Qualitative Research and Aging and Physical Activity: Multiple Ways of Knowing

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There has been a notable increase in research on aging and physical activity in recent years. Most of this research derives from the natural sciences, using quantitative methods to examine the consequences of the physically aging body. Although these investigations have contributed significantly to our knowledge, to further understand the complex meanings attached to physical activity we also need social-science research. The article explores how a variety of social scientists (positivists, postpositivists, interpretive social scientists, critical social scientists, poststructuralists, and postmodernists) who use quantitative and qualitative methods approach physical activity and aging. Through examples from research on aging and physical activity, the authors highlight the differences, possibilities, and limitations of each research approach. Their intention is not to declare one research approach superior to any other but to increase awareness and acceptance of different paradigms and to encourage dialogue between those who study aging and physical activity from a variety of perspectives.

Key Words: social-science paradigms, qualitative methods, gerontology

With prolonged life expectancy in Western societies, there has been a need to better understand the aging process. One important factor that has emerged as contributing to longevity is a physically active lifestyle. Consequently, a growing number of scholars now focus entirely on studying the relationship between aging and physical activity. As evidence of this active scholarly interest, an increasing number of conferences are devoted solely to the subject area (e.g., the 5th World Congress on Physical Activity, Aging, and Sport, 1999), a variety of texts have been published on physical activity and aging (e.g., Cotton, 1998; O'Brien Cousins & Horne, 1999; Shephard, 1997; Spirduso, 1995), and this very journal was introduced in 1993 to disseminate research and related commentary specifically about aging and physical activity.

Most research published in the Journal of Aging and Physical Activity derives from a natural-science or positivist social-science paradigm employing exclusively quantitative methods. In this article, we discuss how qualitative researchers might

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analyze physical activity patterns of older adults. We begin by reviewing current research that uses qualitative methods to examine older people's physical activity. We then discuss further possibilities for studying aging and physical activity through qualitative research. In this discussion we emphasize an understanding of qualitative research as a research paradigm—in addition to introducing a variety of qualitative methods, we discuss the philosophical premise that underpins qualitative research projects. This also means that there are multiple ways of undertaking qualitative research. Our aim is to highlight how a range of qualitative-research approaches can result in different but significant knowledge about the (in)active older person. In addition, we hope to clarify what choices a researcher of physical activity and aging confronts when planning a qualitative-research project. Most important, though, we hope that this article encourages further dialogue regarding research on aging and physical activity. To begin our discussion on the qualitative-research paradigm, we look at how qualitative methods have been applied to current research on physical activity and aging. Before this overview, however, we attempt to explain why a need for qualitative methods has emerged in research on physical activity and aging. We found Spirduso's (1994) review of the research particularly helpful in this task.

**Seeking Insights:**

**Combining Quantitative and Qualitative Methods**

Spirduso's (1994) starting point is to look at physical activity as a life experience. She points out that every life experience has four dimensions—physical, mental, social, and spiritual—and suggests that it is important to include all of these dimensions in examinations of physical activity and aging. This means that physical activity should be analyzed as a biological, psychological, and sociological phenomenon. Biological analyses have dominated research on physical activity and aging, but recently, psychological and sociological research in this field have increased (e.g., McAuley & Rudolph, 1995; McPherson, 1994). Spirduso also notes that until recently, "the questions about the role of physical activity and life were questions of quantity" (p. 235), and consequently, biological, psychological, and sociological research have focused on quantitative measurements of older people's physical activity patterns. Spirduso believes, however, that new questions involving the quality of exercise have become increasingly important. Researchers now ask, How does physical activity contribute to mental and emotional function in the elderly? What is the role of physical activity in the well-being of the elderly? Answers to such new questions require new methods of inquiry. Consequently, qualitative methods are now being applied in the field of physical activity and aging. Many scholars who advocate qualitative methods have not abandoned quantitative methods but see these two types of methods as complementing each other. Research that combines quantitative and qualitative methods is often labeled postpositivist (Denzin & Lincoln, 1994; Guba & Lincoln, 1994).

Postpositivists argue that qualitative methods, such as semistructured interviews or focus groups, are needed because they can expand our knowledge on physical activity and aging beyond what quantitative studies can offer. They justify the need for qualitative methods by pointing out several shortcomings of quantitative
research. Our discussion highlights three of these shortcomings and derives from Guba and Lincoln’s (1994) characterization of competing paradigms in qualitative research. We apply their observations to research on physical activity and aging.

First, Guba and Lincoln (1994) maintain that quantitative research requires tight control of variables to obtain precise results. Therefore, research is often conducted in strictly controlled settings such as laboratories or through strictly controlled methods such as questionnaires. This type of research design can exclude existing variables in the actual context that might greatly alter the results. It also means that the results can be properly applied only in other laboratory situations. In addition, although generalizations based on quantitative research can be statistically meaningful, they do not have applicability to each individual case. For example, although there is strong scientific evidence linking inactivity and disease, this does not mean that every inactive individual is ill. O’Brien Cousins (1993) found that “many women over the age of 70 who are experiencing multiple health difficulties are just as active as other women who are experiencing no health difficulties at all” (p. 342).

