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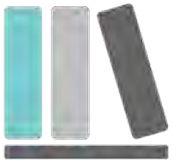

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Feature Article

A Bioecological View of Culturally Sustaining Pedagogy

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Abstract

Culturally sustaining pedagogy (CSP) considers the impacts of schools on communities, explicitly calling upon schools to sustain the cultural modalities of communities of color (Paris, 2012). In this paper, we argue that one important influence schools should have on families is the awareness and knowledge that families' culture are sustained and viewed as official knowledge (Ladson-Billings, 1995) in the education system. We do so by including a perspective found in the disciplines of developmental science, family science, and education, Bronfenbrenner's bioecological theory. Specifically, we examine the principles of CSP from the Person-Process-Context-Time (PPCT) model within bioecological theory. Furthermore, we problematize the traditional practice of assigning homework and offer an implication for reimagining homework from a CSP lens.

Keywords: *culturally sustaining pedagogy, bioecological theory, homework, family storytelling, PPCT model*

The purpose of this paper is to bring together two fields of study that are often separate in higher education, bioecological systems theory (Bronfenbrenner, 2005) and culturally sustaining pedagogy (CSP) (Paris, 2012) and consider how the two theories can be discussed in tandem to allow educators and child and family scientists greater understanding of home and school contexts. As children are influenced by both home and school, the two fields of study should connect in the theories used to understand and study these influences. Though the two theories have been linked in the past to discuss the importance of culture, (Lee, 2017) a discussion about how CSP is rooted in an ecological frame has not been shared.

From a bioecological perspective, schools and families share a reciprocal relationship, with schools serving as centers of academic instruction and peer socialization for children, and their families, parents, and home life influencing the school context (Newman & Newman, 2016). Yet, CSP recognizes that school environments reflect and are shaped primarily by the dominant culture, resulting in the assets of underrepresented groups being overlooked. Families in the United States are becoming increasingly diverse (U.S. Census Bureau, 2018), but students are entering classrooms with instruction that is heavily focused on mainstream views that do not match or build

upon the culture and background of a majority of our students (Walker-Dalhouse & Risko, 2020). Professionals who will be working with children in the future, whether from human development and family science (HDFS) or education programs, should be cognizant of families and the education system.

In this paper, we begin by providing an overview of the current and projected demographic and cultural landscape in the United States vis-à-vis the current educational landscape. We then provide a review of CSP and its recommended use within schools to create a space more inclusive and representative of underrepresented groups. Next, we use Bronfenbrenner's (2005) bioecological perspective on human development to examine how CSP and bioecological theory can build upon one another. From there, we discuss tensions when considering the two theories together. As the purpose of this article is to be used in higher education, we conclude the paper by providing higher educators with one practical example, namely, homework, as a model for merging bioecological theory and culturally sustaining pedagogy. This example could give higher educators a concrete educational practice to evaluate in theoretical discussions.

Current Landscape

The year 2014 was notable in American history as the nation's schools reached a majority-minority milestone (Maxwell, 2014) wherein the diverse population became the majority and the White, Non-Hispanic population became the minority (National Center for Education Statistics, n. d.). In 2020, it is estimated that 46% of our students are White, 15% Black, 28.9% Latinx, 5.3% Asian/Pacific Islander and 3% two or more races. By 2060, our nation's children are expected to be approximately 36% White, non-Hispanic and 11.3% of our children are expected to be two or more races (U.S. Census Bureau, 2018). These shifting demographics have prompted calls to improve our education system to better educate all American children (Maxwell, 2014).

However, such calls for improving educational outcomes have not considered how school districts and educators may leverage family and community resources to advance children's learning. A lot of conversations on improving education outcomes focus on how to best manage the achievement gap, or the disparities in standardized test scores among people of color and White students. These conversations often focus on viewing people of color through a deficit lens stating that, "The parents just don't care," or "The children don't have enough exposure/experiences," or "These families do not value education" (Ladson-Billings, 2007, p. 318-319). Yet, deficit thinking does not seem to be doing anyone any good. Scholars have been requesting and arguing to view students' backgrounds as strengths and have called for instruction that builds on their existing culture, literacies, and skills (see Delpit, 2006; González et al., 2006; Ladson-Billings, 1995). Similarly, many scholars would argue that the schools in which we send our children and the curriculum that we provide for our children can be more attributed to the gap (see Gay, 2004; Apple, 1990) as our classrooms are focused on a monocultural, monolingual environment where teachers "favor mainstream cultural values and norms" (Walker-Dalhouse & Risko, 2020, p. 307). In fact, Gloria Ladson-Billings (2007) stated that just focusing on the "achievement gap" fails to address the foundational problem.

