Understanding Heath Viscerally: The Role of Kinesthetic Experience in Defining Health

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Abstract

This article examines how health promotion is experienced by students, their families, and their teachers. Experiential aspects of health point to the embodied and sensory dynamics of health meaning-making. Findings of this qualitative study indicate that (1) people make sense of health kinesthetically, and (2) when needs are high and resources are low, school-based health promotion takes the shape of crisis management. The first finding foregrounds the role of viscerality, illustrating the intimacy of health; the second finding points to the importance of context, demonstrating the contingency of health. Also introduced are the theoretical frame of kinesthetic circuitry (the somatic transferences between people) and the methodological strategy of transcriptive memo-writing (writing the memo at the time of transcription), both which emerged as findings in and of themselves through the research's Constructivist Grounded Theory approach. The concluding discussion considers the biopolitical implications of kinesthetic circuitry.

Key Words*: health promotion, normativity, embodiment, elementary school*

Introduction

Honestly, I determine students' health grades by whether or not they wash their hands after they go to the bathroom…I don't know what else to do, there is just so much every day. The kids just need so much. Who cares if your food is healthy when you don't have enough food? Or getting enough physical activity when it's not safe to play outside? (Kindergarten Teacher Interview)

This article attends to a gap in the literature between how health is promoted in schools and how its promotion is experienced by students, their families, and their teachers. Understanding the experiential aspect of health promotion can yield insights into the intimate ways that young people and their caregivers make sense of what it means to be healthy, highlighting both health promotion's biopolitical reach into schools and, importantly, the limits of its efficacy on day-to-day school health practices. Using the concepts of kinesthetic recontextualization and kinesthetic circuitry, the article considers ways that kinesthetic experience can reassemble biomedical health messages and resist health promotion's biopolitical reach.

Drawing upon a qualitative study with elementary students, their adult caregivers, as well as school-based teachers, staff, and administration in an under-resourced, urban, public elementary school in upstate New York, the article examines the research findings that (1) people make sense of health kinesthetically, and (2) when needs are high and resources are low, school-based health promotion takes the shape of crisis management. While the first finding foregrounds the role of

viscerality, illustrating the *intimacy of health*, the second finding points to the importance of context in determining health priorities, demonstrating the *contingency of health*. The intimacy of health is the viscerality of bodily sensation and experience, whereas the contingency of health points to the ways that health experiences take on meaning contextually.

To explore the intimacy and contingency of health, the paper introduces the theoretical framework of *kinesthetic circuitry* and the methodological strategy of *transcriptive memo-writing*. Both this theoretical lens and this methodological tool emerged through the research process itself—the process of Constructivist Grounded Theory. As such, this paper's discussion of kinesthetic circuitry (discussed in this section) and transcriptive memo-writing (discussed in the methodology section) are simultaneously a description of research findings and an analytical application of these findings.

Kinesthetic circuitry focuses on the sensory experience of affective exchanges between people, a lens which highlights the kinesthetic dimensions of context. Physiologically, kinesthetic describes one's sensory awareness of body movement. It is often subconscious or experienced as automatic, such as sensing how to walk, bounce a ball, propel a wheelchair, or withdraw from a hot touch. Used here metaphorically, the scope of kinesthetic is expanded to include sensory awareness of how the body is moved affectively. The relationship between physical sensation and affectivity is illustrated by things such as one's cheeks becoming hot when feeling flush with embarrassment or feeling a knot in one's stomach in response to anxiety. *Kinesthetic* is sensory awareness of such physical expressions of affectivity, while *circuitry* refers to the physical ways that people experience each other's affectivity. In response to the person with flushed cheeks, one might feel empathy for their embarrassment, or experience one's own gut tension in response to the palpable stress of another person or develop a headache in the face of someone else's anger. Kinesthetic circuity is relational and describes the somatic transferences mobilized through human interaction.

Sensory awareness of the kinesthetic is activated within and by *affect*, which is an in-betweenness of "having an effect upon" and "being affected by" (Clough & Halley, 2007; Massumi, 2015, 1995; Leys, 2011; Gregg & Seigworth, 2010; Spinoza & Morgan, 1985). Massumi (2002) describes affect as "visceral perception," and Gregg's & Seigworth's (2010) delineation of affect points to the relational and circulatory aspects of visceral perception's in-betweenness.

> Affect is found in those intensities that pass body to body (human, nonhuman, part-body, and otherwise), in those resonances that circulate about, between, and sometimes stick to bodies and worlds, and in the very passages or variations between these intensities and resonances themselves. Affect…is the name we give to those…visceral forces beneath, alongside, or generally other than conscious knowing… that can serve to drive us toward movement, toward thought and extension… (Gregg & Seigworth, 2010, p. 1)

Circulating through the body and between bodies, the sensory experiences of these intensities, resonances, or visceral forces comprise the kinesthetic, and the ways in which the intensities "pass body to body" is its circuitry.

Kinesthetic circuitry highlights the embodied ways students and teachers navigate the tensions and complexities of school-based health promotion. While schools are often sites of biomedical health messages, such as teaching the importance of eating fruits and vegetables, schools are also places in which these messages intersect with the societal realities of students', families', and teachers' lives, such as the social condition of racialized poverty which complicates access to fresh

fruits and vegetables. Kinesthetic circuitry affords a way to trace the embodied ways people navigate such tensions, thereby contributing to deeper understanding of health meaning-making processes and the way this meaning-making relates to decision-making. Increased knowledge about health sense-making can contribute to initiatives aimed at culturally relevant health education with students.

