Capitalizing I.Q.: Intelligence as Human Capital in the Twentieth Century

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My dissertation focuses on the transnational history of intelligence testing in the twentieth century, and explores the relationship between war and international tensions, and psychometric testing. By examining major transnational actors and trends, principally from the United States, France, and Great Britain, it sheds light on the numerous connections between international conflict and the rise of population-based national psychometric testing programs. International conflicts over the course of the twentieth century helped to heighten consciousness and concern over the quality, as well as quantity, of national populations. Unprecedented opportunities to apply intelligence tests to large populations, which were in part created by the context of war, yielded mass amounts of testing data that elevated experts' concerns about national levels of intelligence at the same time that population experts vocalized anxieties about overpopulation. Experts from the fields of psychology, demography, genetics and eugenics spoke to these concerns in their research and advisory roles. The dialogue they helped to

establish contributed to a reimagining of intelligence as a form of human capital in the context of the Cold War. This form of human capital came to be considered a vital national resource that could influence outcomes in international conflict and diplomacy.

My time at the Rockefeller Archive Center has enabled me to clarify and further develop three sub-theses of my dissertation. First, race and class became increasingly interchangeable in dialogues about both national levels of intelligence and the efficacy of intelligence tests into the postwar era. Second, the degree to which concerns about population quality served as grounds for population experts' expressed concerns and policy suggestions regarding overpopulation increased markedly between the First World War and the decades following the Second World War. Third, the role of eugenics endured in the history of intelligence testing, long after eugenics itself had been largely defamed in the wake of Nazi applications of eugenics during the Second World War.

At the Rockefeller Archive Center, I consulted primary sources principally from the General Education Board, the Population Council, and the Social Science Research Council. These sources will figure prominently in two chapters of my dissertation that follow the history of intelligence testing in the decades following the Second World War. These sources confirm the importance of ideas about intelligence to the history of population research, the role of eugenics in prioritizing a certain conceptualization of innate intelligence measured by tests as "intelligence quotient," and the reconfiguration of "intelligence" as a form of human capital vital to nations in times of international conflict.

From the records of the General Education Board, I reviewed Allison Davis's longitudinal study on intelligence testing and the inability of tests to accurately measure intelligence across

class divides. Although Davis' work receives brief acknowledgement in several histories of intelligence testing, his study is worthy of much greater scholarly recognition. His research was recognized internationally by his contemporaries, and his study featured in the reports of the UNESCO Social Science Division on the alleged relationship between intelligence and differential fertility, which was presented at the 1954 World Population Conference in Rome.

The Population Council records provided particularly enlightening material on the activities and insights of major leaders in population studies during the critical transition period between the Second World War and the Cold War. The records of the Population Council underscore the centrality of intelligence to issues like differential fertility rates, thus connecting the history of intelligence testing with the history of population studies in a profound way which has not been explored in extant scholarship.

From the Social Science Research Council material, I viewed crucial records on the American Eugenics Society, later renamed the Society for the Study of Social Biology in the 1970s. This research highlights the role of newly formed relationships between demographers, geneticists, and psychologists, centered on questions of intelligence in populations, in the perpetuation of eugenic thought and practices in the decades following the Second World War.

Findings from the Records of the General Education Board

The Rockefeller Foundation's General Education Board funded various intelligence testing projects in the 1910s and 1920s, as well as in the 1950s. The University of Chicago study led by Allison Davis stands out as a hitherto overlooked chapter in the history of intelligence testing. Davis was a black professor of education at the University of Chicago who conducted

multiple studies on socioeconomic status and structural barriers to academic achievement in the United States. This study was of special interest to the 1950s UNESCO committee on intelligence and differential fertility. Notably, Davis did not challenge the premise of intelligence tests, or offer any resistance to the idea that intelligence was determined by genetics, but rather challenged the symbols and cultural basis of those tests in use. Davis maintained that intelligence tests that privileged exclusionary symbols were harmful to democracy and the nation; as they stood, he asserted that the tests were in fact depriving the nation of crucial human resources. His study is an important example of numerous critiques of intelligence testing that did not actually seek to subvert the tests on principle, but rather to modify them.