To redress this situation, postpositivists argue for qualitative data that are collected in more natural settings. In addition, several researchers of physical activity and aging advocate more studies on the interaction of everyday life, physical activity, and aging. For example, Henderson, Ainsworth, Stolarczyk, Hootman, and Levin (1999) studied the role of physical activity in the lives of African American (n = 100) and Native American (n = 100) women. This study emanated from a quantitative perspective, because the funding agency (public health officials) wanted a deductive explanation about women’s physical activity levels in order to develop strategies that might help reduce disease. The researchers, however, wanted to understand inductively the connections between physical activity and women’s daily lives. Acknowledging the dilemma that “no one method or data type can encompass such a complicated phenomenon” (p. 248), they combined quantitative data (physical activity records, caltrac, and pedometer measurements) with information gained from qualitative methods (in-depth, semistructured interviews initially analyzed using NUD*IST) that considered social processes related to the daily lives of the women. The researchers linked two types of data to provide a more holistic understanding of the phenomenon being studied. The results showed that although the women expended similar levels of kilocalories (identified via quantitative measurements), their attitudes toward physical activity (identified via interviews) differed considerably. The authors concluded that researchers “have the potential to use more than one form of data to better understand what statistics mean and how averages can be interpreted” (p. 254).

Second, Guba and Lincoln (1994) point out that quantitative methods tend to exclude the meanings and purposes attached by human actors to their activities. This argument has become more pertinent as researchers of physical activity and aging aim to understand the inactivity patterns of older people. There is strong evidence of the health benefits gained from regular physical activity, but according to current research, inactivity and poor functionality characterize the lives of many older adults, even those who recognize the benefits of exercise. For example, Bokovoy and Blair (1994) report that “among people 65 and older, more than two of every five have essentially a sedentary life style” (p. 248), and more recently, Dunlap and
Barry (1999) note that "although the number of adults who regularly participate in physical activity has increased most remain sedentary" (p. 69).

To analyze why older people remain inactive despite their awareness of the benefits of exercise, postpositivists argue for a better understanding of the purposefulness of exercise regimes for older people. Qualitative data can provide such insights to older people's exercise behavior. For example, Whaley and Ebbeck (1997) used qualitative methods to investigate why older people do not participate in structured exercise classes. Their qualitative study was "meant to combine the strengths of previous studies and to serve as a validity check of those investigations, few of which asked the older adults themselves what constituted constraints of exercise" (p. 203).

The researchers focused on exercise constraints among 17 self-reportedly inactive older adults (8 men and 9 women) ranging in age from 65 to 85 years. After a pilot test of the interview protocol, each participant was invited to participate in an open-ended, one-on-one, semistructured interview. During the interviews participants were asked to generate a list of constraints to attending exercise classes, respond to a list of constraints identified in the literature, rank all the constraints they identified, consider whether they were gender specific, and, finally, identify ways to overcome them. Data were analyzed deductively and presented primarily as frequencies. The researchers concluded that exercise constraints were both universal and unique. Therefore, "although some constraints are shared by many . . . they mean different things for different individuals" (Whaley & Ebbeck, p. 203). For example, several of the participant-identified constraints were distinct from those found in previous studies. In addition, it appeared that, in fact, some older people who considered themselves inactive exercised in some way. Therefore, the researchers concluded, "the low numbers of older adults who exercise reported in literature are not entirely accurate" (p. 206). Through this study, the authors discovered that trying to understand the constraints to physical activity is far more complex than they had thought. Qualitative data helped them identify the context and different purposes individuals attached to exercise. They concluded,

If we limit our research endeavors to traditional approaches, we risk overlooking important factors that could more adequately explain complex behaviors such as exercise participation. Given that most current studies of exercise behavior generally explain about 25% of the variance alternative methods and procedures are well worth pursuing. (p. 207)

Third, Guba and Lincoln (1994) note that postpositivists have identified a disjunction between researchers' theoretical views and participants' everyday understandings. The theoretical approaches and hypotheses based on theory tend to have little meaning for the participants whose exercise behavior is investigated. In order for theories to be valid they should be strongly grounded on the views of the people investigated, not only on the theoretical, scholarly literature. Qualitative data, postpositivists argue, are more useful for uncovering the physical activity attitudes of individuals, groups, or cultures.

Qualitative data based on informants' insights rather than the scientific literature are often used to generate further research hypotheses. For example, O'Brien Cousins and Keating (1995) examined a group of 60-year-old women to
develop further research possibilities regarding the influence of life-course changes on physical activity participation. To uncover the views of this particular group, they opted for the focus-group method. They interviewed two groups of women: very active ($n = 8$) and inactive ($n = 5$). The aim of this research was “not to have a sample that represents a population of people but to have a rich data set from which to develop ideas and concepts for further research” (p. 345). Their findings challenged the hypothesis that involvement in organized sport during youth is a predictor of later participation. They hypothesized instead that early “turning points” such as an emerging awareness of one’s physical capabilities in comparison with those of others are more important in maintaining a physically active lifestyle. Based on the findings of their study, O’Brien Cousins and Keating recommended an investigation of a larger random sample of women to verify the impact of early turning points on older women’s physical activity participation.

In conclusion, postpositivist researchers promote qualitative research on aging and physical activity to accommodate the influence of natural exercise settings, to include participants’ meanings and purposes for exercising, and to ground theories of physical activity and aging more firmly on participants’ views. They assert that including qualitative methods in the study of physical activity and aging sufficiently addresses the shortcomings of quantitative research. Like quantitative researchers, however, postpositivists emphasize the importance of discovering a single theory to explain their results and stress external and internal validity when evaluating the research. Their main concern is to make a methodological adjustment, not to challenge the basic assumptions of scientific research. Guba and Lincoln (1994) label this methodological criticism an intraparadigmatic critique, because although it points to problems inherent in quantitative research, it remains within the parameters of conventional scientific research. Without question, this methodological critique has changed how research on physical activity and aging has been conducted.