According to a vice-principal research participant, "Health is an optimum place to be," and yet, in a biopolitical sense (Foucault, 1980; Lemke, 2011; Rabinow & Rose, 2006), it is a state one never quite reaches. Producing one's healthy self as prescribed via the biopolitical norm is an ongoing project. At the same time, a first-grade student participant explained, "Health is always having an emergency exit," a metaphor that speaks to the contingency of health and subjective experience of well-being; for this child, "health" is being safe and able to exit risky contexts as opposed to simply engaging in prescribed behaviors to mitigate one's health "risk" (Bunton, Nettleton, & Burrows, 1995; Lupton, 1993). As both an optimum place to be and a way out, health is necessarily complicated. Participants consistently described health through stories of overcoming hardship, pain, and turmoil rather than offering global form definitions. Their stories evidence the contextual, kinesthetic ways that people come to understand health. The article concludes with a discussion about the biopolitical implications of kinesthetic circuitry, paying particular attention to the resistive and empowering elements of kinesthetic recontextualization.

Background: Situating Kinesthetic Circuitry

Understanding "the body as a political space" (Wright, 2009), this article builds upon literature that examines "how young people interpret health messages…(and how they) contemplate to "live out" the health imperatives that saturate their lives" (Leahy, Burrows, McCuaig, Wright, & Penney, 2016, p. 31). Kinesthetic experience is a context of interpretation, and kinesthetic recontextualization is, arguably, part of bodily contemplation. Attending to kinesthetic dimensions of health meaning-making contributes to discussions concerned with the "experience of embodiment" (Walkerdine, 2009, p, 204); "…embodiment as intercorporeality" (Blackman, 2012, p. 12); and health biopedagogies (Evans, Rich, Allwood, & Davies, 2008; Petherick & Beausoleil, 2015; Rail & Jette, 2015; Vlieghe, 2014; Wright & Harwood, 2009; Wright, O'Flynnn, & Welch, 2018). The sociality of kinesthetic experience, like that of embodiment itself, positions the lens of kinesthetic circuitry within scholarship that considers "what passes between bodies, which can be felt but perhaps not easily articulated" (Blackman, 2012; see also Gregg & Seigworth, 2010; Leahy, 2009; Leys, 2011; Massumi, 2002, 2015). It is precisely this difficult-to-express interaction, undertheorized in the literature, that this essay takes up. Kinesthetic circuitry names the viscerality of intercorporeal experience, offering a way to both articulate what is happening in and between bodies and to trace how health meanings emerge through these somatic exchanges.

As a theoretical framework, kinesthetic circuitry affords a way to trace flows of power mobilized by and operating through the affective exchanges "passing between bodies." The study uses the lens of kinesthetic circuitry to examine the viscerality of this passing, or circulation, and to analyze the dynamic role of kinesthetic experience in health meaning-making, specifically, in recontextualizing meaning-making (processes through which context-specific conceptual shifts occur). Kinesthetic circuitry is a theoretic framework that provides a lens for not only recognizing the affective, somatic dynamics of biopower, but also how this dynamic is limited. As such, the context-specific "bodily contemplation" involved in kinesthetic recontextualization is simultaneously intimate and social, fluid and productive, material and discursive, and its operationalization

through kinesthetic circuitry illustrates the mutually constitutive relationship between sensory experience and biopolitical health messaging. It is in this context that the essay highlights also how kinesthetic circuitry contributes to discussions about the limitations of the biopolitical reach of biopolitical health messaging.

The article's discussion of how health crisis management in schools involves kinesthetic and social dimensions of embodiment and re/contextualization considers the importance of context in shaping the health work of teachers with students. It also responds to a need identified in the literature to better understand tensions teachers may experience about their biopolitical role in advancing ideas of individual accountability for the health of the social body (Fitzpatrick & Allen, 2019; Petherick & Beausoleil, 2015; Wright, O'Flynn, & Welch, 2017). Through a discussion of this study's findings, the article engages with this area of tension, paying particular attention to the kinesthetic experience of this tension and how students, as well as teachers, experience it. There is a "visceral connection" to the tension between "what lessons about health are supposed to offer and how nonconforming practices can be policed" (Petherick & Beausoleil, 2015, p. 13), and how it is experienced by students, teachers, principals, and other school-based health workers like school psychologists and nurses. While much has been written about this tension in terms of the teacher's role in advancing biomedical health messages in their instruction and interactions with students (Fane & Schulz, 2017; Fitzpatrick & Allen, 2019; Fitzpatrick, Leahy, Webber, Gilbert, Lupton, & Aggleton, 2019; Welch & Wright, 2010), how this tension *feels*—how it is experienced by students as well as educators—is under-examined. The kinesthetic analysis of this research contributes to a call for deeper understanding about "what actually happens, affectively, in classrooms" (Leahy & Malin, 2015, p. 400).

Critical health education research has demonstrated the biopolitical relationship between health promotion, school health education, and students' bodies (Fitzpatrick & Tinning, 2014; Leahy, Burrows, McCuaig, Wright, & Penney, 2016; Rich & Perhamus, 2011; Webb & Quennerstedt, 2010; Wright & Harwood, 2009). Biopolitics is a political rationality that aims to regulate the life processes of populations through the subjectification of individuals as both "legal persons and living beings" (Lemke, 2011, p. 48). Working through biopolitical arrangements, biopower refers to how this subjectification works through the individual body (Rabinow & Rose, 2006) to "put this (collective) life in order" (Foucault, 1980, p. 138). Emerging from this literature, biopedagogies of health enjoin the concepts of biopower and pedagogy (Harwood, 2009; Wright, 2009) by addressing how pedagogies work on, in, and through the body to surveil, normalize, and regulate. Perhaps the most prolific areas of scholarship in the biopedagogies of health literature are analyses of fat discourses and the "obesity epidemic" (Azzarito, 2007; Evans, DePian, Rich, E., & Davies, 2011; Lupton, 2018; Rice, 2015; Rich, E. & Evans, J., 2005; Wright & Harwood, 2009). Biopolitical analyses of the obesity epidemic point to a multitude of discourses, practices, technologies, and pedagogical sites that are, in the ongoing project of "urging people to work on themselves" (Wright, 2009, p. 9), aimed at the "regulation and abjection of unruly (fat) bodies" (Rail, 2012, p. 227). Critical health education studies have examined the myriad ways schools are one such pedagogical site (Gard & Vander Schee, 2014; Leahy & MacCuaig, 2014; Macdonald & Hunter, 2005). Examinations of how body-shaping "surveillance circulates relationally and affectively in school contexts" (Rich, 2010, p. 807; see also Petherick, 2015; Wright, 2014) have illustrated that both students and teachers are implicated in the on-going construction of a "healthy = thin" self. And yet, as Leahy (2009, 2014) has shown, students and teachers also resist the normalization of body surveillance. This article offers a kinesthetic perspective of such tensions and con-