We know that families have a strong influence in their children's education (Smith & Sheridan, 2019) and we know that educators should include and engage families in the education of children (Weiss et al., 2013). Yet, education scholars report to one another and HDFS scholars speak to one another and a framework has not been offered to understand the link between family theory and educational theory. Bronfenbrenner's (2005) bioecological theory helps us understand the influence schools and other contextual factors have on the development of individuals. Though valuable in considering these multiple contextual influences, Bronfenbrenner did not define well

how larger sociopolitical factors fit in at the macrosystem level and how these factors influence development via the micro, meso, and exosystems. Culturally sustaining pedagogy gives us a lens in which to view educational practice. Understanding how bioecological theory and CSP theoretically align, can add to the conversation about how to better educate students. Historically, one way that schools have interacted with homes is by providing school work for children to complete at home. We posit that homework, as it is currently enacted, acts as a wedge to further divide diverse families from the dominant culture of schooling. However, we wonder if reimagined homework could be a potential application of bioecological theory and CSP. Just as educators often ask to bring school work into the home, we should also consider how we can bring the home into the schools. In the following sections we expound on these arguments.

Overview of Culturally Sustaining Pedagogy

Culturally sustaining pedagogy (CSP) is a new but well known philosophy in the field of education that focuses on fostering the pluralistic cultures, languages, and literacies of children of whom are part of classrooms (Paris, 2012). Although the term CSP is relatively new, CSP draws upon previous research and literature that focuses on equity and access. The terms asset pedagogies has been used to describe educational practices that view children's unique individuality as a resource, a resource that can be drawn upon and used as "official knowledge" in the classroom (Ladson-Billings, 1995, p. 483). Asset pedagogies focus on building upon the background knowledge of students while teaching them the unfamiliar (Villegas & Lucas, 2002).

Several scholars have argued for asset pedagogies to be a major part of our schooling and different terms have been used to describe this work. In a landmark publication in 1995, Ladson-Billings introduced the term culturally relevant pedagogy through the report and analysis of her research with exemplary teachers. Ladson-Billings (1995) identified eight teachers in predominantly black communities, who had been identified as excellent teachers by parents and administrators and sought to understand their practice. Through her work, she identified effective teachers as those who helped their students become successful in academics, while also becoming culturally competent, and sociopolitically critical. Ladson-Billings argued that "teachers [should] systematically include student culture in the classroom as authorized or official knowledge" (p. 483). Ladson-Billings' work was preceded and influenced by others. Au and Jordan (1981) used the term culturally appropriate when describing the work they engaged in with Hawaiian children. The authors engaged children in a reading program that used teaching strategies that were very similar to those used in their home, and teachers mirrored major speech events called "talk story", common in the students' culture. The authors found that the instruction was effective because of the appropriateness and relation to the background of the students. Likewise, Mohatt and Erickson (1981) studied teachers and students and found that teachers who used language patterns similar to those of the students, the child experienced positive academic outcomes. The authors used the term culturally congruent to explain this work as the teachers were focusing on congruence with the children with which they worked. In addition, the terms culturally responsive (Erickson & Mohatt, 1982) and culturally compatible (Vogt et al., 1987) have also been used.

Though asset pedagogies and culturally relevant pedagogy have been amongst educators' vocabulary for quite some time, almost twenty years after her seminal publication, Ladson-Billings (2014) no longer viewed her theory as pertinent and argued that it is time for a "remix" of asset pedagogies (p. 74), and the "remix" is culturally sustaining pedagogy as presented by Paris (2012). Various asset pedagogies described above, though influential in their time, were much needed concepts in the trajectory of understanding culture and education. However, these concepts lack the sustaining

element of CSP. CSP is defined by Paris (2012) as a pedagogy that "seeks to perpetuate and foster--to sustain--linguistic, literate, and cultural pluralism as part of the democratic project of schooling" (p. 93).