Nonetheless, many researchers define qualitative research in much broader terms than inclusion of qualitative methods. They contend that much more than a methodological change is required to address questions pertaining to quality of experiences or meaningful interactions. In addition to methods, these researchers call for adjusting the basic assumptions that guide research. Guba and Lincoln label this level of criticism extraparadigmatic, because rather than being an adaptation within an existing research paradigm, it points to the need for a new paradigm. The development of a new qualitative-research paradigm, critics believe, can offer us an enhanced understanding of our research topics—in our case, physical activity and aging.

**Questioning Current Research Practices**

Although postpositivists favor the use of some qualitative methods, like quantitative researchers they still assume that knowledge that counts as legitimate research must be collected objectively. To remain objective, researchers’ influence on the results must be minimized. Lather (1992) summarizes that postpositivist research is objective: It controls the values of the researcher and minimizes his or her influence in the research process in order to obtain precise, unbiased results. This assumption also characterizes paradigms employing exclusively quantitative
methods, often labeled logical empiricism in the natural sciences or positivism in the social sciences. Extraparadigmatic critics of positivism assert that the assumption of objectivity is a belief system that seriously limits the researcher’s understanding of phenomena under investigation. They argue that objectivity is an impossible and unnecessary requirement for meaningful knowledge construction. To support their claim, they uncover several inconsistencies and limitations in the logic of objective scientific theory.

First, they argue that scientifically observed “facts” are seriously influenced by the theory that defines the framework for the research. The theory creates a type of strong and distorting lens through which the researcher views “reality.” This limited view leads the researcher to focus on only selected aspects of that reality. Consequently, scientific theories are constructions based on observation through a limiting theoretical frame rather than objective observation. Moreover, the critics observe that different theories can be equally supported by the same facts, depending on how the researchers “work the data.” If this is possible, what claims does scientific research have for demonstrating the “real” truth? Furthermore, because theories influence how researchers analyze facts, collections of facts are obviously limited by the theories used to analyze them. Because theories are constructed by researchers, knowledge, instead of being value free, neutral, and objective, is in fact created by the people involved in the research process (Guba & Lincoln, 1994). In conclusion, extraparadigmatic critics argue that knowledge obtained through research is fundamentally subjective in nature.

Obviously, objectivity is impossible because of the interactive nature of any research process: Researchers influence results, and the results influence the researchers. For example, when measuring an older person’s exercise outputs in a laboratory, the researcher decides what tests to conduct and can influence the participant’s physical exertion or motivation levels. In a natural setting such as an exercise class, the presence of a researcher might change the nature of the class or the interaction between the participants. In an interview setting, the researcher sets the discussion questions and generally leads the discussion, which can influence participants’ responses. Study participants can also influence the researcher’s ideas, because their responses might evoke emotional reactions from the researcher, which makes a neutral and objective research stance questionable. Guba and Lincoln (1994) summarize this view:

The notion that findings are created through the interaction of inquirer and phenomenon (which, in social sciences, is usually people), is often a more plausible description of the inquiry process than is the notion that findings are discovered through objective observation “as they really are, and as they really work.” (p. 107)

As a result of these criticisms, new forms of research knowledge, unlimited by objectivity, have emerged. This development has led to the formation of competing models of scientific activity within disciplines (Kuhn, 1970). Such competing models, or paradigms, as interpretive, critical, poststructuralist, or postmodernist paradigms challenge the claims for objectivity and value neutrality that are at the heart of natural science, positivist, and postpositivist inquiry. We label these new qualitative-research paradigms collectively as antipositivist. With the
antipositivist challenge, many contemporary social theorists now argue that social science is essentially a subjective rather than objective enterprise (Burrell & Morgan, 1979).

As we have alluded, several qualitative paradigms challenge the value neutrality and objectivity of natural science and positivist and postpositivist social science. Several paradigms advocate qualitative research but call for a particular qualitative method. Although all antipositivists critique objectivity and promote qualitative research, they also contest each other’s assumptions regarding the appropriate level of subjectivity in research practice. As a result of the emergence of multiple, competing paradigms, intense debates about the nature of research fill many scholarly journals, and, as Sparkes (1992) puts it, the intellectual landscape has generally become “turbulent.” To understand the nature of these debates, we first follow Sparkes’s (1992) division of antipositivist paradigms into two very broad categories—interpretive and critical—to discuss the philosophical premise they share. Both the interpretive and the critical research paradigms call for more subjective approaches to social science, and because of this philosophical premise, they also favor qualitative methods. Despite their common grounding, these two paradigms clearly differ from one another. To clarify this distinction, we begin with the philosophical and theoretical premise of the interpretive paradigm.

**INTERPRETIVE PARADIGM AND QUALITATIVE METHODS**

The interpretive paradigm includes a diverse set of theorizing such as hermeneutics, phenomenology, symbolic interactionism, and constructionism. These research traditions, although they differ from each other significantly, all promote the idea that humans create knowledge through a subjective meaning-making process. Interpretive researchers consider all knowledge fundamentally subjective and therefore also consider the research process subjective and interactive. Dilthey’s (1976) concept of the hermeneutical circle illustrates the interactive nature of interpretive knowledge. He argued that we interpret other people’s interpretations of their experiences based on their expressions (verbal or nonverbal) and define our meanings based on these interpretations. Interpretive researchers understand the research process as a type of hermeneutical circle: The researcher and the participants are engaged in a dialogue based on which the researcher interprets the participants’ meanings. This dialogue is intersubjective and circumstantial: The research participants affect the researcher, and the researcher has an impact on the participants.