tributes to "a more nuanced understanding of the embodied and affective workings of governmentality and its biopedagogies" (Leahy & Malin, 2015, p. 400) by focusing on kinesthetic experiences that resist the "global form of health" (Perhamus, 2010).

In this study, the kinesthetic dimensions of health meaning-making are evidenced by the thematic pattern of participants using visceral, sensory-based metaphors in their description and explanation of health. Grounded in the data of interview transcripts, play transcripts, field notes, and research memos, the lens of kinesthetic circuitry affords analysis of the way viscerality gets mobilized through interaction. Kinesthetic circuitry offers insight regarding the experiential transferences of power between people, including researcher/participant. Situated in critical health education scholarship and biopedagogies of health literature, kinesthetic circuitry directs one's analytic eye to the experiential transferences of power in health meaning-making.

Methodology: Situating Transcriptive Memo-writing

Data for this qualitative study in an urban public elementary school was collected through semi-structured interviews with adults and through play with children over a two-year time period. There were 12 adult participants, comprised of teachers, principals, parents, nurses, social workers, and psychologists, and 5 child participants, comprised of kindergarten and first grade students. Constructivist Grounded Theory (Thornberg, Perhamus, & Charmaz, 2014; Charmaz, 2006, 2008; Clark, 2005) was employed to analyze the codes and categories which emerged from the data. Theoretical sampling, the process of applying emerging theory to guide data collection/analyses, helped to identify each step of the data collection, data analysis, and theory development of the research.

The mental map with which the researcher began this study was shaped by feminist Foucauldian insights about power, subjectivity, and human agency and by political sociological ideas about social structures and material conditions. Constructivist grounded theory (CGT) is situated in a productive tension, on the one hand calling for "constructing" the study's theoretical framework from the data, while on the other acknowledging that the researcher is already theoretically grounded. Grappling with this tension requires rigorous analytic reflection about the ways in which researcher/participant inter-subjectivity is "embodied methodology" (Finlay, 2005; Francombe-Webb, Rich, & DePian, 2014) and, also, a layer of the "ethnographic record" (Spradely, 1979). Treating this tension as part of the data, the research uses the novel method of *transcriptive memo-writing* (Perhamus, 2010b), the act of writing a research memo *during* the interview transcription process, as part of its data analysis. In addition to transcriptive memos, the research employs common CGT methods: initial line-by-line coding; category building; mapping properties of categories and the relationships between categories; developing themes from these properties; and analyzing the presences and absences in these themes during initial write-up. It is through the process of transcriptive memo-writing that theories regarding kinesthetic experience, its assemblages, and circuitries emerge.

Transcriptive memo-writing builds on the grounded theory scholarship of Charmaz (2000; 2006; 2008) and Clarke (2005). Charmaz's work pushes the traditional grounded theory methods of Glaser and Strauss (1967) by incorporating constructivist ideas and acknowledging researcher subjectivity in the data collection/analysis processes, an approach to grounded theory that she calls constructivist grounded theory. In her grounded theory work, Clarke (2005) integrates postmodern notions of multiplicity and fluidity in a mapping strategy that analyzes research situations through a range of relevant contexts, a strategy she calls situational analysis. Transcriptive memo-writing

incorporates the ideas of constructivism, researcher subjectivity, multiplicity and fluidity of meaning, and the importance of viewing a research situation through several contextual lenses. A simple strategy, it is the timing of transcriptive memo-writing (*during* the interview transcription process) that is key for pushing the grounded theory tool of memo-writing to a deeper analytic level.

In contrast to the typical CGT memo (Charmaz, 2006), transcriptive memos are not titled or re-worked through data analysis. The analytic refinement occurs during write-up but leaves the memo itself in tact as it was first written during transcription. When the researcher transcribes, the researcher kinesthetically re-experiences interview moments. Being "in" the interview once again, the researcher not only recalls the interview in more detail, the researcher is "there" again. Sensory memory is activated. The researcher can smell and hear the interview setting again. If a participant cried during part of the interview, hearing those tears again can stir emotion in the researcher that the researcher might have felt while doing the interview. Or, if the boundaries of being in the researcher role restricted the researcher's freedom to fully acknowledge the kinesthetic dynamics in that researcher/participant social interaction—that human moment—there is freedom during the transcription process to feel that which one originally kinesthetically contained.

