GF may be considered undesirable by some and not listeners and not others. Researchers Chao and Bursten (2020) believe a combination of factors such as features of one's personal

identity, age, and ethnicity may interact to influence one's like or dislike of the sound of this register. The dislike of GF is often rooted in bias or a personal expectation of what an individual should sound like.

Background and Attitude Homophily

It may have been difficult for listeners within both groups to draw conclusions regarding their perceived levels of background and attitude homophily with the speakers given that not much personal information about the speaker was revealed in the speaking sample. However, McCroskey et al. (1975) noted that background information is not always required when persons judge homophily towards others. Individuals often draw conclusions regarding the background or attitude about others utilizing little-to-no prior information. Thus, a more likely explanation for the current findings may be that vocal quality has minimal impact on ratings of background and attitude homophily. Instead background and attitude homophily may be driven by the content within the speaker's message, which was a constant within both participant groups. Finally, it is possible that the relatively small number of participants within both groups created difficulty in establishing statistical significance. This may be especially true for background homophily; the LFL group indicated feeling more similar in background to the LF speaker than the HFL group felt about the HF speaker, but this difference was not significant. It is possible that a larger sample size may yield additional trends in homophily that could not be captured with only 20 participants in each group.

Vocal quality (i.e., degree of fry) alone may not significantly impact perceived attitude and background homophily. For example, Hutchinson (1982) explored the link between homophily with the perceived vocal quality of newscasters. Participants provided ratings of

background and attitude homophily following exposure to various vocal qualities within multiple videos of news broadcasts. Findings suggested that perceived homophily, based on viewing and listening to newscasters via a television broadcast, was not related to perceptions of the broadcasters' vocal quality. Further, greater amounts of perceived homophily and/or better perceived vocal quality did not impact whether the participants would more consistently watch the newscaster. Thus, this study may lend support to the idea that perceptions of vocal quality do not significantly impact perceptions of homophily and that media consumption may not be meaningfully shaped by perceptions of vocal quality.

Vocal Pleasantness and Desire to Listen to Speaker Again

Results showed that vocal pleasantness was rated significantly higher in the LFL group compared to the HFL group. Similar findings in the current study were shown for desire to re-listen to the speaker, as participants suggested they would rather re-listen to the speaker of the LFL group than the HFL group. Research suggests that desirability, although slightly different than what was measured within this study, is directly influenced by physical attraction (Dion & Walster, 1972). Feelings of attraction in others are usually related to positive feelings about that individual. Researchers in the area of vocal attractiveness, which can influence an individual's desire to re-listen to a speaker, have found similar results. For example, in a study conducted by Zuckerman and Sinicropi (2011) found that perceptions of greater physical attraction and vocal attraction correlated with positive feelings towards subjects in the study by asking participants to rate the physical attractiveness, personality, vocal attractiveness, and face-to-voice matching on several human subjects. Furthermore, participants' rated individuals in the study negatively if perceptions of vocal attraction and physical attraction did not match, (e.g.. individual viewed as

physically attractive but not vocally attractive). In relation to this study, ratings on vocal attractiveness are more nuanced as participants did not receive information on the physical characteristics of the speaker. Addition of visual stimuli within this study may have altered the results in relation to participants' desire and perceptions related to the audio media speaker, although results of the current study still indicate that listeners would rather re-listen to an audio media sample containing no or minimal amounts of GF.

More recent studies have sought to better understand the complexity of vocal attractiveness, and if or how exactly it relates to perceived desirability (Babel, Mcguire, & King, 2014). For context, desirability is a longing for something or someone, while attractiveness is related to the appeal of a specific quality (e.g. a person's voice). In a study conducted by Babel et al., (2014), both male and female participants were asked to rate the vocal attractiveness of various other participants. Researchers found that both participants rated voices similarly. In contrast to the study conducted by Babel et al., (2014), this study did not include visual components and thus, did not examine physical attractiveness and how it may relate to vocal attractiveness. Without visual cues, vocal attractiveness was likely based on a variety of factors including the speaker's expected age, vocal health, adherence to speech-language norms, and pitch. In other words, media samples including a youthful voice, a healthy voice, a normal voice, and a typical pitch, are likely to be perceived as more vocally attractive to participants. For example, research conducted by Anderson et al. 2014 found that listeners who were exposed to speakers using high amounts of GF perceived them as less employable, attractive, and trustworthy than speakers using low amounts of GF. In relation to the current study, where concepts of vocal attractiveness could be compared to vocal pleasantness, higher ratings of vocal pleasantness in the LFL group may be attributed to participants in the HFL group perceiving the

audio sample containing fry as non-conforming to speech-language norms, or even vocally unhealthy.