Interpretive researchers’ main aim is to understand their participants’ subjective experiences. To obtain a holistic understanding of subjective experiences, many interpretive researchers derive their research approach from phenomenology. Phenomenology is based on Husserl’s (1965) systematic attempts to examine the realm of the subjective consciousness. Husserl believed that, through understanding individuals’ experiences, a researcher could reach the essence of phenomena in general. For example, by examining individual older adults’ negative exercise experiences, a researcher could understand inactivity during older age in general. To reach into the “real” subjective experience buried in one’s “preobjective” consciousness, the researcher can employ such qualitative methods as memory work (Grant & Friend, 1997; Haug, 1987) or in-depth or unstructured interviews.
(Kvale, 1996; Patton, 1990). For example, Kluge (in press) studied the essence of older women’s physical activity experiences through interviews.

Drawing on phenomenology, Kluge (in press) explored the meaning of the subjective experiences of 15 women 65 years of age and older who had committed to lifelong physical activity. Through her research, Kluge wanted to explicate the “essence” of the women’s physically active lifestyles: what constituted their experiences over the life course and how this transcended sociocultural constraints. In order to maximize her understanding of this phenomenon, she collected data via in-depth, open-ended interviews that enabled the women to share any aspect of their experiences from the past, present, and future. Kluge’s data analysis followed the process outlined by Moustakas (1994), wherein the researcher identifies from verbatim transcripts significant statements of “meaning units” that best described the participants’ experiences and clusters these into themes that identify meaning structures of the phenomenon under investigation. Kluge identified six themes: external influences, values and beliefs, multiple roles, planning, physical challenges, and rewards. To complete the analysis, she developed textual descriptions that represented participants’ experiences with physical activity and structural descriptions that “convey[ed] how the experience came to be what it is.” Finally, she collated these descriptions to understand the essential structure of lifelong lived physical activity experiences of women 65 years and older.

Whereas Kluge focused on women’s experiences, Langley and Knight (1999) aimed to understand the role of sport participation through men’s life course. They suggested that “phenomenological reports using interpretive techniques represent an appropriate methodology to address issues on the evolution of activity patterns over the life course” (p. 33). Through interviews, they teased out the meanings a 68-year-old man attached to participation in competitive sport. To approach the personal experiences of the participant, the researchers analyzed the interviews through a “narrative inquiry.” This meant that they identified 136 core narratives based on the interviews and then categorized them into five narrative themes. Instead of merely listing the five themes, the researchers integrated them into a chronological account of the participant’s life. They believed that experiences such as the meaning of sport participation over the life span are best understood through participants’ stories, which are, nevertheless, reconstructed by the researchers.

These interpretive researchers are investigating individuals’ lived physical activity experiences in order to obtain knowledge on aging and physical activity in general. In spite of answering the call for more subjective perspectives on research, interpretive research has been criticized for focusing too narrowly on subjective experience. Interpretive researchers seem to assume that individuals’ meanings are a result of the interaction between people who knowingly control their experiences. This implies that our meanings and, consequently, our knowledges are unaffected by other factors in life. Critics of the interpretive paradigm argue that few people in the world are free to create their own meanings. Rather, they argue, the construction of individual meanings is influenced by the historical, political, cultural, and economic context of one’s experiences, and therefore one’s thoughts, meanings, and knowledges are constructed within societal power relations. Consequently, issues of power have entered into the center of social inquiry. Sparkes (1992) labels theoretical traditions focusing on power in society the critical paradigm.
CRITICAL PARADIGM AND QUALITATIVE METHODS

Like the interpretive paradigm, the critical paradigm includes several distinct theoretical traditions such as critical theory, neo-Marxism, some strands of feminism, and Gramsci’s theory of hegemony. Although these theoretical perspectives differ from each other significantly, they all assume ideological control of the individual in society. This means that all humans are subjected to belief systems that make certain ways of life, certain values, and certain knowledges seem natural and just. The belief systems—the ideologies—are created to benefit the factions that hold power in the society. Through the ideologies, the powerful groups control and dominate us without our conscious knowledge. As a result, we are led to believe that our ideological beliefs are our own creations that will work for our benefit. We unknowingly support our own oppression through an uncritical acceptance of these belief systems.

Just as critical theorists believe that ideological control permeates society as a whole, they believe that research practices are subject to ideological control. The notion of ideologically controlled research leads critical theorists to challenge the neutral objectivity of science and connects them with the other antipositivist paradigms. The so-called Frankfurt School scholars critiqued the value-neutrality of positivism as early as the 1930s (Kvale, 1992), but Habermas’s (1972) critique of positivism fully established the antipositivist nature of the critical paradigm. Habermas demonstrates that the positivist requirement of objectivism is an ideological construction to benefit the established fields of science and exclude others. Such a requirement has resulted in “scientism,” a belief that the only valuable knowledge is produced by objective, value-free research practices.

Scientism, according to Habermas (1972), excludes other ways of knowing and creates arrogant scientists, who take objectivity so much for granted that they ignore the subjective aspects of their actual research practices. Habermas argues against objectivist illusion and unreflecting researchers to suggest that researchers must become aware of themselves as observing, knowing, thinking, and interpreting human beings in order to uncover the ideological power of scientism. Like the interpretive theorists, Habermas demonstrates that knowledge is necessarily defined by research participants and the perceptions of the researcher. To ignore the researcher’s own “faculties of reason” means accepting the ideological control of scientism. Unlike as in the interpretive paradigm, Habermas holds that researchers are not rational beings aware of the powerful ideological control of scientism but must be “awakened” to understand the belief systems inherent in academic power structures.