Transcriptive memo-writing is a strategy for tapping into these sensory-activated moments and is a textual space for recording the researcher's kinesthetic experiences and analysis of these experiences. In this way, transcriptive memo-writing deepens the analytic reflection of data that more conventional memo-writing provides and keeps the data "open" to its theory-building capacity. The researcher's re-experience of the interview, now recorded in the transcript itself, becomes part of the ethnographic record. As part of the ethnographic record, the researcher's re-experience of the interview is textually visible, kinesthetically accessible material for self-reflexive analysis of how subjectivity becomes part of the interview. As both a method and a data source, transcriptive memos demonstrate how "data are a product of the research process…(and) subjectivities are embedded in data analysis" (Charmaz, 2008, p. 402). Cued into the kinesthetic aspects of data analysis because of how the researcher is kinesthetically animated in the memo-writing process, the researcher is positioned to be more affectively open to the kinesthetic circulations happening in the data. The theory of kinesthetic circuitry, and the related concepts of kinesthetic recontextualization and kinesthetic health assemblage, emerge through the data.

Research Findings and Discussion

In addition to the way that the theoretical framework of kinesthetic circuitry and the methodological strategy of transcriptive memo-writing emerged through the CGT process itself, this research yields findings about the *intimacy of health* and the *contingency of health*.

The Intimacy of Health

A primary research finding is that people make sense of health kinesthetically. Kinesthetic meaning-making foregrounds the role of viscerality, the dynamic bodily dimensions of health, and illustrates that health is more intimate and personal than the moral imperatives of the global form suggest.

Kinesthetic

For the purposes of this paper, kinesthetic is defined as visceral, sensory-based experience that influences how one conceptualizes. Based in and through the body, kinesthetic experience evidences the role of the sensory in health meaning-making. For example, a principal research participant discussed the challenges of teaching young students and their families about healthy eating. In describing the limitations of operationalizing health messages in a diverse school setting, she shared,

> Food and smells...are so close to your heart. Um, I'm getting a little emotional about it because I think of my sister-in-law whose mother died...and she wanted to recreate the Thanksgiving dinner of her mother. And everything she had cooking, and I remember her coming down the stairs in her house and going (sniffing, breathing in), Ah, my mom's here...And when you go to your grandmother's or your own family...and those smells are there, it's a visceral response... And I'm thinking about that now, and that was like fifteen years ago, but I remember how powerful a moment that was...I think, if you're going to make a great impact on people, you have to honor that...But you can't do it by calling a PTA (Parent/Teacher Association) meeting to talk about healthy food choices. (Principal Interview)

Reliving this moment, she physically breaths in the rekindled aroma of Thanksgiving dinner cooking. She touches her heart, rubbing it gently in a circular motion, feeling the emotionality of the memory; closes her eyes as she goes back in time and sees the people in the room; and rocks her body ever so subtly as she says, "…my mom's here." Now, fifteen years later, she is kinesthetically stirred by the textures of this sensory memory, and once again experiences the powerful entwinement of food and emotion. She finishes the story by exhaling slowly, uttering an elongated, "Ah…," as she opens her eyes and smiles. It is the feeling of this precise moment that she identifies as critical to reach with people for effective nutrition education, and she acknowledges that conventional health curriculum does not have such kinesthetic depth. Drawing from her sensory experiences with food and family, the principal connects the kinesthetic aspects of cooking and eating with the development of nutrition practices. Her personal experience with and connection to food influences her conception of appropriate and meaningful nutrition education.

Kinesthetic Recontextualization and Health Assemblages

Recontextualization refers to a process of shifting health conceptions according to the particularities of specific contexts. *Kinesthetic recontextualization* is the viscerality of a context-specific conceptual shift. For example, in a kindergarten class, the teacher states that cooking with lard is "bad for you." This message conflicted with the cultural truths of a kindergarten student whose family makes tortillas with lard. This child's face was riddled with confusion, her body crunched over as she tried to make sense of how this cultural tradition, through which her family expresses love and togetherness, could be "bad." The student's kinesthetic experience of this message is evidenced by her body language, including a shift in posture, facial expression, and decreased engagement with the class discussion. In a subsequent interview, this student described her angst in trying to reconcile her new-found health knowledge with her fond attachment to cook-

ing with her family. She rejected the moralizing dynamic of this health message, stating confidently that she loved her abuela (who "is not bad"), but she was affected by the message's emphasis on risk and disease. She repeated, this time more quietly, that she loved her abuela but added that she did not want anything bad to happen to her grandmother. Kinesthetically experiencing a cognitive dissonance, the student was trying to reconcile the biomedical health message that saturated fats are "bad" with what she knew and experienced in her body—that sometimes cooking with love means cooking with lard.

Nuanced, multilayered, and felt through the body, the process of sorting through contradictions to make contextualized meaning is part of kinesthetic recontextualization. In this case, the moralizing messaging (about the use of lard) is complicated by the kinesthetic tension of a good/bad binary—the experience of the biomedical message becomes more fractured and comprised of partialities. Through the tensions, contradictions, and partialities, new, context-specific health meanings—*health assemblages*—emerge. A "composite concept" (Collier & Ong, 2005), an assemblage is a fluid "multiplicity, neither a part nor a whole" (Nail, 2017), that is constituted through heterogeneous elements and which can both take and resist form (Collier & Ong, 2005; DeLanda, 2006; Deleuze & Guattari, 1987; Fox, 2011; Nail, 2017; Perhamus, 2010). By tracing visceralities of in-betweenness, the lens of kinesthetic circuitry affords a way to analyze the recontextualizing dynamics of health assemblages, both in form and in process. Greater understanding of how students kinesthetically experience and kinesthetically recontextualize health can help teachers understand how specific health messages affect students, positively and negatively, an insight which can guide teachers to be more culturally responsive in their interactions with students. Had the teacher in the tortilla and lard story been equipped with knowledge about how her health instruction that day affected the student, she might have presented the curriculum without a moralizing message.