The notion of sustaining culture is quite different than simply trying to connect content to the culture of students, or making content relevant, and it is more than "checking a celebrating "culture" or "diversity" box" (Algava, 2016, p.51). When educators aim to sustain the culture of students, the goal is to consider how to foster the various cultures in the classroom rather than occasionally connecting to the various cultures. For example, a culturally relevant teacher in a Hmong community might read a book about Hmong New Year to connect to the culture of their Hmong students, yet continue with reading, math, and science curriculum that is rooted in the dominant culture. Yet a culturally sustaining teacher would first seek to better understand the community languages and valued practices of all represented cultures and then center these practices across units and projects throughout the school year.

Paris and Alim (2014) stated, "culturally sustaining pedagogy attempts to shift the term, stance, and practice of asset pedagogies toward more explicitly pluralist outcomes" (Paris & Alim, 2014, p. 87). Focusing on pluralist outcomes requires a shift in thinking; that education is aiming to create a new generation of multicultural and multilingual groups and beings rather than education is aiming to make everyone as much like the White, dominant culture as possible. After shifting to a pluralistic goal, educators can aim to "fully see their students in order to nourish their whole selves" (Doucet, 2017, p. 196).

In order to truly see students and sustain their culture, we must understand their heritage and their contemporary practices. Ladson-Billings (2014) explained this idea very clearly by giving examples of individuals and groups. There are three generations of Hmong individuals living in the United States: one generation who spent a lot of their life in Laos, the next generation who transitioned from Laos to the United States, and the third generation who was born and raised in the United States. The third generation, while inextricably tied to their heritage, also have contemporary culture that is quite different than their grandparents. Paris and Alim (2014) asserted, "we believe equity and access can best be achieved by centering pedagogies on the heritage and contemporary practices of students and communities of color" (Paris & Alim, 2014, p. 87). CSP is fluid and supports students' evolving identities while advancing "pluralistic ways of being" (Doucet, 2017, p. 196). Additionally and lastly, CSP aims to view pluralistic ways of being as important while concurrently providing opportunities to better understand the dominant culture (Paris & Alim, 2014). While CSP educators aim to sustain the culture and language of their students, allowing and introducing the culture and literacies of the dominant culture is important.

Overview of Bioecological Theory

Many who learn about Urie Bronfenbrenner's bioecological theory of human development (Bronfenbrenner, 2005) associate his work with the visually appealing diagrams representing a person, often a child, nested within concentric circles of contextual influence. The first and most immediate is the microsystem, consisting of the parts of a person or child's life with whom they may have regular (i.e., daily) contact. Examples of microsystems include a child's place of residence and their classroom. The mesosystem consists of the relationships and connections with a person's own microsystem, like a parent-teacher conference, and is sometimes represented as a separate circle surrounding the microsystem, and other times is represented through bidirectional lines within microsystem settings. The next circle represents the exosystem, which consists of settings that have indirect influences on a developing person, such as a school district, parent work environment, or neighborhood. Next is the macrosystem, which is the broadest social system in Bronfenbrenner's model and consists of

culture, systems of governance, and social norms. Finally, the chronosystem, often depicted as a directional force encompassing all other systems, includes all of the normative and nonnormative changes and continuities which occur over time within each layer of context. The relationships between each of the nested systems are bidirectional, as well as both direct and indirect, in their effects. The bioecological model, overall, suggests that in order to understand behavior, one must understand the contextual features where the behavior occurs (Newman & Newman, 2016).

However, as noted by Tudge and colleagues (2009; 2013; 2016), any use of or reference to Bronfenbrenner and ecological systems theory without acknowledging his model of Person-Process-Context-Time (PPCT) could be considered a misuse of the theory. Indeed, diagrams of the bioecological model generally only illustrate the context (C) aspect of PPCT. The person aspect of PPCT simultaneously emphasizes the backgrounds, physical characteristics, dispositions, and resources of each individual, which are determined both by one's biology and one's environment. Process (also referred to as proximal processes) refers to any and all interactions between a person and their environment. Processes change over time, are cumulative in impact (Newman & Newman, 2016), and are considered the primary contributors to development (Smith & Hamon, 2022). Time (originally referred to as the chronosystem) can be analyzed and understood within and between each layer of context, generally demonstrating that as children develop over time, so do their environments (Bronfenbrenner & Morris, 2006). Within bioecological theory, time involves "what happens over the course of both ontogenetic and historical time." (Rosa & Tudge, 2013, p. 254).