Davis' research received funding from the General Education Board for six years, starting in 1944, when he submitted a proposal "for the development and standardization of a verbal test of general intelligence which will measure and offer a means of comparing the abilities of children of all socio-economic levels."[1] In his proposal, Davis asserted that the use of tests that privileged middle class symbols and cultural knowledge was detrimental to the nation as well as the futures of individuals from lower socioeconomic backgrounds. He identified one of the problems with the tests was their almost universal acceptance "as primary measurements of innate ability." This misconception was responsible for "causing incalculably severe educational loss in the public schools."[2] Davis' proposed solution was to create new tests utilizing language and cultural symbols that were equally accessible across class divides. This, Davis concluded, would allow the tests to accurately measure innate intelligence.[3]

Davis' study concluded that: "the standard tests, fail to tap many aspects of intelligence. Both the tests and the schools are caught in a circular process. They define only certain kinds of activities as "intelligent," namely those activities which are highly valued in middle-class

academic culture. Then the schools, supported by the test-results, conclude that only those pupils who rank high on this special, limited range of activities are "intelligent." This is a circular process of in-grown education, which costs our nation and our industries a tremendous loss, through the failure of the schools to uncover and train many other kinds of ability in all our children. (p. 8)"[4] This is an important example of the adoption of the language of the capitalization of human resources, and marks a shift in modes of thought about intelligence as a kind of national resource, as opposed to an individual trait. It is also representative of the ways in which class dialogue increasingly supplanted race dialogue in conversations about the tests after the Second World War. Davis further identified a potential military application for his research in the development of democratically culture-based intelligence tests. His only reservation in giving his modified tests to the Army and Navy, which he believed would be eager to receive them, was his concern that they would become classified, and therefore unable to be applied in schools.[5] Davis' study thus makes an important early reference to intelligence as a form of human capital.

Findings from the Records of the Population Council

The Population Council played an important role in the professionalization of the fields of demography and population research. In particular, the Population Council funded numerous studies and activities of the Milbank Memorial Fund and the International Union for the Scientific Study of Populations. Following the Second World War, these organizations became increasingly concerned with the relationship between fertility and intelligence in both a national and international context. Population experts in the middle of the twentieth century particularly

expressed concern about the possibility of over-population. Alongside the fear of overpopulation was the anxiety that the lowest socioeconomic classes had significantly higher rates of fertility than the middle and highest socioeconomic classes. The records of the activities of the Population Council shed light on these issues.

The work of the Milbank Memorial Fund supported by the Population Council is particularly relevant to the history of demographic investigation of possible connections between psychological characteristics and fertility.[6] The Fund prioritized its agenda in the years following the Second World War as: "(1) factual studies of class differences in fertility; (2) studies of contraception; (3) study of social and psychological factors affecting fertility; and (4) promotion of studies of world population problems."[7] The Fund, which directed the landmark longitudinal Indianapolis population study, thus saw questions of fertility and psychological traits as intimately connected. For example, leading United States population expert Frederick Osborn particularly directed the Population Council toward investigation of the connection between psychological traits and family size.[8] In his correspondence with then-President of the Fund, Charles Westhoff, Osborn congratulated Westoff on the progress made in confirming correlations between performance on the Otis Intelligence Test and fertility.[9] This aspect of postwar population studies has not yet been thoroughly investigated by scholars and is crucial for understanding the shift away from individual toward population-based intelligence testing in the context of the international tensions that characterized the twentieth century.

This research helps to illustrate the dynamic connections between the hitherto distinct historiographies on population studies and intelligence testing. The records of the Population Council demonstrate the centrality of psychological questions to demographic research on populations and fertility practices.

Findings from the Records of the Social Science Research Council

The records of the American Eugenics Society and, later, the Society for the Study of Social Biology underscore the centrality of concerns about levels of intelligence among populations to postwar eugenics, and the working relationships between demographers, psychologists, and self-professed eugenicists that developed during this era. Genetics was the critical factor that brought these professions together to address questions about group intelligence.