In a study about teacher practices in critical health education, Fitzpatrick and Allen (2019) found that teachers who question biomedical forms of health knowledge are also likely to simultaneously engage biomedical health information in their curriculum. Arguing that this can be a fruitful tension, they describe this pedagogy as a "pedagogy of uncertainty," one which embraces the "messiness" of criticality. The fluidity and shifting-ness of health recontextualizations, and the heterogeneity and partiality of health assemblages, exemplify both the messiness and fruitfulness of such a pedagogy of uncertainty, and provides warrant for embracing a position of criticality.

Kinesthetic Circuitry

As previously stated, kinesthetic circuitry focuses on the sensory experience of affective exchanges between people. Kinesthetic circuitry is the way in which individually embodied experiences affect other people, are shared by other people, or have a social commonness among a group of people. It includes exchanges between researcher and participant. The researcher in the exchange below related kinesthetically to the student participant's story.

> **Student**: We had a sub today (substitute teacher). She yelled a lot, all she did was yell.
> **Interviewer**: What did you think of that?
> **S**: I had a stomachache.
> **I**: What did it feel like in your stomach?
> **S**: Like swords were stabbing me. (Kindergarten Student Interview)

The student told the researcher that he started feeling better once he got home—like the swords "were coming out." Stabbing penetrates, sends bolts of pain through the body, severs the skin and releases gushes of blood—and it repeats. With each sword that "comes out," there is less pain, less severing, and less blood, as the body returns to its state of equilibrium. His graphic metaphor highlights the kinesthetic dimension of a commonplace school occurrence—a yelling substitute teacher—and evidences the intimate and embodied ways students can experience school.

When this student told me, the researcher, about feelings swords in his stomach, I recalled my own experiences of being yelled at by a teacher and could relate to his physical reaction. Triggered in my body was the pain of a stabbing headache. As the student told me his story, I could feel the sharp and decisive pounding in my head and viscerally remember how incapacitating this kind of headache could be. It interrupts the flow of one's day, affects how one experiences other people, and makes concentration difficult. Stabbing pain demands attention, requires healing, is more pressing than the academic task of the moment.

During the transcription of this researcher/participant exchange, I re-experienced these sensations and recorded them in a transcriptive memo. Similarly, the following transcriptive memo (about sensing that I had missed an important opportunity to ask a child-participant a follow up question) illustrates kinesthetic dynamics of the researcher/participant relationship during data collection:

> (Upon my taking a photograph of what Anthony had made while playing our game, he looks into the camera from his side. The flash had gone off.)
> **Anthony**: You look like, you see that, it's like hot black cotton.
> **Interviewer**: Uh hah. (Child Interview)

Although my guess is that his description of "hot black cotton" refers to the camera flash, I fail to confirm this with him. In my transcriptive memo I write,

> I do not ask him what he means. I missed this invitation, and I am aware of my own kinesthetic tension during this moment. I am holding my breath, feeling tightness in my muscles. Although Anthony moves quickly from one thing to another, I experience his pace of playing the game as very slow, like he does each activity leisurely. My kinesthetic tension is about restricting my physical impulse to move him along, urge him to hurry up, ask him to stay focused. I restrict myself because I know and feel that I need to just stay in the moment with him. See him. Hear him. Enter his world of reference. Appreciate how he's navigating it. And yet, I am task oriented. Product driven. I made a game. We're supposed to play it. He's supposed to take his turns, go through the prompts I spent so much time agonizing over. I'm supposed to witness incredible narrative making. Then I'll go home and write about the amazing, deeply moving things the child said, did and made. This is my research. Thus the physical impulse, I guess. Apparently, I had not prepared myself for the "everydayness" of playing a game with a child. Actually, truth be told, I feel rather disappointed…(a feeling which registered at the time like a full-bodied sigh, and I realize that)…It is me that needs to shift. Which, of course, increases my kinesthetic tension, because even though I am not articulating all this in my head during this one moment of "it looks like hot black cotton," it is part of everything about me as I hear his comment and don't ask. (Transcriptive Memo)

When I coded this memo during data analysis, I noted the distinction I had made between head and body, and cringed, for I agree that that mind/body dualistic thinking is problematic (Bordo, 1993; Grosz, 1994). As tempting as it was to re-interpret the data of this memo during data analysis so that its theoretical development tightly aligned with my theoretical commitments, such an approach would have cut off part of the data. It would have been a disembodied analysis. Staying open to what the data are saying calls for acknowledging what one is experiencing in and through the body, always. Itself data, the transcriptive memo illustrates a "probing" of my "own embodied responses" (Finlay, 2005, p. 280), to better understand this particular research moment. Descriptive phrases like, "holding my breath," "tightness in my muscles," and "restricting my physical impulse," demonstrate a kinesthetic response to Anthony (kinesthetic circuity). My "cringing" during another round of data analysis signals that the body is implicated in the sense-making of these kinesthetic responses as well.

The Contingency of Health

Again, a finding from this study is that when student health needs are high and school resources are low, school-based health promotion takes the shape of crisis management. The term "crisis" refers to situations in which the acuteness of immediate need exceeds available resources to meet these needs. "Management" is a term employed to indicate the ways that schools address crises systemically, while "intervention" refers to the direct action a school takes to address a particular crisis situation. As a health response, crisis management highlights the importance of context in assessing the crisis situation and in determining health priorities. A dimension of the visceral nature of health, crisis management demonstrates the contingency of health.