Indeed, ontogenetic development is a primary concept in bioecological theory (Smith & Hamon, 2022) and includes the biological and genetic components of the maturation process. Environmental conditions, such as the proximal processes experienced within various microsystems, play a key role in determining which ontogenetic capacities are expressed or suppressed within an individual. In addition, it should be noted that individuals are active participants and not passive recipients within their environments and in their own development. This notion is central to the concept of adaptation, a core concept of bioecological theory (Smith & Hamon) which accounts for the modifications humans make to their environments in order to achieve specific outcomes.

Integrating Culturally Sustaining Pedagogy and Bioecological Theory

Those who view education through a CSP lens view students' background and cultural inheritance as assets to be sustained in the classroom (Paris, 2012). Bronfenbrenner's (2005) bioecological theory views children's development as positioned within multiple contexts with which individuals engage. Bronfenbrenner's theory explicates that an individual's family and culture impact one's development, but what if the culture and ways of being are silenced in a school that only values the dominant culture? If students' culture is not represented in schools, then the processes and interaction between systems may interfere with one's development.

CSP has been identified as rooted in an ecological frame, "in the sense that these constructs are asking teachers to take into account aspects of youth's lives outside the classroom not only as resources, but as targets of learning to be sustained." (Lee, 2017, p. 262). However, in what ways CSP is rooted in the ecological frame has not been explicated in literature, nor has CSP been integrated with Bronfenbrenner's PPCT model. In this section, we use the PPCT model from bioecological theory to demonstrate the conceptual and empirical footing of CSP in a common HDFS perspective. However, we present these examples in a different order than PPCT as a rhetorical device in which we can then segue into our treatment of how the practice of assigning homework illustrates the concept of process

within a CSP frame. Specifically, we integrate bioecological theory and research with CSP by highlighting (a) the centrality of context; (b) the importance of identity; (c) the role of sociohistorical time and place; and (d) process as a mechanism of development.

The Centrality of Context

As previously noted, context is a key element of Bronfenbrenner's PPCT model and is illustrated in the diagram of nested ecological systems. Context, then, is understood as both the broadest sources of influence, such as culture and social norms, as well as the most immediate contexts a developing person engages in, such as their family or classroom. The central position of context within a bioecological perspective of a developing person is illustrated by Bronfenbrenner's own efforts when he advocated for a program to fight poverty that would focus on the education of children, their families, and their communities. His endeavors led to the creation of Head Start (Tregaskis, 2015), which has supported low-income children and families in the areas of school readiness, health, and family well-being since 1965 (Office of Head Start, 2018).

In order to enact CSP in a classroom setting, educators should first be aware of the immediate familial contexts of their students, their heritage, and their modern culture and create a student-led context within the classroom. Educators can better understand the fluid nature of students' culture and familial context by asking students to reflect and share about their background. One specific strategy we discuss later which integrates this approach is that of family storytelling (Strekalova-Hughes & Wang, 2019).

A student-led context allows for individuals to have a voice in the classroom, which creates a space for various cultures to be a part of the classroom culture. The antithesis of a student-led context is teachers using a scripted curriculum (created by someone from the dominant culture) that explicates what to focus on with one option of what the students should do (e.g., fill out a worksheet).

In a student-led context, however, students have choice in what is learned, in what mode learning occurs, and/or in what mode students express learned material. For example, a teacher may have several different topics to be covered in a given semester. To initiate a student-led context, the teacher can ask students to choose a topic that they are most interested in, become an expert in this topic, and teach the rest of the class about the chosen topic. The student can also choose the mode of their creation, (e.g., create a video, slideshow, verbal presentation, play). Additionally, a student-led context can also be facilitated by learning more about the students via family storytelling, and using specific attributes of cultures to be used in and across curriculum.

In an analysis of four different studies, Wynter-Hoyte and colleagues (2019) highlighted the importance of creating critical spaces (or contexts) for both children and teachers. Within these spaces, CSP can be enacted as children and teachers engage in critical conversation and build upon one another's knowledge. In this space, individuals can "disrupt the notion that they enter classrooms lacking knowledge and meaningful experiences" (p. 434). Context is a crucial element of Bronfenbrenner's theory and CSP seeks to connect the context of home in the context of school.

