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Deaf/Hearing Research Partnerships

Ju-Lee A. Wolsey, Kim Misener Dunn, Scott W. Gentzke, Hannah A. Joharchi,
M. Diane Clark



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DEAF/HEARING RESEARCH PARTNERSHIPS

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EAFF INDIVIDUALS typically are seen through the lens of the dominant hearing society's perception, i.e., that being deaf is an impairment. Today, a small but growing number of Deaf and hearing researchers are challenging this perception. The authors examined perceptions of what components are necessary for a successful Deaf/hearing research partnership, and propose that it is essential for Deaf and hearing researchers to embrace a Deaf epistemology. The authors found that a core category of equity is the key to effective teams. This equity is based in part on the mutual understanding that American Sign Language is the lingua franca of the team, as it provides full and easy access between Deaf and hearing team members. Additionally, a transformative paradigm, as a research frame, was found to be necessary to focus on leveling the playing field for Deaf researchers.

**JU-LEE A. WOLSEY, KIM
MISENER DUNN, SCOTT W.
GENTZKE, HANNAH A.
JOHARCHI, M. DIANE CLARK,
AND THE CSEDL TEAM**

WOLSEY IS A DOCTORAL STUDENT, DEPARTMENT OF DEAF STUDIES AND DEAF EDUCATION, LAMAR UNIVERSITY, BEAUMONT, TX. DUNN AND GENTZKE ARE DOCTORAL STUDENTS, DEPARTMENT OF EDUCATION, GALLAUDET UNIVERSITY, WASHINGTON, DC. JOHARCHI IS A DOCTORAL STUDENT, DEPARTMENT OF PSYCHOLOGY, GALLAUDET UNIVERSITY. CLARK IS PROFESSOR AND CHAIR, DEPARTMENT OF DEAF STUDIES AND DEAF EDUCATION, LAMAR UNIVERSITY. THE CSEDL (CRITICAL STUDIES OF EDUCATION OF DEAF LEARNERS) TEAM IS BASED IN THE DEPARTMENT OF EDUCATION, GALLAUDET UNIVERSITY.

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Intersectionality is an “analytic approach that simultaneously considers the effects of multiple categories of social group membership (e.g., race, class, and gender)” (Cole, 2008, p. 444) to help deconstruct identity and social hierarchies. This concept includes notions of power and privilege, as these notions must be understood if cross-boundary alliances are to be created. This deconstruction of privilege allows one to understand *earned* versus *unearned* privilege. Earned privileges focus on an individual's skills, talents, and hard work: for example, the right to be addressed as “Doctor” after earning a PhD, or money earned from one's own work. Unearned

privileges are conferred, based on “accidents of birth” (Pease, 2010). White privilege, hearing privilege, and male privilege are examples of unearned status that is conferred on the basis of one's biology.

Unpacking unearned privileges is often difficult because these privileges are unmarked (e.g., White or male), in contrast to marked categories (e.g., Black or female). The concept of marked versus unmarked is discussed by Moore (1976) in his classic book *Racism in the English Language*. The insidious impact of unearned privileges is that those in the privileged class tend to be unaware of their privilege, a situation that leads to a perpetuation of privilege. To move toward a level playing field, one must be self-reflective, which tends to result in a move toward

social justice. Intersectionality is an attempt to frame these issues and allow them to be openly discussed, with the goal of finding equitable solutions.

In Deaf/hearing alliances, researchers must be aware that their unearned privileges influence how they view the world; this idea is referred to as *positionality*. Understanding intersectionality provides the basis for a Deaf/hearing research partnership, so that often-overlooked strengths can be optimized, instead of hidden or minimized.

Research Paradigms

Mertens and Wilson (2012) discuss four major paradigms found in research and evaluation: *postpositivist*, *constructivist*, *pragmatic*, and *transformative*. Each paradigm is associated with traditional methods. Researchers who apply the postpositivist paradigm typically use quantitative designs and statistical analyses of data. The constructivist paradigm typically focuses on qualitative designs, while the pragmatic paradigm typically includes mixed methods (both quantitative and qualitative designs). The pragmatic paradigm leads to the transformative paradigm, which focuses on the viewpoints of marginalized groups and the advancement of social justice and human rights while challenging systemic power structures. This transformative paradigm emerges from the dissatisfaction of marginalized communities about how they have been viewed by the dominant culture (Mertens, 2015). Therefore, critical theories such as Critical Race Theory (Ladson-Billings, 1998), Queer Theory (Jones & Calafell, 2012), and Disability and Deaf Rights (Harris, Holmes, & Mertens, 2009), among others, have contributed to the transformative paradigm. These critical theories and the transformative paradigm are concerned with issues of power and justice (Mertens, 2015). Therefore, this transformative paradigm offers a meta-

perspective to challenge systems of unequal power. This paradigm demands an ethical stance of respect and beneficence, as a focus for social justice. Finally, the transformative paradigm assumes that reality is multifaceted and is influenced by the positionality of the person. From the perspective of other, more traditional paradigms, one might suggest that this paradigm is limited; rather, it is an alternative paradigm that provides an emic perspective in the research design.