Crisis Management

While kinesthetic experience illustrates the viscerality of health, and kinesthetic circuitry demonstrates the sociality of health, crisis management amplifies the contingency of health. Through crisis management, health promotion is recontextualized by the needs of students in crisis. Assemblages of health which emerge through this recontextualization supersede official health curriculum, overriding biomedical health promotion messaging. Recontextualized health assemblages (1) are contextually specific (rather than decontextualized like global health forms); (2) prioritize physical and emotional safety (rather than general well-being); (3) determine action based on available resources (rather than assume human capacity); and (4) are present-moment oriented (rather than future oriented). Contingent upon the details of context, crisis management points to a "crucial present moment," wherein kinesthetic experience is intensified through the immediacy and urgency of the moment and action is determined by intervention needs. The intensification of the kinesthetic in crisis management and the corresponding tensions of competing health needs makes crisis management a keen opportunity for studying kinesthetic meaning-making. Such analysis demonstrates that the intimacy of health is inevitably bound up with its context.

A first grader, whose struggles with angry behavior has led to mental hygiene arrests at school, describes that her "mad parts are right here, everywhere (in her body)." When asked about what happens with her mad parts during a mental hygiene arrest, she said, "They get out." Resonating with this metaphor, the student's teacher describes her own experience of feeling out of control with anger as not having enough air to breath. "It's like I can't swallow enough air," and she kinesthetically relates to how this student might be feeling during a mental hygiene arrest,

"Sometimes I think she can't breathe either." The bodily escape of the "mad parts" yields an intervention, and the health work with this student becomes focused on anger management.

Describing how often she sees this cycle play out in schools, a principal told a story of needing to do mental hygiene arrests with students (i.e. police and paramedics bring the student to a hospital or treatment center for care regardless of the student's wishes).

> I have chased little kids down the streets as they run out of the schools, and you think, Oh, my God, they're gonna be hit by a car. I have physically held students down for mental hygiene arrests and then watched as police take these little first and second graders and handcuff them in their car, just so that they'll settle down. Or put children on stretchers and bat them down as they try to fight you, and they don't settle. They won't stop, and they're screaming and cursing the whole time. And you bring them to the hospital, and the hospital releases them in an hour. And the cycle continues... And I think, how is it that our society is allowing children to get to such extremes, and still expect them to stay in school…I think the system takes too long to identify kids and get them the support that they need earlier… I've seen kids spitting and biting and punching and kicking and teachers doing a body-hold to maintain a child until the police can come and cuff them and put them in a car and take them away only to come back to school the next day. Nothing has changed and nothing is there to help the child…And these are the kids that are running the streets. (Principal Interview)

Chasing kids down the street reflects both a desperateness and a focused sense of purpose. Feeling the fear that they might get hit by a car, the principal runs after the kids in an acute emotional state. This heightened emotionality is intensified by the sounds and sights of the trauma scenes that follow: body-holds, police sirens; ambulance sirens; stopped street traffic; first responders arriving to the scene, fully armed and in uniform; handcuffed little hands still trying to fight; screaming; shouting; crying; cursing; the rolling out of stretchers; the body straps on the stretchers for restraining the children. The desperateness of the chase follows the children to the hospital, the teachers back to the classroom, and the principal back to running the school. Trauma recovery takes time. But the immediacy of the situation does not afford the privilege of time, for the police "…take them away only to come back to school the next day"—while the trauma is still fresh for everyone involved. Healing is now complicated by its compoundedness. Teaching and learning is situated in this crisis management context.

Describing another societal cycle, a mother research participant, who is also a vice-principal, talks about how homelessness impacts students and schools.

> Working in the school every day. You see so much…I remember last year there was one student who, uh, came to school, and she was wearing the same clothing for like 3 or 4 days. And finally a teacher pulled her off to the side, and she told her that, um, this particular girl was in a foster home, and a parent was abusing her so she had left home and was staying with like different friends and so forth. So they found out…but um, a lot of them stay overnight in the building…I'd say fifteen kids were sleeping in the building at the beginning of the year. The night janitors would find them in there....they knew areas of the building we knew nothing about…You know, I don't think people realize, you know, how many homeless kids we have and just the different issues that stem from that. (Parent Interview)

Foster homes, child abuse, homelessness…these stories tell complicated tales of physical and emotional danger, violence, and insecurity. The destructive uprootedness of these stories is encapsulated in the image of youth sleeping in the shelter of their school. An academic hub by day, the school represents a refuge by night. And in the quiet stillness of their nighttime hiding spots, their secret is discovered by the custodial staff whose caretaking job now involves people. Although the school doors still open to a bustle of students come morning time, the nighttime discovery reverberates in multiple directions throughout the school day as teachers understand their student's behavior in a new context; school counselors and nurses offer more informed care; parent liaisons reach out to families with community service connections; and school administrators make decisions about what kind of shelter the school can offer its students. While the custodial staff may not find children sleeping in the school's hiding spots the next night, the children are still on the run from abuse and homelessness, and the school must still find a way to absorb and manage the cyclical nature of these crises.

When students are experiencing body-holds, mental hygiene arrests, and homelessness, biomedical health messages, such as "get enough sleep," fall short of reaching the granularity of students' lives. Contextual details of the crisis, such as the direct, tangible impacts of being homeless or experiencing a mental hygiene arrest, are the conditions through which people kinesthetically assemble health meaning. Because crisis management is particular to the crises it is managing, each new crisis calls for distinct interventions and coping strategies, making crisis management an ever-emergent set of definitions and practices that are contingent upon the details of the context.

Poverty

Poverty is a common denominator to a multitude of health crises. Poverty's prevalence in schools and health crises situations is evidenced by a school nurse participant's calling it, "The life issue" that "is connected to everything." Interviews with the school nurse, psychologist, social worker, and physical education teacher reveal a pattern of school-based health workers associating socioeconomic circumstances with one's capacity to "be healthy." A school nurse participant describes poverty's impact on health circumstances which, in turn, affect a student's experience of school.