The aim of critical theory is to expose the workings of ideology and consequently reveal the few who benefit, at the expense of the majority, from maintaining that ideology. Therefore, critical social science strives to “generate knowledge in ways that turn critical thought into emancipatory action” (Lather, 1992, p. 94). Because the ultimate goal is emancipatory action, the researcher assumes the position of a political advocate. Instead of being objective observers, these researchers believe in an openly ideological stance as they create knowledge to fight imbalances between powerful groups and marginal groups such as women, the working class, the poor, and ethnic, sexual, and other minorities in society.
Critical theorists could also view the elderly as a marginalized group. They would point out that youth is one of the valued features in today’s society: Young people get jobs, young people are beautiful, and strong, young people are sharp and have good memories. Aging, on the contrary, is equated with physical and mental deterioration (e.g., Blaikie, 1999; Vertinsky, 1995, 2000). A critical theorist would further examine how this rather negative notion of aging is maintained through certain ideological constructions to indicate who benefits from this ideological system. The final aim, then, would be the emancipation of the elderly from their marginalized positions. But how do we reveal the intricate web of ideological dominance? Because critical theorists argue that knowledge is fundamentally subjective, they believe that qualitative-research methods are best suited for their emancipatory quest.

Because ideological power naturalizes certain phenomena, such as aging as a deteriorated state, it is difficult to detect which beliefs work as oppressive ideologies. One way to examine an ideological system is to analyze the content of media texts, because media are powerful distributors of images of old age (Blaikie, 1999). Fairclough (1995) has developed a methodology that he calls critical discourse analysis to detect the ideological context of media texts. Through detailed analysis of the form (the syntactical structures of language) and the content (the narrative structure of the text), the researcher is able to interpret which dominant ideologies permeate the text.

For example, Eskes, Duncan, and Miller (1998) employed the method of critical textual analysis to fitness-magazine texts to interpret ideologies concerning health, beauty, and the construction of the ideal feminine body. They argued that fitness magazines cleverly use language and visuals connected to women’s empowerment to support the dominant patriarchal notion of femininity; women as passive objects of beauty dependent on men. The magazine texts recommended diet and exercise programs on the premise that women, as a result, could feel better about their improved looks. In this way, women’s fitness practices, instead of being advocated for health or functionality, were connected to notions of women as objects of beauty. Eskes, Duncan, and Miller concluded their article by examining whose interests these representations serve and then speculated about what could be done to emancipate women from the ideological construction of fitness that assigns them only the role of objects of beauty.

Although critical social science has contributed greatly to our understanding of the workings of ideological power, its emancipatory project has also been an object of criticism from other social scientists. The interpretive paradigm was critiqued as being overly subjective, but the critical paradigm has been critiqued for ignoring the diversity of subjective experiences in society. In other words, the critical theorists have been accused of imposing their theoretical notions of what emancipation means, without enough consultation with the people concerned. As Lather (1992) cautions, “there is a growing concern with the dangers of researchers with liberatory intentions imposing meanings on situations, rather than constructing meaning through negotiation with research participants” (p. 95).

In addition, critical theorists acknowledge the researcher as a political advocate with clear subjective visions of justice for a certain underprivileged group in society. Therefore, the researcher has to assume a group with rather uniform life situations, aspirations, and goals. This means that he or she might also assume an
essential, universal prototype for an underprivileged person that then comes to represent all the members of that group. The represented group assumes an essential identity. For example, the liberatory impulse has led feminism to fight against women’s universal oppression without regarding the many and varied life conditions, social contexts, education levels, and subjective meanings women hold. If we think of retired women (or men), they are definitely a very diverse group, depending on their retirement age, ethnicity, education level, economical possibilities, or residential location. Therefore, one physical activity model, no matter how theoretically apt, will not attract them equally, even if we conclude that improved physical ability reduces their dependency on others and thus potentially serves as an emancipator from the control of others.

Because of the problems arising from assumptions associated with an essential identity, many antipositivists have turned to alternative modes of theorizing. Instead of focusing on certain groups as either dominant or subordinate, researchers have looked at how all of us, including the researcher advocating liberation, are governed through the use of language. This notion of the centrality of language has often been labeled poststructuralism and sometimes, in an even broader sense, postmodernism.

Emerging Trends in Qualitative Research: Understanding Multiple Realities

Poststructuralism and postmodernism have become some of the most used and abused concepts in the social sciences and humanities. They escape clear definitions, which has sparked much fury among already confused researchers. In part, this definitional confusion derives from a philosophical assumption they share: Theorists from both “camps” assume that there is no one reality to be captured through theorizing based on empirical methods. Each interpretation of reality becomes valuable when we reflect on the social and historical contexts of the knowledge making. In a sense, then, poststructuralism and postmodernism combine an interpretive focus on subjectivity with a critical focus on power, and oftentimes the distinction between these two theoretical trends has blurred. Some theorists, such as Foucault, can be located within either category, depending on the researcher’s preference. We have decided to discuss poststructuralism separately from postmodernism, not to insist on clear boundaries but to highlight the recent developments of social inquiry.

POSTSTRUCTURALISM: MEANING OF AGING IS STRUCTURED THROUGH LANGUAGE

Although poststructuralism includes various sets of theorizing such as deconstruction by Derrida, psychoanalysis by Lacan, and the theory of discursive power by Foucault, the common factor for this theorizing is the analysis of language (Weedon, 1987). These theorists believe that language structures social meanings, power relations, and individual consciousness (Kvale, 1992). Language, for poststructuralists, is an area of constant political struggle, where competing meanings are continually imposed on words, depending on who dominates the meaning field at the time. Poststructuralists would consider, for instance, that the exact
meaning of the word *aging* depends on who dominates the meaning field in which this word is primarily used. As a result, researchers of aging can significantly shape the meaning of this word. At the moment, aging research is predominantly done by natural scientists; therefore, *aging* often carries a biological definition (the declining physical body). The declining physical body needing extended medical care is an expense for society, and thus the word *aging* assumes an economic meaning (medical costs).

