

# Improving Latino Health Through Equity-Centered Physical Activity Research

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## ABOUT THE AUTHOR

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Regular physical activity (PA) is associated with improved physical and mental well-being, better sleep, lower mortality, and a reduction in the development of chronic health conditions, including cancers and diabetes.<sup>1</sup> Individuals of Hispanic or Latin American origin (herein “Latinos”) have one of the lowest levels of physical activity of all racial/ethnic groups in the United States. National surveillance data indicate that 43.1% of Latino adults, compared with 54.2% of their non-Latino White peers, meet physical activity guidelines of engaging in at least 150 minutes of moderate or vigorous physical activity (MVPA), or a combination of the two, on a weekly basis.<sup>1</sup> This disparity is present whether PA is assessed via self-report or accelerometers, a wearable device that senses and measures movement. The Hispanic Community Health Study, or Study of Latinos (SOL), collected accelerometer-based PA data across a large and diverse sample of Latinos and showed important differences by Latino group and sex. For example, adults of Puerto Rican and Dominican background had the highest levels of total MVPA compared with other Latino groups, and Latina women consistently had lower MVPA than Latino men regardless of age and Latino group.<sup>2</sup> Moreover, compared with

national data, SOL findings showed that only 31.3% and 51.1% of Latina women and Latino men, respectively, met PA guidelines. Coupled with this high level of physical inactivity, Latinos suffer disproportionately from chronic health conditions that can be prevented or ameliorated through an active lifestyle. For example, relative to their non-Latino White peers, Latino adults experience a nearly two-fold risk of diabetes, hypertension, select cancers, and overweight or obesity,<sup>3</sup> making PA promotion an urgent need in this population.

Despite the abundance of evidence linking active living to improved health, we know very little about when, where, and how physical activity takes place among Latinos, and what the key determinants of active living are in this population to develop effective prevention strategies. This editorial takes a critical, equity-centered perspective on methodological gaps in physical activity research, explains why these gaps are particularly problematic for Latino communities, and suggests research approaches that can address the complexity of social and cultural conditions that Latinos in the United States encounter.

## PHYSICAL ACTIVITY RESEARCH IN LATINOS

Examining physical inactivity in Latinos is important for several reasons. First, over the last several decades, the United States has undergone a dramatic transformation in employment opportunities available to the working adult population. The majority of workers today report less occupation-based physical activity than in previous decades, and some research suggests that this increase in sedentary occupations may have partially contributed to the rise in obesity among adults.<sup>4</sup> Currently, 44.8% of Latinos are classified as obese.<sup>5</sup> Second, examination of physical activity engagement in minoritized groups has implications for understanding racial/ethnic health inequities, given that these groups experience distinct social and economic contexts that influence physical activity opportunities. For example, Latinos tend to hold jobs that are labor-intensive and unstructured (for example, Uber drivers) and at times dangerous, especially for men, compared with other working US adults.<sup>6</sup> The overrepresentation of Latinos in these work conditions has its roots in their racialized identity in the United States, based on skin color and ethnic group membership, lower educational attainment, citizenship status, and language barriers, all contributing to what scholars have defined as occupational segregation.<sup>7</sup> Finally, studying physical inactivity in Latinos offers clues for tailoring prevention strategies for other minoritized groups based on immigration-related factors. In some of my previous research, we demonstrated that Latinos of immigrant origin are more likely to engage in vigorous occupational PA than other modes of activity.<sup>8</sup>

This mode of physical activity contributed a significant proportion of total PA, which would have been missed if only leisure-time PA was measured. Thus, immigration and work policies are critical for promoting physical activity and ensuring a healthy working adult population.