The Transformative Paradigm

The transformative paradigm was an important component of the belief system of the team of Deaf and hearing researchers who conducted the present study. Therefore, from this framework, the rationale for research or knowledge creation is to improve society (Mertens, 2003). In the theoretical and methodological stance known as DeafCrit (Valente, 2011), the emphasis is on empowering Deaf people with knowledge and giving them “voice.” Therefore, this research must be both practical and collaborative, and related to the motto *Nothing About Us Without Us* (Charlton, 1998). The transformative paradigm provides a guide for discussing ownership, integrating views, and understanding data. It also requires that researchers analyze and understand their own positionality in terms of their audiological status. This in-depth analysis of one’s positionality makes irrelevant the differences between various audiological positionalities, as mutual respect, an understanding of power, and the creation of allies are the result of these self-analyses.

Applications of the Transformative Paradigm

Benedict and Sass-Lehrer (2007) and Harris, Holmes, and Mertens (2009),

as well as Boland, Wilson, and Winiarczyk (2015), have applied the transformative paradigm to working as collaborative teams of Deaf and hearing researchers. Members of these collaborative teams focused on equity and challenged the majority power groups’ privilege. These challenges inevitably benefited minority, oppressed, and marginalized groups. Benedict and Sass-Lehrer (2007) worked on improving early interventions provided to Deaf infants, especially those with hearing parents who needed more information. Their common goal of improving these infants’ lives led them to not only build on earlier mentoring experiences but on common life interests to work in an area of the field that can be highly controversial. Harris et al. (2009) focused on developing research ethics from a Deaf perspective and providing a framework that was more inclusive. Harris et al. (2009) moved “outsiders” to status as “insiders” for a more in-depth and accurate understanding. Boland et al. (2015) worked in the area of international development with Deaf individuals. Two Deaf members of the Boland team found that when they came to poverty-stricken Deaf communities, the local Deaf people responded, “DEAF, DEAF, SAME.” This perception from the Deaf members of the community opened gates for the Deaf researchers that the hearing researcher needed to work harder to open. Boland’s team found that this combination of their own etic and emic status, in conjunction with a position straddling the insider-outside dimension, provided rich and important information leading to the creation of effective programming for the community. These three groups of researchers focused on the importance of having common interests, being advocates, and considering the values of the groups who were included in the research. This framework is in contrast

to the traditional scientific perspective of objective, neutral observers, who analyze data from the black box.

Here we are not discussing all people who have a hearing loss; rather the focus is on culturally Deaf individuals. Given this focus, we identify with the phrase *Nothing About Us Without Us* (Charlton, 1998). This phrase has shown up recently in disability studies and is being applied in DeafCrit as well (Valente, 2011). It captures our understanding about research related to culturally Deaf¹ individuals and their experiences, knowledge, and beliefs. “Deaf people view themselves differently from how hearing people perceive them” (Hauser, O’Hearn, McKee, Steider, & Thew, 2010, p. 486), seeing themselves as differently able, not as “broken” (Andrews, Ferguson, Roberts, & Hodges, 1997; Andrews & Mason, 1991; Clark, 1991; Humphries, 2004; Kuntze, 1998; Thumann-Prezioso, 2005). Interestingly, recent findings suggest that being Deaf provides many benefits (i.e., Deaf Gain) to the Deaf community (Bauman & Murray, 2009). Additionally, adaptations for Deaf people benefit the general population; for example, closed captions benefit everyone and are now required by North American law to be built into every television set. Our goal was to explore dialogues and interactions as we embarked on discovering what makes a strong Deaf/hearing partnership in the field of Deaf scholarship. We embrace the belief that a Deaf epistemology leads to efficient collaboration among different communities (Hauser et al., 2010).

Intersectionality and the transformative paradigm tend not to follow traditional scientific paradigms. Rather, these frameworks point out that privilege benefits unmarked groups while hindering marked groups. Therefore, in understanding why Deaf people are underrepresented in research, espe-

cially in the science, technology, engineering, and mathematics (STEM) fields (National Science Foundation, 2007), one needs to critically evaluate the reasons that lead to this situation. Critical theory, which includes the voices and experiences of marginalized groups (Yosso, 2005), questions whether untested assumptions actually shape how knowledge is defined (Crawford & Marecek, 1989), and relates this to underrepresentation in the STEM fields.

One necessary component of this type of collaboration is the presence of Deaf professionals (Benedict & Sass-Lehrer, 2007). Benedict and Sass-Lehrer (2007) described many of their experiences working together to improve Deaf education, beginning with their PhD advisee mentoring relationship. Many instances of insensitivity and misunderstanding are shared in their work, and it is their belief that these lead to misperceptions of Deaf children’s abilities. One example focused on an interaction that Beth Benedict had at a Deaf education conference. At that meeting, a hearing attendee ended her attempts to communicate with Benedict after realizing she was Deaf. This type of insensitivity seemed shocking, and Benedict and Sass-Lehrer pose the question of “whether . . . a blind adult attending a conference on the education of children with visual impairments would be similarly disregarded” (p. 277). These experiences at conferences, as well as in the topics published in major educational journals, lead them to state that “hearing dominance” has polarized the field of Deaf education. Their belief is that if Deaf people were involved from the beginning, then the bias toward hearing dominance could be resolved.