Language, then, creates the social context for our understanding of reality, but poststructuralists also acknowledge the individual’s role in the formation of meaning. They believe that individuals actively produce multiple meanings, but their thoughts and meanings are, through language, products of society and culture (Weedon, 1987). For example, Westerners often define *aged* depending on their own age. Our young undergraduate students seem to perceive anyone over 30 as “over the hill.” For others, retirement from work means the beginning of old age, and some define rest-home residents singularly as “aged.” Cultural differences can also construct individuals’ meaning of aging. Whereas in Western cultures aging is perceived rather negatively as physical and mental decline, in other cultures old age elicits respect from the other members of the society for the older person’s accumulated wisdom.

Because the poststructuralists allow for the social construction of meaning making (subjectivity is socially produced in language), their understanding of subjectivity is a break from the free and self-determining individual of the interpretive paradigm. Because poststructuralists also believe in subjectively produced meaning, they reject the rational, essential, universal individual of the critical paradigm. This means that because language powerfully constitutes our understanding of reality, we also constitute reality through the language we use but do not entirely control its meanings. Within a poststructuralist framework, a researcher, rather than being the creator of a unique research text, reports meanings that are mediated by his or her subjective understanding of the phenomenon under analysis. What can this possibly mean in terms of research on aging and physical activity?

Poststructuralist interpretations of physical activity and aging have been rare, but one example is Vertinsky’s (1995) study of stereotypical images of physically active elderly women. Vertinsky analyzed how the meanings attached to aging women have been socially constructed to exclude physical activity. She argued that the notion of aging women as too frail to exercise is, as a matter of fact, a social construction by the male authors of numerous texts about aging. Therefore, these texts represented a male view, not an objective recording, of the experiences of aging women. Vertinsky then deconstructed the meaning of “an aging woman” through history by analyzing texts from the period of Classical times to the present day. She demonstrated that from Classical times through the Enlightenment, “old age tended to refer primarily to a stage of life rather than a numerical age” (p. 226). Women were perceived to age sooner than men and thus had to “take on the trapping of old age” earlier. It was not appropriate for older women to engage in physical activity; the appropriate manner of old age emphasized passivity, contemplation, gentle exercise, and adequate rest.

Christian theology added to this classical view “by seeing life as a metaphorical journey, a pilgrimage toward God and eternity” (Vertinsky, 1995, p. 227). Women’s and men’s journeys were different, however. Whereas physical decline
but spiritual growth characterized men's journey, women's journey was laden with physical imperfections and a continuous unsuccessful spiritual quest for perfection.

Finally, the emergence of the scientific and medical study of old age "place[d] great emphasis on visual evidence and the demonstration of function" (Vertinsky, 1995, p. 228). According to Vertinsky, the medical profession exacerbated negative attitudes toward aging by defining it "as a period of decline, weakness, and obsolescence" (p. 229). In this view, women's bodies wore out between ages 40 and 50, after menopause, at which point their energy levels were low, their social function (childbearing) was curtailed, and degeneration began. The medical profession urged the aging woman "to adopt a well-regulated regimen in which a combination of rest and gentle exercise might render her body less susceptible to senile illness" (p. 231). Through her deconstruction, Vertinsky aimed to establish how language creates social context for our understanding of aging women and how today's stereotypes are powerfully influenced by the conceptions of earlier years. She also demonstrated how the meaning of aging changes depending on who dominates the creation of the texts on aging.

Poststructuralist analyses of meanings embedded in cultural texts can be very illuminating in pointing out how people's lives are controlled through textual meanings. Poststructuralists are also interested in how meanings are influenced by one's subjectivity, but regardless, these studies are often devoid of the subjective voice of the researcher or the voices of the participants. For example, Vertinsky (1995) did not talk about how she had been influenced by the stereotypes of aging, nor did she refer back to other women's experiences of aging. The absence of the researcher's personal voice has been disappointing for some, who accuse poststructuralists of producing texts incomprehensible with their high theorizing and of being arrogant in their objective, distant tone (Jensen & Pauly, 1997). This has led some scholars to examine qualitative ways of writing that include the researcher's voice engaging in a dialogue with the participants and the reader.

**POSTMODERNISM: AGING IN THE HYPERREAL WORLD OF FRAGMENTED IMAGES**

*Postmodernism,* as a term, is probably the least possible to delimit or define, and this has undoubtedly led to much confusion and also arguably undue dismissal of research under this rubric by many academics. Although *postmodernism* cannot be captured in one clear definition, it is, as a term, characterized by several features. Some define it as a time period, probably from the 1960s onward, in Western society. Other theorists reject the notion of any exact period as postmodern and claim that postmodernism, rather than a time period, is best characterized as a state of mind. For example, Kvale (1992) understands postmodernism not as a systematic theory or a comprehensive philosophy, "but rather diverse diagnoses and interpretations of the current culture, a depiction of a multitude of interrelated phenomena" (p. 32). What characterizes these interpretations most clearly is Lyotard's (1989) call for an "incredulity towards metanarratives" (p. xxiv). He is critical of our previous attempts to legitimize science through the appeal of grand narratives such as emancipation or progress. Postmodernists following Lyotard's lead would question the previous attempts to create a singular social theory of aging that would
explain the conditions of all elderly people and help develop a uniform recipe for
ever-increasing longevity.

Strictly speaking, then, postmodernism also rejects poststructuralist notions
of language as a universal governor of our meanings. Instead of metanarratives,
postmodernists favor cultural pluralism, which, in turn, leads to their assumption of
constant cultural change, fragmentation of experience, and an understanding of
culture as a civilization of images.