By the 1960s, studies on differential fertility assuaged concerns in the immediate postwar years that the poorest members of society were reproducing at much higher rates than the rest of the population. The American Eugenics Society even established a committee to investigate the relations between intelligence and personality to investigate these trends.[10] The baby boom marked a significant change in fertility patterns, which helped to redirect eugenic concerns about levels of intelligence away from anxiety over declining rates of intelligence toward explorations in how to increase national levels of intelligence. Previous studies on assortative mating and differential fertility that had indicated declining levels that "showed widespread and persistent negative associations between fertility and intelligence" were reevaluated as representative of a transitional phase in reproductive habits. This helped to inspire a transition away from anxiety over "a possible deterioration in man's genetic resources" to research in improving populations' genetic resources.[11]

New and improved technology in contraception was also partly responsible for the optimism of the American Eugenics Society. Some studies suggested that increasing fertility

control was in fact leading to higher fertility rates among the more intelligent members of society, with some studies indicating, "that the relation of I.Q. to the fertility of individuals was not negative and might even be positive in a major part of our population.[12] One study by Carl Bajema, a leading postwar expert on intelligence testing and fertility, suggested the possibility of "a positive relationship between ability (as measured by I.Q.) and fertility right across the board, the more intelligent in every class having more children than the average of their class."[13] These findings help to outline a shift in the postwar era away from a focus on the negative effects of differential fertility on national intelligence toward efforts to maximize national levels through reproductive control.

Conclusions

The postwar era created opportunities for intelligence testing to be applied to populations in an unprecedented way. By the end of the Second World War, there was shared anxiety among many western nations that national levels of intelligence were declining, potentially due to various populations' reproductive patterns. My dissertation will explore how international tensions drove major international organizations to address perceived connections between intelligence measurement and population. Nationally, as my research in the records of the General Education Board shows, anxiety over possible loss of human resources in intelligence among various socioeconomic classes fueled longitudinal studies on culture and intelligence tests. Additionally, as indicated by my findings among the records of the Population Council and the Social Science Research Council, changing international climates created opportunities for various professions of the human sciences to lay claims of authority to the understanding and

assessment of intelligence. My month of research at the Rockefeller Archive Center has thus helped to trace the evolution of "intelligence" as a form of national human capital and to trace the connections between the national and transnational dimensions of my dissertation narrative.

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[1] Flora M. Rind to Ralph W. Tyler, November 15, 1944, Folder 5289, Box 496, Series 1.3, FA058, General Education Board records (GEB), Rockefeller Archive Center (RAC).
[2] Allison Davis, "Proposal for the Development and Standardization of a Verbal Test of General Intelligence which will Measure and Offer a Means of Comparing the Abilities of All Socio-Economic Levels," Folder 5289, Box 496, Series 1.3, FA058, GEB, RAC, p. 3.
[3]W. Allison Davis and Robert J. Havighurst, "The Measurement of Mental Systems (Can Intelligence be Measured?)", Reprinted from *The Scientific Monthly*, Vol. LXVI, No. 4 (April 1948), Folder 5291, Box 496, Series 1.3, FA058, GEB, RAC, p. 301.
[4] "General Education Board Study of Cultural Factors in Intelligence-Tests. I. Progress-Report on Study of Cultural Factors in Ten Standard Tests of Intelligence. II. Proposal for the Development of Culturally Equalized Group-Tests of Intelligence," Folder 5289, Box 496, Series 1.3, FA058, GEB, RAC.
[5] Allison Davis to Flora M. Rhind, November 10, 1948, Folder 5290, Box 496, Series 1.3, FA058, GEB, RAC.
[6] "The Fund's Work in Population Problems, 1928-1950," Folder 340, Box 22, Accession 1, Series 1, FA210, Population Council records (PC), RAC.
[7] "The Fund's Work in Population Problems, 1928-1950," Folder 340, Box 22, Accession 1, Series 1, FA210, PC, RAC, p. 2.
[8] Frederick Osborn to Charles F. Westhoff, December 1, 1953, Folder 340, Box 22, Accession 1, Series 1, FA210, PC, RAC.
[9] Frederick Osborn to Charles F. Westoff, December 14, 1954, Folder 340, Box 22, Accession 1, Series 1, FA210, PC, RAC.
[10] Folder 5163, Box 427A, Series 1.74, FA021, Social Science Research Council records (SSRC), RAC.
[11] Frank Lorimer, "The New Outlook in Eugenics," Folder 4849, Box 398, Series 1.74, FA021, SSRC, RAC, pp. 125-126.
[12] "The American Eugenics Society, Inc., Six-Year Report of the Officers: 1965-1970," Folder 5149, Box 427, Series 1.74, FA021, SSRC, RAC, p. 6.
[13] *"Some Genetic Indications of Population Policy, Michael Tietelbaum, Office of Population Research, Ms. for the U.S. Commission on Population Growth and the American Future. With modifications suggested by F.O. 3/3/72,"* Folder 5149, Box 427, Series 1.74, FA021, SSRC, RAC, p. 5.