Additionally, Kuntze (1998) proposed that Deaf children learned to read by using American Sign Language (ASL) as a bridge to English, rather

than the other way around, as typically believed. At a start-up meeting of the Science of Learning Center on Visual Language and Visual Learning (VL2), he challenged the team to focus on successful Deaf readers. After all, if the average reading level was fourth grade, at least 50% of the group was reading *above* that level. Many Deaf individuals obtain university degrees, including doctoral-level degrees. These postsecondary achievements require sophisticated reading and analytic strategies. In light of this, an important question becomes *What is the impact of dissertations by Deaf scholars?* Unfortunately, this research has a limited impact because most of these dissertations are never published (Andrews, Byrne, & Clark, 2015). What decreases Deaf scholars’ likelihood of getting published is access to scientific networks and the publishing processes necessary to rewrite the dissertation, submit it to a journal or book publisher, and have the manuscript accepted (Braun, Gormally, & Clark, 2015).

Deaf people are aware that they take a visual stance and that it is a highly effective way to thrive, think, learn, and communicate. Deaf culture provides strategies for navigating the hearing world (Hauser, 2015; Holcomb 2013), but Deaf people often cannot obtain access to scientific networks because they have limited access to mentors who can provide them with linguistic, aspirational, or navigational capital (Listman, Rogers, & Hauser, 2011; Yosso, 2005). Such mentors would otherwise provide information on how to get the resources needed to develop networks, attend conferences, or be published in peer-reviewed journals. Few graduate schools include programs with direct communication in ASL; this lacks adds to the effort needed to get access to course work and limits interaction with colleagues

in social networks. The Deaf members of our team have had a different experience when going to conferences than those who are hearing. As ASL/English bilingual Deaf individuals who use ASL, these scholars have to initiate contact with the sponsoring organization(s) and ask for ASL interpreters. Deaf individuals are often required to inform conference planners weeks in advance which sessions they want to attend. Once they are at the conference, they are often unable to change or revise this predetermined schedule, whereas hearing colleagues can easily decide to attend a different workshop or session at the last minute. ASL interpreters are rarely provided for informal networking opportunities at most conferences, which limits Deaf attendees' ability to benefit in the same way as the hearing attendees at these meetings. To counter these types of privilege, Deaf epistemology can facilitate collaborations among Deaf and hearing researchers.

Deaf Epistemology

Contexts of learning vary for each individual, regardless of whether someone is Deaf or hearing. These contexts include one's schooling, parental hearing status, one's language and communication modality preferences and/or those of his or her parents, the etiology of audiological status, and the use of assistive technology (e.g., hearing aids or cochlear implants). These experiences shape who individuals become and how they view the world. Epistemology is the formal framework for how people view their world and is defined as a way of knowing, which develops from these contextual experiences.

One of the core questions that underlie the building of a successful bilingual Deaf/hearing partnership is how one understands Deaf epistemology. For over 50 years, scholars and researchers in Deaf education and Deaf

studies have engaged in defining, debating, and defending Deaf epistemology. The views that have undergirded and grown out of these activities have enabled an understanding of how Deaf individuals navigate through their world and interact with the majority—that is, the hearing world (Hauser et al., 2010; Holcomb, 2010; Ladd, 2003; Paul & Moores, 2012).

Deaf individuals learn to be bicultural or multicultural, as do African Americans, women, and all members of marginalized groups. For example, African Americans use different registers in formal contexts, Gay men often change their linguistic registers, and Deaf people know how to navigate the hearing world. These experiences develop an individual's three epistemological aspects of knowledge: belief, truth, and justification. Deaf epistemologies situate Deaf people as visual learners who may organize their brains differently, and for the majority of whom sign language is the natural and visual language (Moores, 2010). Given this basis of epistemological development, Deaf epistemology is often viewed as insufficiently scientific (Holcomb, 2010), as it was developed from testimonies from Deaf people. Again, one sees the impact of the traditional scientific method, focusing on observable, replicable, and neutral evidence, rather than more qualitative subjective perspectives.

Deaf epistemology is different from what many hearing people think of as true or factual about Deaf people. Hearing people often report that they have never met a Deaf person or are unaware of having interacted with a Deaf person until they became the parents of a Deaf child (Benedict, 2013). Therefore, they have never met a successful Deaf adult who functions using ASL, and often rely on the perceptions of the medical profession, which tends to focus on a dysfunctional auditory

system. This perspective leads research and research dollars to be invested in assistive technology and using traditional teaching methods that are best suited to auditory input. This focus is understandable if one is only aware of hearing people, who tend to be highly auditory. From this viewpoint, there is a clear need to "fix" deaf people's hearing. In contrast, Deaf epistemology is focused on visual access, visual learning, and visual language.