> I've seen a lot of class issues. Families don't have the money; they don't have the resources to do what they need to do. There may be a free clinic but if you don't have the money for the bus you can't get to the free clinic, but children can't be at school without their immunizations. And then there's issues like children with lice, who can't be treated, can't come to our school because they haven't been treated because the lice shampoo is $5.00 and you have to get to the store to get it and that's just the treatment. Then you have to, you know, the entire apartment, you have to do the linens and the bedding and financially that's more than some people can do, to do what they need to do to get the child back in school. (School Nurse Interview)

This story points to kinesthetic aspects of health and poverty—feeling physically and emotionally exhausted, feeling drained by the wear and tear on one's body from relying on the city's inefficient and unpredictable public transportation system, feeling overwhelmed by competing

basic needs, experiencing the self-knowledge of not being able to fully take care of the child's health needs. At the end of a long work day, the parent in this story has neither the time, money, nor energy to do "the entire apartment," a step required for getting rid of the lice and making it possible for the student to attend school. While the objective of being lice-free might appear relatively straightforward, accomplishing this objective is complicated by the limitation of material and emotional resources. And, so, this student has chronically recurring lice, which is physically uncomfortable, socially isolating, and it prohibits school attendance. At the time of the interview, the student had left and returned to school six times, evidencing the nurse's words that lice treatment is "more than some people can do." In response to this situation, the school has sent lice treatment products home with the student. It is an important school support and intervention, but it is momentary and cannot, in and of itself, break the poverty entrenched lice cycle.

Identifying sleep deprivation as another chronic problem with students, a school psychologist describes the way poverty can elongate how one experiences the day and tax the body with stress.

> Lack of sleep I think is a huge concern for kids...I deplore the late bedtimes, but I also understand what it's like from the working person's point of view. So I've got a couple kids, I'm a single parent, and my kids are in daycare, so I've got to take the bus from work to daycare, pick up the kids, get another bus to go home, I don't have a car. Any time we go to the grocery store or we got to take the clothes to the laundry mat or that kind of thing…I have to use public transportation, so then by the time we're getting home its 6:30, I still got to get dinner, the kids got homework, there's baths and then we got to get ready to start it all over again tomorrow. (School Psychologist Interview)

Contextualizing a student's fatigue with the realities of living, working, and raising a family in poverty, the school psychologist considers sleep deprivation to be one of the horrendous home situations which affects students at school. By connecting poverty to sleep patterns, the psychologist identifies a concrete illustration of the relationship between poverty, sleep, and school engagement. When she shares her story within the research context, the kinesthetic circuitry between researcher and participant is again evident. As the researcher conducting the interview, I could mentally picture the sequence of events she outlined and kinesthetically connect to the profound kind of exhaustion poverty induces. A single mother living below the poverty line and raising two children at the time of this research, my body ached from kinesthetically relating to how poverty can feel: muscle soreness; stress headaches; physical tension and fatigue from realizing that there is not enough time in one day to take care of things; physical and emotional weariness from realizing that after a very long day, there is still more that needs to get done; and the anxiety in every fiber of my being about not having enough money to pay the rent, buy groceries, get the kids new shoes as their feet grew, etc. As I made sense of the severity of poverty's impact on health, I recalled my own kinesthetic experience of poverty. Through the kinesthetic circuitry of the researcher/participant relationship, there was a kinesthetic flow of sense-making that affected how the researcher understood the participant story. This kinesthetic circuitry is also data.

Biopolitical Implications of Kinesthetic Circuitry

Understanding power in a Foucauldian sense as productive relations that are exercised throughout the social body (Foucault, 1980), this article defines "political" as the effects generated

by interactions of power-relations. Kinesthetic circuitry analysis offers a way to examine how these effects travel between bodies, affording theoretical exploration of how this traveling circulates power between the individual and the social body. For example, the principal's narrative about mental hygiene arrests is political in this sense, both in terms of effects travelling between student and principal, and in terms of the way that power circulates between the social systems of policing and individual students. The relationality and sociality of health, demonstrated through the intimacy and contingency of health, point to the traveling of these effects.

Simultaneously intimate and contingent, kinesthetic circuitry encapsulates, and is co-constitutive of, the effects generated by interactions of power-relations. It is an analytic framework that understands visceral experience as fluid, relational, contextual—and political. Deeper understanding of how power operates viscerally can yield greater capacities for resistance to normative health messages and more nuanced insights about the political implications of how the visceral circulation of power travels between and upon bodies. For example, the first-grade student who resisted the normative health message that cooking with lard is bad determined, through a process of kinesthetic circulation, that sometimes, "Cooking with love means cooking with lard." Making sense of kinesthetic distributions of power involves registering the sensation of the kinesthetic experience itself.

Understanding the political implications of kinesthetic circuitry is, arguably, a collective process of this kind of registering—a social body kinesthetic embodiment. In her writing about the bodily experience of illness, Susan Griffin (1999) describes the importance of being able to name one's experience and reflects on the way that this individual body-articulation is part of a healing process upon which the democracy of the social body depends. She writes,

> The return of bodily experience to public consciousness has great implications…for democracy...Those who lose the authority of experience can no longer govern themselves. (1999, p. 291)

For the purposes of this article's discussion, naming refers to the process of sensory sense-making. When meaning registers for someone, the visceral experience is "named." The affective exchanges of kinesthetic circuitry animate a social recognition of individually embodied experience. Visceral responses between people, like the students and educators of this study, are communications of social recognition. The kindergarten student who relates his feeling that swords are "stabbing" him is naming his affective response. The first grader whose body slouched when told that cooking tortillas with lard was bad was communicating, through her body, a discomfort with the health message. The principal's terror as she runs down the street after children is communicating her fear through her body: frantic running, scared look in the eye, and determination chiseled on her face. These examples illustrate how kinesthetic experience is circulated among people whose social interaction is a series of visceral communications. The ways in which kinesthetic expressions register between and among bodies point to the meaning-making, including the naming, aspect of kinesthetic circuitry. It is precisely this kinesthetic naming that registers during kinesthetic recontextualization which can resist the normativity of the global health form.