Postmodern theorists understand culture as an ongoing, active process of
constant change. This change, however, does not happen in a predictable, rational
manner, but rather culture seems to be an ongoing ordered disorder, a continuous
discontinuity. For example, our understanding of appropriate physical activity for
the elderly is constantly changing. Whereas older people were previously urged to
rest, we now promote active living for all ages. In addition, new exercise forms for
older people rapidly appear and disappear. A couple of decades ago an older person
purchasing exercise shoes would have been an anomaly, but now the older
generation can choose from a wide selection of special-purpose exercise shoes to
participate in spinning classes, aqua exercise, or resistance training or to train with
exercise balls with a personal trainer. Within a year, these exercise forms will no
longer be offered, or they will have been modified into new offerings by the fitness
industry. This frantic process of cultural change is illustrated by such terms as
pastiche (Jameson, 1983) and collage (Kvale, 1992). A constantly changing culture
will affect people’s experiences, which have become increasingly fragmented.

Postmodernists describe current culture as a culture of images. Everyday
culture is filled with images that, in postmodern culture, are often more important
than the reality that they are supposed to signify. Characteristically, rapid changes
of images are not built into coherent narratives or do not have any meaningful
relation to each other but are organized in a series of fragmented presents (Jameson,
1983). They are meant to be consumed and enjoyed on this surface level as intense
moments of different sensations (Featherstone, 1988). Multiple images of aging
flash on us through different media. They range from advertisements for new,
luxurious retirement villages for the wealthy to infomercials for exercise machinery
for beautiful and active mature people to battered elderly victims of crimes in the
news updates. Baudrillard (1983) argues that in the postmodern world, reality is
transformed into these images, and this “unreal” image world becomes more real
than the original world. In this world, the boundaries of real and unreal are blurred.
A “simulation” precedes “the real.” As these simulations begin to dominate, society
becomes “hyperreal.” Baudrillard specifies that “the real is not only what can be
reproduced, but that which is always already reproduced, the hyperreal” (p. 146).
Therefore, for Baudrillard, in hyperreal society the distinction between real and
unreal is no longer apparent or valid.

To apply Baudrillard’s concepts to aging and physical activity, we can think
of a retired couple who dreams of a winter holiday at a resort in Florida. This couple
has never visited Florida but envisions palm trees, balmy weather, and sandy,
uncrowded beaches suitable for long strolls. This image in mind, they select a resort
on the Internet. The Web page pictures a spacious, light hotel lobby with a smartly
dressed, beautifully aged couple heading for the tennis courts. Through the lobby
window, another slim couple is playing golf on a putting green surrounded by lush
greenery. In the background the ocean glistens in the sunshine. These images
promise an enjoyable holiday in a perfect environment and present Florida as a paradise for active retired couples. The Web page does not mention, however, that to actually reach the resort, a vacationer has to drive through a low-income-housing area populated by recent Hispanic immigrants. Or that the resort itself is located beside high-rise hotels that prevent direct access to the ocean from the resort. Or that the lush golf course is only a putting green located on the front lawn of the resort. In actuality, guests at the resort vary widely in age, size, and interests, and many stay inside because it is too hot to engage in outdoor activities.

Nonetheless, the preconceived luxurious images, whose origin is unclear, create the “real” Florida in the travelers’ minds. Florida has turned into a hyperreal simulation of represented images through the Internet. If the retired couple decides on their destination based on their own created images and the resort’s hyperreal Web page, they might be disappointed with the “real” Florida. What has become of qualitative research in this fragmented simulacrum of a constantly changing world? How do we conduct research on such a culture, and is any type of research meaningful if reality is no longer a valid concept?

Most postmodern researchers do not take Baudrillard’s vision to its extreme but, rather, believe that we are moving toward a simulacrum. Research has not become a useless activity; it points out the signs of postmodern change in social theory, society, or people’s everyday experiences. In these examinations, the methods have become increasingly unimportant, and the ways in which we write about our research, increasingly important.

Postmodern researchers are interested in pointing out signs of postmodern changes in a world that is still largely under modern influences. Glassner (1989) examines how the exercise video can be examined as a “quintessential postmodern object.” According to Glassner, two factors contribute to this label. First, the exercise image, rather than being a copy of “the real,” becomes the model toward which “real exercisers” strive. Consequently, the real becomes a copy of the image. Second, there are no originals for exercise videos. Although for the viewer it is a continuous lesson, the tape is actually constructed of separate “shoots” filmed over a long period of time. Therefore, this image world can become our world of aerobics. The fashionably dressed, thin, toned, and eternally young aerobicizers who never miss a beat or step form our understanding of an aerobics class. Participating in an aerobics class can be a quite different experience, however, from exercising alone with a videotape.

These individual experiences count for an important part of postmodern inquiry. For example, Poole (1999) studied how individual older women who participated in a fitness class experienced their activity. Similar to Vertinsky’s poststructuralist account, Poole first recounted the rather negative images connected to aging and particularly aging women: unattractive, useless, temperamental, and senile, even disgusting in their ugliness. But she also pointed to a rather contradictory image emerging within the postmodern consumer culture: a deconstruction of aging as “healthy aging” or as a “prolonged life course.” Such positive images, according to Poole, served the emergence of the “aging industry” that aspired to cater to the growing number of healthier and wealthier older people in Western society.