Deaf epistemology argues that the quality of Deaf education can be improved only when Deaf individuals' beliefs and worldviews are acknowledged (Holcomb, 2010; Humphries, 2004; Nover, Andrews, Everhart, & Bradford, 2002; Thumann-Prezioso, 2005). In contrast, published research (Luckner & Handley, 2008; Mayer & Leigh, 2010; Traxler, 2000), which finds that Deaf children continue to lag behind their hearing peers, tends to use the standard epistemology, as preferred in schools. Data show that when educators, policymakers, and administrators are influenced by a Deaf epistemology, Deaf students perform at higher levels (Nover et al., 2002). Nover et al. (2002) found that 542 students who had teachers trained in bilingual pedagogy performed at higher levels than the national norm of Deaf students on standardized tests of both English vocabulary and English language. Nover et al. also found differences between Deaf children of Deaf parents and Deaf children of hearing parents. Additional important differences were found in visual attention and eye gaze behavior between Deaf and hearing teachers. While visual and tactile signs were used by a Deaf teacher to establish visual attention before signing, hearing teachers did not use these strategies (Hauser et al., 2010). This use of non-verbal cues to direct visual attention and eye gaze has an impact on Deaf

students' learning. Deaf individuals born to hearing families (Singleton & Crume, 2010) arrive at school needing to develop visual attention skills by being provided with more linguistic and physical prompts (Hauser et al., 2010). This behavior is in contrast to that of Deaf children in signing Deaf families, who arrive at school already understanding how to engage in joint visual attention (Singleton & Crume, 2010). This difference in school preparedness is an implicit confirmation that parents' epistemologies have an impact on the learning outcomes of their children, suggesting that a Deaf epistemology is more effective for visually focused Deaf children.

In summary, the research suggests that a bilingual research team of Deaf and hearing researchers brings a wealth of knowledge and experiences, as well as the understanding that there is a need to apply Deaf epistemology, in order to create accurate knowledge. For all of these reasons, our team decided to directly communicate with faculty and students from a PhD community to invite them to participate in providing data to obtain a broader-based understanding of how to develop effective Deaf/hearing partnerships.

Research Question

The present study focused on gathering and understanding qualitative data to respond to the research question: *What are the necessary components of a successful Deaf/hearing research partnership?*

Method Participants

The present study took place at a federally chartered private ASL/English bilingual university in a large metropolitan city in the northeastern United States where the majority of undergraduate and graduate students who attend are Deaf or hard of hearing.

ASL is the primary language for face-to-face interactions, with English as the language of written information for both students and faculty.

Participants' ages ranged between 25 and 64 years. Demographic attributes of the participants are shown in Table 1. Seven participants (2 males, 5 females) began this project in one of two research courses. After the completion of course work, those from the class were motivated to continue this discussion; therefore, all faculty and students in the university's Critical Studies in the Education of Deaf Learners (CSEDL) program were invited to join the team and contribute their ideas to this effort. The final group of participants included 2 faculty members (one Deaf and one hearing) and 12 doctoral students (8 Deaf and 4 hearing) from the CSEDL program.

Given a Deaf epistemology, it was previously mentioned that participants' audiological status is not relevant. A transformative paradigm places the focus on marginalized groups; in adopting this paradigm, dominant group members must "unpack" their privilege. They then recognize their unearned status, rejecting this privilege. For example, Bauman (2015)

comments that he was "born hearing" at the age of 21; this awareness developed when he recognized his audiological status of "hearing" when working as a dorm counselor at a school for the Deaf. This awareness confirmed his unearned privileges related to this hearing status. Therefore, faculty and students in the CSEDL program have worked through this transformative period and adopted a DeafCrit perspective on the systems involved in maintaining hearing privilege.

Procedures

The 14 participants responded to the question *How do you develop a bilingual team of researchers who are Deaf and hearing?* The length of the typed summaries ranged from one page to no more than two pages, and they were posted online through Blackboard. Summaries were based on what participants thought was necessary for a successful research partnership, which was reviewed and analyzed to find common themes. Data were coded to maintain participants' confidentiality. No differences were found between the comments collected in class and those collected outside class via e-mail. This group was homoge-

Table 1
Demographic Characteristics of the Study Participants ($N = 14$)

Attribute	Status	Students ($n = 12$)	Faculty ($n = 2$)
Gender	Male	4	0
	Female	8	2
Age (years)	25–34	4	0
	35–44	6	0
	45–54	2	1
	55–64	0	1
Hearing status	Deaf	8	1
	Hearing	4	1
Race/ethnicity	White	5	2
	Asian	3	0
	African American	2	0
	Hispanic	2	0
Citizenship	U.S.	9	2
	Other	3	0

neous in the sense that all of the participants were in the same doctoral program and all of the faculty were in the same university department of education.

Data Analytic Plan

Data were analyzed by means of a grounded theory approach with the method of constant comparative analysis (CCA; Fram, 2013). CCA was used to review and analyze interview responses to reduce the data in order to find emerging themes, which were compared to other interview responses. Forms of data analysis included the systematic model of Corbin and Strauss (1990), which was used to collect, review, and identify shared themes (open coding), review and categorize themes (axial coding), and determine the overarching theme (core category). To ensure the credibility and trustworthiness of participants’ responses, member checks were used. The research team made the data analysis available on Google Drive (an online file storage and synchronization service created by Google); this gave participants the ability to review the analysis. Therefore, a thematic analysis was reviewed by the majority of participants in class and outside class via e-mail and Google Drive.