The Importance of Identity

At the center of every version of the bioecological model is a developing person. Bronfenbrenner's view was that a person consists of three types of characteristics. First, demand features, such as age, gender, skin color, or body type, each of which can either invite or discourage interactions with the environment (Bronfenbrenner & Morris, 2006; Rosa & Tudge, 2013). Second, dispositions (AKA force characteristics) such as motivation, temperament, and self-efficacy, which can influence a person's own desire and readiness to engage in their environments (Newman & Newman, 2016). Third, resource characteristics,

such as intelligence, skills, and abilities, which can either limit or enhance the effectiveness of a person's interactions with their environment. Although identity was not a concept explicitly identified in Bronfenbrenner's work, we posit that a person's identity is formed, experienced, and expressed at the intersection of the three person characteristics identified by Bronfenbrenner.

As a product of both biology and environment, a developing person's identity emerges as they interact daily with their environment. According to Bronfenbrenner (2005), however, a person plays an active role in their own development. We claim identity formation is central in this process. Umaña-Taylor and colleagues (2014) identified the variety of contexts relevant to how children develop ethnic and racial identity. Navigating multicultural contexts and transitioning from one dominant culture to another during childhood can have profound effects on identity development (Baldwin-White et al., 2017; Paat, 2013). For example, Hayes and Endale (2018) demonstrated the advantages of using Bronfenbrenner's PPCT model to examine how adolescents navigate their identities as immigrants and refugees. Specifically, the authors found that migrant and refugee youth developed a unique newcomer identity as they balance macrosystemic influences from two cultural contexts. Similarly, Misoska (2014) found that the effects of contact programs meant to promote inter-ethnic understanding among children raised in areas of political conflict varied widely depending on their ethnic identity and the views of the intergroup relations to which they had become accustomed. Identity is indeed a central component of the developing person, which is influenced by the complexity of the person's context and sociohistorical conditions.

CSP places a heavy focus on the identity of individuals and the inclusion of the multiple identities in the classroom context. In order for educators to actually sustain the culture of individuals, the individual's evolving identity must be considered in the process. Paris and Alim (2014) and Ladson-Billings (2014) both highlighted the notion that we must understand individuals' heritage but must also realize their unique individual identities. What we cannot do, is try to understand the complex identities of various individuals in classrooms as one singular culture. According to Ladson-Billings (2014) CSP,

> Pushes us to consider the global identities that are emerging in the arts, literature, music, athletics, and film. It also points to the shifts of identity that now move us toward a hybridity, fluidity, and complexity never before considered in schools and classrooms. (p. 82).

In Bronfrennbrenner's theory, we understand identity to be an influential aspect of development, and CSP explicates the complexity of identity while arguing that the whole child must be understood and considered in education (Doucet, 2017).

The Role of Sociohistorical Time and Place

The time component of PPCT serves as the recognition that people, systems, and the relations between people and systems change over time (Rosa & Tudge, 2013). A major element in how scholars have incorporated change over time as a vital aspect of properly using bioecological theory has been to encourage the study of children and families longitudinally (Tudge et al., 2009; Tudge et al., 2016). Change over time includes both naturally occurring changes due to biological maturation as well as social changes due to advances in knowledge and technology, declines in resources, and shifts in societal structures such as education (Newman & Newman, 2016). Some examples of changes over time related to the education of children include the desegregation of schools, the implementation of standardized testing, and efforts to end discrimination based on disability.

One sociohistorical feature of schools and families in the twenty-first century is the prevalence of digital screens in the lives of children. Although some have decried the ubiquity of digital screens in the forms of televisions, computers, and mobile devices as a threat to children, their development, and their relationships within their families (e.g.,

Cleveland Clinic, 2019; Park, 2019), others have approached the conversation more optimistically, treating screens and technology as an asset and opportunity to engage children in new and exciting ways (e.g., Lovato & Waxman, 2016). From bioecological and CSP perspectives, however, the conversation shifts toward the consideration of how the emergence and prevalence of mobile device technology and access to screen-based entertainment is an additional source of social stratification for children from families whose income is in the lowest income bracket. What might be a common social and educational trend during a specific time, such as laptops or tablets for students and Smart Boards in the classroom (Bowles, 2018), may only reflect norms achievable by schools and families with access to sufficient financial resources.

Paris and Alim (2014) explain that CSP is focused on sustaining both individual heritage and individuals' evolving culture over time. As mentioned in a previous section, as families immigrate to America, their heritage, while exceedingly important, evolves throughout generations. In other words the culture of a first generation immigrant will be much different than the culture of a third generation immigrant who was born and raised in the country. The authors offered the terms community practices to describe the fluid nature of culture and continued, "These terms are based in contemporary understandings of culture as dynamic, shifting, and encompassing both past-oriented heritage dimensions and present-oriented community dimensions" (p. 90). Culture is fluid and culture shifts and changes over time. Though Bronfenbrenner specifically discusses the influence of time on the development of an individual (Rosa & Tudge, 2013), CSP focuses on how time influences the lived culture of individuals.