Poole (1999) then aimed to locate the experiences of the 17 women fitness instructors, all over 50 years old, within this pastiche of contradictory, changing
images. Through interviews, she discovered that like postmodern culture, the women’s exercise experiences were often contradictory. These older fitness instructors talked about the importance of shaping their aging bodies toward the ideal of feminine beauty. For example, they explained how their participants exercised to tone their sagging underarms or bulging stomachs. Poole connected such requests to a feminist concern over women’s continuous oppression through an obsession with the impossible (and unhealthy) body shape. When the emphasis in the fitness classes was on the improved body, women’s lives, instead of being controlled by the women themselves, were regulated by a complex power network of beauty and health industries. On the other hand, the older women attended exercise classes not only for a better looking body but also to gain strength and mobility for more independent living, to create social networks with other women, to have time for themselves, or to care for others of a similar age—all reasons that Poole identified as empowering older women. She concluded that healthy aging, like postmodern culture, should be viewed as a continuous process of construction and deconstruction. For the women in her study this involved “keeping in shape, maintaining a healthy lifestyle, keeping active and being part of social networks” (p. 99). The older women exercisers, then, attached multiple, often contradictory, meanings to their exercise experience.

Because postmodernists argue that today’s society is constituted of multiple meanings, they prefer qualitative research that allows multiple voices to emerge from the research text. Traditionally, as in Poole’s (1999) study, the participants’ voices have been included through interview quotes, but postmodernists’ interest in more vivid representations of everyday experience has led to a more detailed attention to ways of writing research. According to Kvale (1992), there has been an increasing interest in narratives “on telling of stories” (p. 34). A narrative, according to Kvale, does not simply transform information—storytelling implies a storyteller and an audience that bond during the act of telling. In postmodern narrative writing, the researchers include their personal experiences in their research texts to emphasize the interactive nature of knowledge construction. Once the understanding of a researcher’s subjective experience is created, the reader can engage in the researcher’s representation of the people he or she studied. Postmodernists would advocate forms of research writing that engage the researcher’s voice with his or her participants’ voices in a dialogue on aging, physical activity, and lived experiences. Now autoethnography, confessional tales, ethnopoetics, and ethnographic fiction/drama have become increasingly visible as qualitative-research texts. Now a researcher of aging might aim to understand his or her personal struggles with aging in postmodern society in a confessional tale or present the meaning of resistance training for older gym goers in a dramatized dialogue.

Research texts that include the researcher’s own voice have been rare in the examinations of aging and physical activity. As different writing techniques have become important research tools, however, some sociocultural researchers of physical activity have experimented with subjective ways of writing research. Some (e.g., Kohn & Sydnor, 1998; Markula, 1998; Sparkes, 1996, 2000; Tsang, 2000) have woven together their personal physical activity experiences with social theory into one text. Others present their research on physical activity through fictionalized accounts (e.g., Bruce, 2000; Denison, 1999; Rinehart, 1998; Rowe, 2000).
Conclusion

In this article, we have attempted to map various qualitative-research approaches to study physical activity and aging. Throughout, we have emphasized that instead of set procedures, there are a myriad of ways to research how aging shapes our experiences of physical activity. Researchers adopt a particular approach depending on their philosophical position: their ontological, epistemological, and methodological assumptions about what constitutes research. All these approaches expand our knowledge about physical activity and aging but are subject to the limitations of their philosophical grounding. Qualitative social-science research, as we have demonstrated, focuses on theorizing about the meaning of aging in society and interpreting the experiences of the physically (in)active aging population. In addition, the influence of the researcher on the research process is openly acknowledged. Qualitative researchers aim to include their own subjective voices to address the fact that the representations of physically active older people are deeply influenced by the researchers' own societal and cultural meanings. This emphasis on the subjective nature of the research process provokes questions such as, How do we judge the quality of the research? With the emergence of new ways of writing, does any story now count as a valuable work of research?

These questions, generally labeled the crisis of legitimization (Denzin, 1997), have troubled qualitative researchers for some time. It is clear that some criteria for judging the quality of research are needed, and, consequently, several attempts have been made to define what constitutes legitimate research. It is equally obvious, however, that because we no longer have a unified research philosophy, neither can we demand a unified criterion that validates all research. Instead of such a criterion, we need to better understand the premises of each research tradition to ensure that their results can contribute to our knowledge of aging and physical activity. Like research results, the conduct of research cannot be removed from its context, because each research approach becomes meaningful in its philosophical context. Palmer (1969) observed already 3 decades ago that understanding is a matter of placing oneself in a research tradition, and once one is inside a particular tradition, its “logic” begins to make sense. It is inappropriate to judge a poststructuralist deconstruction of the word aging based on positivist criteria or, vice versa, to demand that a positivist study include a rich description of an individual’s exercise experience. Instead we need to judge the meaning of each research project against its philosophical premise.

As positivist and postpositivist research aim to build a generalizable theory of aging and physical activity, good research within this tradition should result in findings that can be truly generalized (i.e., be quantifiable, valid, and reliable). Interpretive theorists want to tap into people’s subjective experiences; therefore, their efforts should be judged on convincing evidence of “understanding experience.” Likewise, a poststructuralist deconstruction should be validated through a persuasive theoretical argument concerning the creation of meaning through language. Finally, postmodern texts that emphasize the literary quality of the research to vividly convey the multiple voices that shape the research process should be judged based on their literary merits, as well as their “theoretical” content. The acknowledgment of multiple research traditions does not translate into an
acceptance of poor-quality research but instead requires us to contextualize each study carefully within its paradigm.

In conclusion, in the current climate of philosophical and methodological pluralism, qualitative research on physical activity and aging should not be left to flounder in a relativist abyss. On the contrary, the diversity of qualitative-research approaches available today provides us with multiple ways of examining the meaning of physical activity for older people. Understanding the philosophical premises of a variety of research traditions can help us celebrate their diversity and, consequently, use them effectively to increase our collective knowledge about physical activity and aging.

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