Results

CCA Analysis

During the three-step analysis, open coding identified eight shared themes from the interview responses to explain what components or characteristics were required to develop a bilingual team of Deaf and hearing researchers. No thematic differences were noted between faculty and students, most likely due to the shared common goal of improving Deaf education through the lens of critical pedagogy. Themes identified included *ASL/English bilingual competency*,

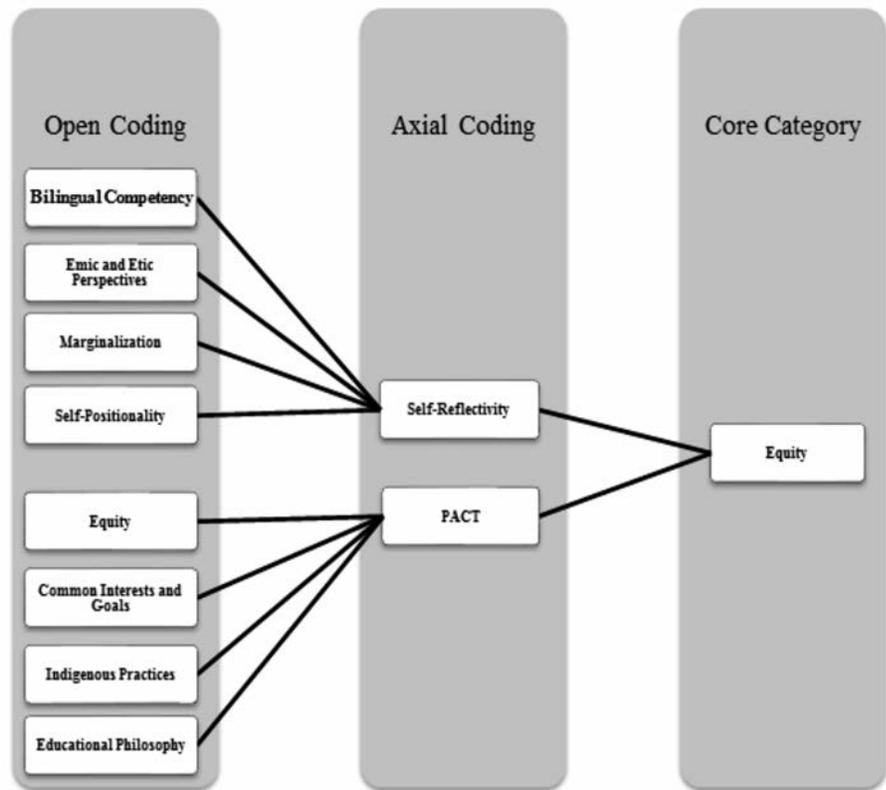
emic and etic perspectives, marginalization, self-positionality, equity, common interests and goals, indigenous practices, and educational philosophy. These interconnecting themes were reduced during axial coding to determine two categories of larger themes: (a) self-reflectivity and (b) power, action, collaboration, and transformation (PACT). The category of self-reflectivity included four themes. These were ranked from most important to important: *ASL/English bilingual competency, emic and etic perspectives, marginalization, and self-positionality*. The second category of PACT included the other four themes, also ranked from most important to important: *equity, common interests and goals, indigenous practices, and educational philosophy*.

These themes were synthesized to determine the core category, *equity* (see Figure 1).

Core Category

The core category, *equity*, was found to be the overarching theme that was mentioned across all themes, as to what was needed to develop a strong and positive bilingual team of Deaf and hearing researchers. The emerging themes provided pertinent characteristics that were essential before a Deaf/hearing partnership could be established. Participants shared that equal access to a visual language and culture (i.e. having *ASL/English bilingual competency*) set the bar for open communication and equal collaborative partnership. Having mutual respect and common research goals, acknowledg-

Figure 1
Visual Model of a Successful Bilingual Team of Deaf and Hearing Researchers



Notes. PACT = power, action, collaboration, and transformation. CSEDL = Critical Studies of Education of Deaf Learners.

ing each individual's strengths and weaknesses, and understanding diverse perspectives and experiences were also critical components. When researchers reflected on their position as a Deaf or hearing researcher and acquired a deeper understanding of marginalized groups (e.g., of the experiences of oppression and audism²), they were able to transform and provide action. When researchers provided equity and equal access, a vibrant and healthy Deaf/hearing partnership was established, with no power struggles or inequality.

Axial and Open Coding Self-Reflectivity

The first category, *self-reflectivity*, focused on the importance of researchers reflecting on their willingness to understand their purpose and interest, as a Deaf or hearing researcher, in a bilingual team. Self-reflectivity provided an understanding of their biases. Emerging themes demonstrated specific components necessary for establishing a strong and healthy partnership between Deaf and hearing researchers.