Process as a Mechanism of Development

Bronfenbrenner (2005) referred to proximal processes, or interactions between individuals and their environment, as the engines of development. These constant small interactions are the primary mechanisms that drive a person's trajectory in life. This same mentality is evident in a quote attributed to Booker T. Washington, in which he provided his view on the foundation of success: "Success in life is founded upon attention to the small things rather than to the large things; to the everyday things nearest to us rather than to the things that are remote and uncommon." (as quoted in McCreadie, 2010, p. 46). Although the perspectives of Bronfenbrenner and Washington focused on how day-to-day interactions shape an individual person, others have emphasized the snowballing effects of sustained, collective efforts at broader levels. Indeed, the power of small, cumulative efforts to enact major changes is well documented in popular press media such as The Tipping Point (Gladwell, 2006) and Freakonomics (Levitt & Dubner, 2009). First 5 California (2019), a state sponsored initiative of coordinated services and programs for children prenatal through age 5, has prioritized the importance of process during the first five years of a child's life as demonstrated through their "Talk. Read. Sing." campaign, which emphasizes the power of "three small and free interactions" to promote a child's brain development.

We assert that those who advocate for CSP to be enacted in schools are asking to shift the proximal processes as teachers interact with individual children in meaningful ways. More specifically, teachers are focused on sustaining the cultures of their children through daily interactions. As noted previously, educators who seek to sustain the cultures of their students must do more than spend a day, a week, or a month on cultural appreciation. Sustaining culture must become a daily endeavor to ensure that schoolwork and learning can become a relatable and familiar experience. The majority of school-aged children spend much of their time at home and at school, each of which then becomes a central part of a child's microsystem. In the next section we examine homework as an aspect of school-aged childrens' mesosystems which can illustrate how to integrate bioecological theory and CSP.

Connection Between CSP and Bioecological Theory: Rethinking Homework

The purpose of this paper is to draw attention to two well-known theories in two separate fields and begin a conversation about how these theories can be discussed together to enlighten educators and family scientists. Our aim is that these theories can be used in the field of education and HDFS and taught to college students who will be working with children. One commonly known educational phenomenon, homework, can be used to illustrate the tensions between the two theories and consider how we can reimagine homework to sustain the culture of our students and create a stronger mesosystem for children. Our goal is that through this discussion, readers will critically examine other educational practices and how they are connected to children's culture, identity, and family experiences.

Homework has been defined as "school prescribed tasks undertaken by children and usually under the supervision of an adult, most often a parent/parents within the home" (Farrell & Danby, 2015, p. 250). Historically, homework has been used as an avenue to advance educational rigor in our society. At the end of the 19th century, schools focused on recitation and memorization and as students became aware of their duty to recite their lessons in school, children began spending hours preparing at home. Some families could afford for members of their family to be engaged in hours of memorization rehearsal, while others could not as they were needed for household duties and chores. Throughout the next century, the pendulum swung between the public arguing for and against homework and still the argument continues today (Vatterott, 2018).

Thousands of published peer-reviewed articles have examined whether homework is an effective strategy for promoting student achievement and learning (for a meta-analysis, see Baş et al., 2017). In addition, thousands of other articles have been published examining the roles of parents in promoting, encouraging, and facilitating the completion of homework assignments (for a meta-synthesis, see Wilder, 2014). Although this level of attention is warranted for the sake of promoting positive student outcomes, what has largely been overlooked is how the practice of assigning homework affects families. Attitudes towards homework in the United States have been largely unfavorable for several decades, with certain periods of heightened critique (for a history, see Vatterott, 2018). Nevertheless, the practice of assigning homework, even in the youngest grades and in the most diverse classrooms, has persisted as a standard pedagogical practice. Indeed, teachers and schools continue sending home packets of worksheets and activities for elementary aged students to complete at home and bring back to the classroom (Clarke & Comber, 2019).