Through kinesthetic recontextualization, biopolitical dynamics can shift and concepts can be reassembled with new meanings. As exemplified in the crisis management scenarios, the health idea of safety takes on particular meaning when a child is thrashing in the middle of the street. The immediacy of the moment is characterized by the flush of the teacher's worry, the frenetic running of the child, and the siren sounds of first responders rushing to the scene. The kinesthetic circuitry

charged in this moment recontextualizes the meaning of safety and risk in keenly context-specific ways. If the kinesthetic aspects of this moment could be understood by the social body, it might invite a public consciousness about the acute health needs of some children. An embodied, kinesthetic understanding of safety and risk might honor the authority of experience.

> Illustrating kinesthetic circuitry, a kindergarten teacher shares a pedagogical metaphor: Kindergartners are sponges and my concept of being a sponge is that you can take anything that comes your way in, but then learn how to squish it, and let go of anything that you don't want—and keep what you do want. (Kindergarten Teacher)

It is a common metaphor in the U.S.—kids are sponges. Usually people are referring to how children absorb everything. This metaphor is different and speaks to the heart of this article. It is not that children absorb everything; it is that they can "take anything that comes (their) way in" and learn how "to squish it and let anything that (they) don't want go and keep what (they) want." Many children spend their childhoods having to suck up a lot they do not want. Having absorbed difficult life experiences as a child himself (e.g. witnessing stabbings, seeing people jump off roofs, learning that his mother had once been a live U.S. military target), one participant teacher learned to metaphorically squish the pain out of his body. Knowing that he does not want violence and oppression in his body, he squishes it out through kinesthetic recontextualizations. The health assemblages which emerge from squishing the pain out and "letting it go" reflect the parts that he wants to "keep." Like many people with marginalized identities, he developed strategies for dealing with oppression. The sponge metaphor represents one such strategy, and he states that he wants his students to learn how to "squish" out the oppression, "let go" of the pain, and "keep" the resiliency. To support the large population of minority student identities at this school, he pedagogically weaves the sponge metaphor into his daily teaching practice, thereby resisting global-form health messaging. Students learn to "squish" the oppressive aspects of health messaging out of their bodies, which is a practice of resiliency. Again, the kinesthetic circuitry between the individual body and the social body, the biopolitical relationship invoked in this sponge metaphor, is one of the individual body resisting oppressive aspects of the social body with a goal of fostering a more inclusive, equitable social arrangement.

The implications of children learning this embodied practice are enormous. Recalling the five year-olds going through mental health arrests; the homeless children sleeping in the school; and the children who may not know that they are "somebody," the article argues that the biopolitical implications of kinesthetic circuitry include a visceral redistribution of power—a kinesthetic circulation of sensation that shifts one's meaning-making in ways that are rooted in contextual particularities. For example, a student may absorb the message, "I am overweight," but squish out the fatness stigma associated with this message, and keep the knowledge that, "I am somebody." In this way, the valuating health message ("I am fat") is recontextualized through the kinesthetic ("I feel sad and angry in my stomach when I am called fat"), forging a new health assemblage ("I am not my weight; I am somebody"). Extending this individualized example to populations of people offers insight into how a shift in meaning-making can shift the meaning itself.

Remembering Leahy & Malin's (2015) call for "a more nuanced understanding of the embodied and affective workings of governmentality and its biopedagogies" (p. 400) provides a political impetus for considering how the students' and educators' kinesthetic experiences/exchanges/meaning-making can resist global health forms' biopolitical reach. Students experiencing school as a refuge in the homeless children example demonstrates the sociopolitical complexity of

the health message to "get enough sleep" and shows how the school is not just an external building, but also a place of embodied experience. The researcher's visceral connection to the lived realities of poverty in the school psychologist's story illustrates how the body is implicated in the meaning-making of kinesthetic circuitry and shows how the reciprocity of viscerality is highly contingent. Normative messages about safety are complexified in the narrative about young students running down the street, resisting handcuffs, screaming, crying, fighting and shows that the physicality of safety is acute. These stories exemplify a relationship between viscerality, meaning making, and biopower, and they demonstrate the resistive, resilient power of kinesthetic circuitry.

Conclusion

Finding that people make sense of health kinesthetically and that health promotion takes the shape of crisis management when needs exceed resources, this study evidences that health meaning-making is porous to viscerality. Making sense of health in ways that are both kinesthetic and contextual (kinesthetic recontextualization) acknowledges the dynamic dimension of viscerality and points to the embodied sociality of health. As contexts shift, experiences shift (and vice versa)—and the recontextualized kinesthetic experience yields new health meanings (health assemblages). Illustrated through the intimacy of health (viscerality) and contingency of health (contextuality), kinesthetic circuitry speaks to the experiential transferences of power between people. Through these transferences of kinesthetic circuitry, power is redistributed, highlighting the political implication of kinesthetic circuitry. A kinesthetic circuitry analysis can yield insight about the experiential ways people make sense of health.

In the work of teaching, especially in the ways that teachers are positioned to translate standardized curriculum with students, the constructs of kinesthetic and kinesthetic circuitry, as pedagogical frames, meaningfully foreground the role of the experiential. Somatic memories and experience resist the potentiality of culturally decontextualized health promotion and directs the analytic eye toward the experiential "grit and heart" of schools' health story of crisis management. Deeper understanding of how young children and their educators kinesthetically come to define health can offer insight into how to resist decontextualized biomedical definitions and support culturally and context-specific health assemblages.

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