The first theme, *ASL/English bilingual competency*, was used to describe the importance of researchers being competent and knowledgeable in a visual language and valuing Deaf culture. Participants ranked this theme as the most important asset, as communication is paramount in any collaborative research; however, it is even more important in a Deaf/hearing partnership. Being fluent in ASL (as a minority language) as well as English, and sharing Deaf cultural knowledge removed communication barriers and oppression that had been experienced by the majority of Deaf researchers. Participants shared that in order to develop rapport and a solid partnership, Deaf and hearing researchers needed to analyze their communication and cultural competencies, as well as their role and position with different cul-

tural identities, before being part of a language-rich bilingual research team. Not only was adopting a cultural perspective rather than a medical view critical, but having the ability to continue to learn about one's culture and language kept the doors of dialogue open. One participant commented that one must be "baptized with Deaf culture." Deaf and hearing researchers should already have the skill and knowledge to begin collaborating to avoid communication and cultural barriers. Being bimodal bilinguals and understanding cultural differences was the key to establishing a barrier-free collaborative research team. The following quotes show the importance of ASL/English bilingualism to the participants.

In order for a Deaf or hearing researcher to work in partnership and create mutual collaborations, they should have the following skills, dispositions, and knowledge such as: fluency in ASL and English (bilingual proficiency) or near proficiency.

I definitely see a large need for partnerships between bilingual hearing and Deaf people in conducting research with Deaf and hard of hearing children.

The second theme, *emic and etic perspectives*, focused on the insider (emic) and outsider (etic) views of the researcher. Participants shared that the emic perspective was felt to be missing from much of the research with Deaf people. Deaf researchers experienced different challenges as a minority group whose members were often overlooked or not included. Findings indicate that hearing researchers need to be culturally sensitive to the needs of Deaf researchers by including their views, knowledge, and experiences. From an etic perspective, strong col-

laborations and dialogues were important between Deaf and hearing researchers, the participants said, allowing them to gain insights and perspectives from different angles to understand how to approach system change. By understanding language, cultural, educational, and social differences related to marginalized groups, participants had the skills to examine their own biases. One participant shared, through her interactions with a professor and her peers at the university, that while her professor did research on immigrant families and was not fluent in the family's primary language, she had undergraduate students assist her with interviewing immigrant families in their native language. This example parallels the need to conduct research about Deaf individuals by having Deaf researchers partner with hearing researchers.

The third theme, *marginalization*, looked at the importance of understanding oppression as well as understanding the need to let go of one's own privilege (i.e., understanding hearing privilege). One participant felt that it was "essential to revisit one's positionality if one was to truly cooperate with each other. What kind of privileges did the researcher practice? What kind of privileges must be shared in order for cooperation to occur?" Another participant said,

Hearing privilege must be unpacked. That will create an understanding of diversity and how deaf people can contribute to the good of the overall society. After all CCs [closed captions] are not only used by Deaf people. APD [auditory processing disorder] people can benefit as well [as] many others.

The last theme, *self-positionality*, described the ability to think critically. Understanding Deaf commonalities

worldwide to celebrate both underlying common strengths in conjunction with the wide diversity within Deaf communities was mentioned in recognition of the rich diversity within Deaf cultures. It was also said that a willingness to come out of one's comfort zone is required to participate in a Deaf/hearing partnership. An ability to laugh at oneself and be comfortable in uncomfortable situations helps when cultural boundaries are being crossed. For example, hearing researchers need to jump in and feel comfortable in the Deaf environment where ASL is the dominant language. One participant shared that some hearing researchers may not have a direct connection to the Deaf community but have a "Deaf or bilingual heart" and truly understand the importance of ASL and Deaf culture, and support Deaf individuals. In contrast, other hearing researchers may be fluent in ASL and act as if they were Deaf, but do not work to empower Deaf people. Deaf people have developed a label for these hearing individuals: "Not Even Related to a Deaf Adult" (NERDA). Participants felt that it was important for researchers to recognize their own experiences with and knowledge about Deaf culture, the Deaf community, visual language, visual learning, and how a minority group navigates in the hearing world. One participant commented that "all members of the team must reflect on the positions of power they hold in their different cultural identities and how these identities intersect."

PACT

The second category, *PACT*, concerned specific dispositions, knowledge, experiences, and characteristics that relate to power, action, collaboration, and transformation. These areas contributed to a rich and positive bilingual team of Deaf and hearing researchers.

The first theme, *equity*, looked at

the importance of not engaging in power struggles. One participant shared that it was important to "acknowledge each other's perspectives and expertise equally; no one is better/less than others." Therefore, recognizing each researcher's strengths and weaknesses and using each other as experts and mentors were significant, resulting in action and the creation of new knowledge. Participants discussed the importance of facilitating constructive collaborations. The ability to empower or to provide an "empowering-based approach" was mentioned by one participant. Acting as an ally by speaking when others are silenced was equally important. Therefore, willingness to share cultural knowledge and contribute equal capital was one of the essential characteristics.

The second theme, *common interests and goals*, was concerned with examination of the importance of researchers being equal and efficient team members. Sharing a common ground and a genuine spark of interest enhances and facilitates collaborations. One participant commented that "an interest should spark. . . . Researchers can naturally seek other perspectives from other researchers." Another participant shared that by including more Deaf researchers to partner with hearing researchers, this process promoted positive and powerful teamwork in a field that was saturated with hearing researchers who were doing research about Deaf individuals, not *with* Deaf individuals. Additionally, the importance of respect, integrity, appreciation, honoring differences, beneficence, and justice are important ingredients. The importance of giving back to the Deaf community, not just "grabbing data and running," was noted as a critical component.