According to the Family Adjustment and Adaptation Response (FAAR) model (Patterson, 1988; 2004), families become vulnerable when the demands placed upon them exceed their capabilities. In general, homework assignments may increase stress and anxiety levels for parents and households. Recent studies have shown that homework assignments contribute to the overall sense of strain within a household and can therefore be an undue burden on families (DiStefano et al., 2020). Additionally, homework has shown to cause significantly greater levels of stress and problems for working class parents (Clarke & Comber, 2019) and for parents with lower levels of self-efficacy and emergent bilingual parents (Pressman et al., 2015). As an integral part of a child's microsystem (Bronfenbrenner, 2005), we assert that schools have a responsibility for building the capabilities of their students and limiting the demands placed upon them and their families.

Earlier in this paper we introduced four concepts in the PPCT model including, (a) the centrality of context; (b) the importance of identity; (c) the role of sociohistorical time and place; and (d) process as a mechanism of development. We argue that educational practices should identify how they are

addressing context, identity, time and place, and process. We assert that the way in which homework has historically been done (Clarke & Comber, 2019) fails to bolster one's identity or strengthen their context, and does not adequately consider time and place nor process. Additionally, through a CSP lens, homework done in this way fails to sustain the culture of most children. We suggest that educating professionals who work with children in the principles of CSP using the PPCT framework from bioecological theory will encourage us to question if other educational practices consider context, identity, time and place, and process while sustaining the culture of children in the schools.

Implications, Limitations, and Future Directions

Implications for Educators

Rather than choosing an avenue to connect school and families that may or may not be connected to academic achievement and may be causing families stress, it seems that other proximal processes are needed to involve families and communities (Doucet, 2017). One example, family storytelling, has been used as a culturally sustaining practice and a way to better understand the culture of others (Strekalova-Hughes & Wang, 2019). Additionally, we assert that family storytelling considers the major elements of the PPCT model (Bronfenbrenner, 2005).

Family Storytelling as Homework

Storytelling is one of the oldest ways in which people have maintained their culture over many generations (Ladson-Billings, 2013). Family storytelling is a way in which individuals can engage in intergenerational learning and literacy as individuals tell and retell stories to family members. Additionally, family storytelling is a way that educators could learn about the cultures and literacies of their students, as they seek to sustain culture in classroom settings. Through storytelling, educators who are not a part of the culture of their students can learn about the heritage and evolving culture of the individual (Strekalova-Hughes & Wang, 2019). In a study of refugee children's perspectives of family storytelling, Strekalova-Hughes and Wang (2019) identified three families from Nepal, Somalia, and South Sudan and sought to understand the perspectives of children. The researchers engaged the participants in both interviews and family storytelling sessions. Children in this study viewed the notion of storytelling as a way to maintain family language and were optimistic about sharing stories at school in hopes of peer acceptance, although none had done so. Children and families valued storytelling and noticed differences between the stories their family told and the stories that were told at school.

Though engaging communities and families in storytelling could be seen as time consuming, if the time spent gathering homework, assigning homework, collecting homework, and grading homework were displaced with truly seeking to understand the cultures within a classroom, it seems it would be time well spent. This could result in children who are more capable of making deeper connections through proximal processes of school and family. This could potentially be accomplished through cultural interviews (Grier-Reed & Williams-Wengerd, 2018) or family interviews (Algava, 2016). Furthermore, it should be noted that family storytelling as a CSP-informed strategy is inclusive and therefore benefits all students. White students, who sometimes view themselves as acultural, likely are unknowingly carrying on cultural traditions in their own home, such as wedding practices or foods served during holiday observances. Giving students opportunities to tell these kinds of stories can provide a means by which they may make an individual connection to their cultural background.

Storytelling in the Classroom

Culturally sustaining pedagogy highlights the importance of sustaining the culture of all students in a classroom setting, rather than continuing to only sustain the culture of the

dominant culture. The point of storytelling is to allow students to have their unique voices heard. In order to sustain the culture of students, the teacher must first understand the various cultures represented in the classroom. Storytelling can be used as an avenue to understand individuals who may be quite different than the teacher.

Storytelling could be used in a variety of ways as teachers embark on a journey to sustain the cultures of their students. Teachers could simply ask students to interview family members, create a family story and share it with the class. This would allow student voice and student culture to at least be a part of the classroom. To take it further, teachers could analyze student stories and find ways to connect those stories to various aspects of the curriculum over the course of the semester or year. For example, if one student shared a story about making tamales during the holidays with their family, a teacher could highlight this family story during a math lesson on measuring volume (e.g. ⅔ cup). Storytelling has innumerable uses. However, we suggest that it is one practical strategy for teachers as they seek to sustain the culture of students so that the classroom context can feel more reflective of their home environment.