## MEASUREMENT OF PHYSICAL ACTIVITY

Most of the current evidence on the health benefits of living a physically active life has focused on measuring leisure-time physical activity and promoting MVPA to achieve national physical activity guidelines. Other light intensity domains of physical activity, such as standing for long hours, or bending and lifting as a part of caregiving duties, has not been well documented in Latinos. The exclusion of these modes of activity can underestimate the total amount of PA accumulated over time, especially in women, and lead to ineffective strategies for meeting PA guidelines in populations that may be engaged in various modes of PA. A related issue is that the total amount of PA achieved, whether light intensity or MVPA, has been based on activity levels accrued in bouts of 10 minutes or more. A small but growing body of evidence has shown that health benefits are achieved by counting activities that fall within one- and 10-minute bouts and measuring various modes of light intensity activities.<sup>9</sup> This evidence suggests that meeting MVPA recommendations may not be the only or best marker to define PA success in populations. Similarly, emerging evidence has indicated that sedentary behaviors should be measured separately from physical activity, given that high levels of sedentary

behaviors can be harmful to health, even among those who are physically active.<sup>10</sup>

## IMMIGRATION AND CONTEXT INFLUENCING PA

There remains a paucity of research examining the multilevel contexts that shape PA in Latinos and how immigration-related factors can exacerbate (or ameliorate) physical inactivity. For example, data suggest that Latinos tend to live in areas with limited or poor-quality neighborhood resources (e.g., parks, safety), and they can experience immigration-related stressors that can lower self-efficacy and motivation to engage in PA.<sup>11</sup> Importantly, the majority of studies to date have involved cross-sectional study designs or one-time assessments of physical activity that do not capture the dynamic day-to-day variability of how PA unfolds over time and the role that multiple levels of influence from interpersonal, family, neighborhood, and policy contexts have in shaping PA behaviors.

## RECOMMENDATIONS

Latinos are one of the fastest-growing population groups in the United States and are expected to represent a large segment of older adults over the next few decades, raising concerns about the health needs of this population. To address physical activity inequities and their effect on physical and mental well-being, I propose the following recommendations that can guide research and intervention strategies: (1) adopt equity-centered, antiracist theoretical and conceptual frameworks. In recent years, several scholars have outlined the theoretical underpinnings of racism on health inequities, including

how immigration policies are a form of structural racism.<sup>12-14</sup> These frameworks should be more actively adapted for PA research to ensure that research questions and interventions are socially, politically, and culturally congruent with Latino communities in an effort to (2) expand how we conceptualize and measure PA. By demonstrating how Latinos accumulate specific modes of physical activity over time, the field would clarify the relative merits of all types of physical activity for health, and test more tailored and differentiated interventions, fulfilling a need to (3) apply novel, rigorous study designs and analytic techniques. For example, ecological momentary assessment is a real-time data capture methodology that can repeatedly assess PA and its antecedents and consequences as it unfolds across changing temporal and environmental contexts (via cell phone and spatial sensors).<sup>15</sup> Applying ecological momentary assessment methods would go a long way to advance Latino health since data collection can be delivered in Spanish and would capture domain-specific PA (e.g., work or caregiving) and spatially bound valid assessments of PA in everyday life, which could simultaneously (4) increase the diversity of scholars conducting physical activity research. I was personally drawn to PA research because of my own lived experience as the daughter of immigrant factory workers, having a father who at one time was undocumented, and the roles my mother and father played raising four children and being community leaders. The lines of inquiry I have pursued over the course of my career were born out of this experience and the resilient, hard-working Latino community I represent. Future research would benefit from expanding the cadre of scholars that address physical activity in the

communities most burdened with debilitating chronic health conditions.

In conclusion, there is an urgent need to expand the conceptualization, measurement, and implementation of physical activity research in Latino communities if we are to make inroads in meeting national physical activity goals for all in the United States. Enhancing training opportunities for Latinos and other diverse scholars would ensure that research questions and intervention approaches are community-grounded and have real-world relevance and applicability. It may, in fact, be time to realize a radical new approach to PA research, one where rest is considered a relevant intervention strategy, and the intersection of gender, work conditions, and immigration factors, including policies, are examined to ensure that Latinos can reap the well-documented health benefits of leisure activity. *AJPH*

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