The third theme, *indigenous practices*, focused on each team member's knowledge of what works and what

does not work in diverse groups and culture. Participants discussed the importance of utilizing Deaf researchers who know how to teach and interact with Deaf individuals because they are familiar with cultural practices and have lived through being Deaf at school and in the community. One participant shared that the Deaf population, as a minority group, was a "critical and unique group with diverse educational, linguistic, communication, and learning needs . . . and that having knowledge about the unique educational needs . . . and familiarity with different school placements" were essential. For example,

consider the theory of intersectionality. It's a way to [be] influenced by individuals by considering all aspects of such individuals' identity—ability/disability, race, gender, class status, religion, etc. Such aspects of their identities, not limited to deaf or hearing, do influence the research questions, process, and outcome.

The last theme, *educational philosophy*, focused on researchers' ability to understand the importance of appreciating visual and tactile learning, supporting language planning, and reinforcing language policy for Deaf children. Participants felt that it was critical that there be an understanding that the Deaf education system was not working. They felt that there needed to be a strong stand on the importance of using ASL as the language of instruction and as the bridge to developing English. The recognition of ASL, as appropriate, for transmitting pedagogy was stressed. Supporting the ASL/English bilingual philosophy was seen as strengthening Deaf education. Transforming the education system was seen as a key to breaking down communication barriers, as well as language and cultural barriers, for Deaf individuals.

Discussion

Working toward transforming research to a Deaf epistemology was seen as the tool needed to develop effective educational systems and early interventions. The two axial categories focused on understanding unearned privileges through self-reflection and then using that knowledge to implement system change. There was a clear belief that inequities in power and status affect research results and the hearing world's perspective on Deaf people. To be effective, these Deaf/hearing teams must work toward leveling the playing field to reduce barriers so that Deaf people can thrive and make important contributions to society.

In order to counteract hearing dominance (Benedict & Sass-Lehrer, 2007), Deaf individuals must be included in research (Charlton, 1998; Valente, 2011). However, there should be a common interest among team members in creating an effective synergy. Deaf team members must be equal partners in the endeavor and not tokens, as they contribute unique and valuable perspectives to society at large (Bauman & Murray, 2009). *Bilingual competency* is needed to allow free and effective communication among the team, and it helps to level the playing field so that all are communicating directly with each other (Benedict & Sass-Lehrer, 2007).

Additionally, communicating both *emic and etic perspectives* was valuable to the participants. Those who are from the Deaf community should not be relied on to teach researchers everything about Deaf and hard of hearing individuals; however, they do have valuable experiences (Bauman & Murray, 2009; Benedict & Sass-Lehrer, 2007). Uniting an emic perspective with an etic one allows for deeper analysis and the ability to make connections that might otherwise be overlooked.

The themes of *marginalization*, *self-positionality*, and *equity* highlight society's inequalities. Oppression leaves many scars, including identification with the aggressor (Frankel, 2002), a mindset in which people internalize the dominant group's beliefs; given this idea, a hearing perspective locates the problem in the Deaf person and then some Deaf people believe that they "can't." Educational systems that fail Deaf children establish a legacy of "Deaf can't" rather than an understanding of a system failure. When teachers have low expectations, students prove them correct (McKown & Weinstein, 2008). Deaf/hearing teams challenge these ideas and set high expectations (e.g., Santini, 2014; Simms, 2014).

Recognizing and being willing to unpack one's privilege is useful in situations that involve Deaf/hearing research collaborations, especially when issues of marginalization affect a researcher's chances to publish (D. Braun, personal communication, April 12, 2015), get support from mentors, develop networks (Benedict & Sass-Lehrer, 2007), and participate in other scholarly activities. It is of paramount importance that researchers be aware of the issue of privilege in academic relationships (Jones & Calafell, 2012). The importance of reflecting on one's experience with Deaf culture is also important, as there are crucial historical, educational, and social phenomena the Deaf community has experienced. For example, education developed by and for Deaf people is not a new phenomenon, but it is important for a hearing researcher to know that some argue that Deaf education by Deaf people is necessary (Humphries, 2004; Kuntze, 1998; Thumann-Prezioso, 2005). It is pertinent to a Deaf/hearing research partnership that Deaf culture be given equal respect to that of hearing culture.

Finally, participants believed that having *common interests and goals* is

a necessary component of the recipe for success. These interests focus on improvements in the lives of Deaf people (Hauser, 2015) and drive these partnerships. The resulting passion brings research "alive," with advocacy as a natural result (Mertens, 2009). Initially, VL2 created team leaders consisting of a Deaf researcher and a hearing researcher (M. D. Clark, personal communication, May 10, 2015). Most of these Deaf team members left the project, as they did not believe that the hearing members understood Deaf practices. The Deaf members reported feeling oppressed, even if the team tried to make them feel valuable and welcome members. They felt that they were not viewed as equal partners and that this message was communicated indirectly to them. *Indigenous practices* were the missing ingredient from VL2, as a standard epistemology is the basis for that center.