Implications for Human Development and Family Science Scholars

Scholars in HDFS and family life educators likely are familiar with Bronfenbrenner's bioecological model and the PPCT model. In addition, although HDFS scholars and family life educators may be familiar with principles of social justice, equity mindedness, and cultural sensitivity, they are potentially less familiar with CSP as an educational framework. Though CSP is mostly written about in regards to adolescents, we believe it is important for all learners. For this reason, we encourage family life educators and HDFS scholars to integrate principles of CSP into their teaching and research practices.

In a university setting, professors can peruse their curriculum and identify if their existing coursework has natural spaces to incorporate student culture. Toward the beginning of the semester, we recommend finding a way to learn about the fluid culture of students. Professors could ask students to engage in family storytelling, an autobiographical piece, or a how-to piece wherein students teach others about how to do something in their culture. Allowing the students to share about their background may help students learn about their peers and may help professors better understand how to continually use student background throughout the semester as they aim to sustain culture. For example, after engaging students in family storytelling, the professor could use this experience to explore the concept of developmental tasks from family development theory. The professor may be able to build on the storytelling experience as a way for the learners to understand concepts from other theories students learn in the future, while citing specific examples from students' lives in their specific classroom. This gives students a voice and also helps them better understand how content is connected to their own culture.

In family life education settings, educators can heavily consider the community in which they are presenting. Similar to professors, family life educators must find ways to better understand the culture of their participants. The content that the educators wish to impart will be much more powerful if connected to the community practices, literacies and knowledge. Depending on the structure of the family life education setting, educators could consider sending out qualitative surveys to participants prior to the course. At this point educators can find how the theoretical information and practical strategies can be connected to the culture of the participants while keeping in mind that pluralistic outcomes can be the goal.

Limitations and Future Directions

We acknowledge that CSP and bioecological theory are based in differing epistemological perspectives, with CSP operating from a critical epistemology and bioecological theory from a

constructivist epistemology. As such, integrating these perspectives is not without certain tensions and limitations. For instance, we discussed specific components of the theories such as culture, identity, and sociohistorical time and place as commensurable between the two. However, given their divergent epistemological orientations, one might contend that doing so overlooks the differences in viewing cultural and identity issues from the lenses of understanding and interpretation (constructivist) versus social justice and empowerment (critical). Although these constructs may not be commensurable in all cases, we maintain our position that these two perspectives compliment each other in ways that allow scholars, educators, and other professionals to more fully understand one another's points of view when working with children, families, and broader social issues that affect them. As HDFS scholars do more to incorporate CSP into their research and scholarship and as education scholars find ways to integrate the PPCT model from bioecological theory into theirs, we contribute to the increasingly interdisciplinary nature of these disciplines. Future scholarship can help refine these and other constructs as they are used within differing epistemological frameworks.

Conclusion

We have shown bioecological theory and CSP to be compatible and complementary perspectives for examining the variety of ways that schools, classrooms, and teachers influence students and their families. The synthesis of these perspectives fits within developmental science, family science, and teacher education, whose interests converge around the prerogative to promote child development, particularly for students from underrepresented and underserved backgrounds. Although others have framed CSP within an ecological view (see Lee, 2017), we have specifically identified areas of research and application from Bronfenbrenner's PPCT model which coincide with the aims of CSP. Scholars and educators can benefit from this interdisciplinary integration as they internalize these principles and integrate them into their research and teaching. We postulate that through a recreation of homework, namely family storytelling, educators can better understand the cultures (both heritage and evolving culture) of their children.

In this paper, we have also identified implications for the mesosystem connecting teachers and parents. The expectation of understanding and completing traditional homework assignments with young children places demands on families which can tip their family adjustment towards a cascade of crisis (Patterson, 2004). Our position is that teachers and schools should reconsider the practice of assigning homework, especially for their elementary-aged students. As teachers consider the principles outlined in the bioecological theory and CSP, they will be better equipped to work in harmony with families to promote positive outcomes in their children.

As our nation becomes increasingly diverse, it is important that we seek to better understand how our education system is meeting the needs of all our students. In the past, relations between schools and families have been characterized as "worlds apart" (Lightfoot, 1978). By utilizing the principles of CSP from a bioecological perspective, teachers can be prepared to work with families as "natural allies" (Hong, 2019).

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