It is also possible that participants in this study viewed glottal fry as abnormal for midwestern speakers, as the HFL sample contained very high amounts of glottal fry. Glottal fry has previously been associated with a "valley girl" register and a subpart of a Californian dialect (Yuasa, 2010). In addition, the socioeconomic status of the participants may impact the way they view glottal fry as a speaking register. Yuasa 2010 reiterates that glottal fry is thought to be an upwardly mobile speaking register. Depending on the socioeconomic status of the participants, participants may or may not want to engage with a speaking register that they view as upwardly mobile.

Conclusion

The aim of this study was to explore the relationship between college-aged women's perceived background homophily, attitude homophily, wishful identification, and connectedness with a speaker using high or low amounts of GF. Further, this research investigated participants' ratings of vocal pleasantness and desire to re-listen to a speaker using high versus low amounts of GF. While, it has been previously suggested that young college-age women may perceive GF an attractive voice quality (Yuasa, 2010), our findings suggest the opposite, and are more aligned with findings of Anderson et al. 2014 findings regarding the overall dislike of GF within their participants.

Although attitude homophily, background homophily, and connectedness to the audio media sample did not significantly differ between the LFL and HFL groups, wishful

identification, vocal pleasantness, and desire to re-listen to the speaker were all significantly greater in the LFL group. Thus, college-age women who encounter audio media, may demonstrate a preference for minimal glottal fry and also be less likely to want to emulate persons who use this register regularly. Thus, while scholars may suggest that media figures using glottal fry are influencing young college-age women' adoption of this register (Hoffner & Buchanan, 2005; Yuasa, 2010; Borrie & Delfino, 2017), the findings in this do not support this assertion. Instead, the adaptation of glottal fry as a vocal register are highly nuanced, and depends on the social context of the listener and speaker. Furthermore, perceptions of glottal fry, whether positive or negative, are also nuanced. This can depend on the background, age, and social context on the listener and speaker as well, however, negative perceptions of glottal fry use are often rooted in bias.

Future Directions

Future research should include a larger sample size to improve statistical power and reduce the likelihood that extraneous variables might unduly influence results. Furthermore, while research on how GF is perceived is highly varied, much of that research focuses solely on white, arguably upwardly mobile, individuals (Yuasa, 2010). Minimal research has been conducted on how other races and ethnic groups interact with glottal fry as a vocal register, therefore, generalization of how young women as a whole perceive this inefficient vocal register cannot be made. Also, limited research exists to explain how persons of other races, cultures, gender identities, sexual orientations, or dialects perceived attitude homophily, background homophily, wishful identification, connectedness, and vocal pleasantness for speakers using HF

versus LF. In order to get a more universal, generalized grasp on perceptions on fry as a vocal register, further research is warranted in this area.

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APPENDIX A: WISHFUL IDENTIFICATION QUESTIONS

1. Rate the degree to which the following statements describe your feelings about the speaker from 1 (not at all) to 5 (very much) - She is the sort of person I want to be like myself
2. Rate the degree to which the following statements describe your feelings about the speaker from 1 (not at all) to 5 (very much) - I wish I could be more like her
3. Rate the degree to which the following statements describe your feelings about the speaker from 1 (not at all) to 5 (very much) - She is someone I would like to emulate
4. Rate the degree to which the following statements describe your feelings about the speaker from 1 (not at all) to 5 (very much) - I'd like to do the kind of things she does
5. Rate the degree to which the following statements describe your feelings about the speaker from 1 (not at all) to 5 (very much) - I would NEVER want to act the way she does

APPENDIX B: BACKGROUND HOMOPHILY QUESTIONS

1. Has different status from mine: Has status like mine (1= has different status, 5=has very similar status)
2. Is from a different social class: (Is) from the same social class (1= is from a different social class, 5= from the same social class)
3. Is culturally different: Is culturally similar (1=is culturally different, 5=is culturally similar)
4. Has an economic situation like mine: Does not have an economic situation like mine (1=has an economic situation like mine, 5=does not have an economic situation like mine)

APPENDIX C: ATTITUDE HOMOPHILY QUESTIONS

1. Is like me: Is unlike me (1=is like me, 5=is unlike me)
2. Is different from me: Is similar to me (1=is different from me, 5=is similar to me)
3. Thinks like me: Does not think like me (1=thinks like me, 5=does not think like me)
4. Doesn't behave like me: Behaves like me (1=doesn’t behave like me, 5=behaves like me)

APPENDIX D: BORRIE & DELFINO'S MODIFIED LIKEABILITY RATING SCALE

On a scale from 1 to 10, with 1 = Not at all, 5 = Neutral, and 10 = Completely, please rate the following questions regarding your most recent interaction.

1. How much would you like to hear X again?

   1 2 3 4 5 6 7 8 9 10

2. How well did you feel you connected with X, considering you had never met them before?

   1 2 3 4 5 6 7 8 9 10

3. How pleasant was the speaker's voice?

   1 2 3 4 5 6 7 8 9 10