Appreciation of language, culture, and people is an important asset of these partnerships. While many diverse research partnerships may take access to spoken language for granted, Deaf/hearing research teams do not have this privilege. Using spoken language with interpreters places the burden on Deaf researchers. If all team members are fluent in ASL, the only burden is on invited hearing guests, who must use the interpreter. Having a philosophy grounded in Deaf epistemology (Harris et al., 2009; Hauser et al., 2010; Holcomb, 2010; Moores, 2010; Valente, 2011), rather than a view of D/deaf people as disabled, is a necessary characteristic of Deaf/hearing research partnerships.

Limitations of the Study and Recommendations for Future Research

Past publications have investigated Deaf/hearing collaborations, but the present study was the first to explore

this aspect of the recipe for success, as it specifically pertains to research endeavors. As such, readers must consider the exploratory nature of this initial study and limitations such as a lack of generalizability and the limited number of perspectives. Additionally, the pool of researchers sampled may not represent the diversity of the Deaf community. Therefore, more work needs to be done to include a variety of researchers from different disciplines. Advocacy is required within most marginalized groups, and it will be important to assess the effectiveness of those efforts by Deaf/hearing teams of researchers.

Future research could evaluate the impact of mentoring models on publications for Deaf scholars to determine what types of programs were effective. Publishing more dissertations would support the notion that a program was working to provide more networks. Braun et al. (2015) found that hearing mentors who were knowledgeable about Deaf culture seemed to provide more access to information about publication than Deaf mentors did for their Deaf research students. This finding was troubling because it appeared to be related to a lack of access to networks on the Deaf mentors' part. This issue needs additional work, and Deaf/hearing partnerships are needed to provide the answers behind these numbers to clarify issues and provide solutions. Importantly, Braun et al. (2015) also comment that aspirational capital appears to be easier for Deaf mentors to provide than for hearing mentors; this finding is not surprising, as it relates to the findings of Boland et al. (2015) of "DEAF, DEAF, SAME" and the feeling that "if they can, so can I."

Creative research on Deaf educational policies and systems is needed to improve educational outcomes for all Deaf children. It is hypothesized that Deaf/hearing teams could help un-

derstand how to design both classrooms and curriculum that take advantage of visual learning to provide universal designs for the benefit of all children. Mather and Clark (2012) discuss auditory versus visually designed classrooms that reduce the impact of split attention to the teacher or interpreter versus multimedia materials for Deaf students. Hearing students can look at the PowerPoint and listen to the teacher at the same time, but Deaf children need to switch their attention. Visually designed classrooms tend to follow turn-taking rules that allow all to participate, a benefit not only for Deaf children but for others who have a visual learning style. This type of research produced by Deaf/hearing teams would help hearing teachers in mainstream classrooms improve the learning environments for their Deaf students and enable these students' engagement with their peers during class discussions. This type of research is critical, as Deaf children experience mainstream educational settings more than any other. Therefore, much research is needed, and we propose that Deaf/hearing teams bring strengths and novel ideas to this endeavor.

In conclusion, our findings show the importance of a Deaf epistemology within Deaf/hearing partnerships. There is a critical need to include Deaf researchers to collaborate with hearing researchers who share mutual goals, interests, knowledge, expertise, and perspectives. While embedded themes indicated what was required to have a positive and strong collaborative partnership, they provided a rationale and foundation for more research. When equal access is provided to a visual language and culture, researchers' strengths and weaknesses are acknowledged, and social justice is provided to transform and support marginalized and oppressed groups, a

bridge is created between Deaf and hearing researchers. These findings can also provide hearing researchers with a better understanding of the importance of involving Deaf researchers when conducting research that relates to Deaf children and adults. The core category, *equity*, is a heartfelt call for mutual respect and an understanding of indigenous practices, as well as the key to the missing research component.

Notes on Terminology

1. Deaf individuals use a capital *D* when describing themselves to reflect that they see themselves as a cultural and linguistic minority using a visual language, regardless of their audiological status (Padden, 1980).

2. *Audism* refers to discrimination against Deaf individuals, the "notion that one is superior based on one's ability to hear or behave in the manner of one who hears" (Humphries, 1975, as cited in Bauman, 2004, p. 240).

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Contact Information

Correspondence concerning the present article may be addressed to corresponding author Ju-lee A. Wolsey (Department of Deaf Studies and Deaf Education, Lamar University), 10829 Oak Forest Dr., Hagerstown, MD 21740, e-mail: jwolsey@lamar.edu; and coauthors Kim Misener Dunn (Department of Education, Gallaudet University), 203 North Park Dr., Spartanburg, SC 29302, kim.misener.dunn@gallaudet.edu; Scott W. Gentzke (Department of Education, Gallaudet University), 626 Smugglers Cove, Macedon, NY 14502, scott.gentzke@gallaudet.edu; Hannah A. Joharchi, Department of Psychology, Gallaudet University, 800 Florida Ave. NE, Washington, DC 20002, hannah.joharchi@gallaudet.edu; and M. Diane Clark, Department of Deaf Studies and Deaf Education, Lamar University, 4400 MLK Pkwy., Beaumont, TX 77710, diane.clark@lamar.edu.

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