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Department of Human Sciences

To: Dr. Deepak Kumar, Director, JLC BBRI
From: Dr. Nina Smith, Assistant Professor, Department of Human Sciences
Re: CORP Application
Date: May 20, 2020

Good Afternoon Dr. Kumar,

Please consider my application for the CORP funding opportunity. I appreciate your consideration.

In Truth and Service,

Nina Smith, PhD
Assistant Professor
Department of Human Sciences
North Carolina Central University
919.530.7147
nsmith42@ncu.edu



**Enclosures below*

COVID-19: IMPACT ON BLACK FAMILIES

Principal Investigator – Nina Smith, PhD, NCCU

SPECIFIC AIMS

Coronavirus disease 2019 (COVID-19) is a virus that has spread rapidly across the globe in recent months. The United States has not been exempt from COVID-19, with recent cases and death rates far surpassing those of countries who have combatted the spread. As of May 13, 2020, there have been approximately 1.42 million confirmed cases in the United States – comprising 33% of the world's total cases. While the effects of COVID-19 on the health of racial and ethnic minority groups is still emerging, current data suggest a disproportionate burden of illness and death among racial and ethnic minority groups. The alarming rates coupled with disparities in onset and death have prompted researchers, policy makers and the public to consider potential short- and long-term effects of the virus.

During this unprecedented time, individuals are experiencing an array of emotions and circumstances. Of key importance are the drastic changes in day-to-day family routines. Many children are at home during the day because schools are closed. Parents of many of these children are still juggling the demands of work, whether at home or at their actual work sites. These changes have vital implications for the well-being of children and families, as well as the communities in which they reside. Rural communities may be especially susceptible to the snowball of effects of COVID-19. Comprising 20% of the U.S. population, these settings already suffer from greater socioeconomic disadvantage, limited educational, economic and occupational opportunities, and lack of access to healthcare and social services to promote better health. Similarly, African American households may be indelibly impacted by COVID-19. Work circumstances can contribute to higher risks of COVID-19 exposure and onset and African Americans comprise a sizeable portion of the critical workers who occupy jobs in essential industries. Living conditions, namely residential segregation, are linked with a host of poor health outcomes and underlying health conditions.

The unparalleled changes that are taking place have vital implications for the health and well-being of children and families. Increased levels of stress may lead to poorer health or exacerbate already existing health conditions. Unemployment, changes in employment, and lack of access to food and other essential items also have the potential to disrupt household routines and health-related quality of life in harmful ways. Collectively, these barriers might make African Americans especially vulnerable amid the world's pandemic. Therefore, **the objective of the present study** is to assess 'real-time' impacts of COVID-19 within African American households residing in several North Carolina communities. Specifically, this study seeks to achieve the following aim:

Aim 1: Conduct a community health assessment of African Americans living in rural and urban North Carolina communities.

Activities. 1. Conduct a longitudinal survey to explore associations among health status, parent-child interactions, parental stress, perceived support, and food sufficiency amid the COVID-19 pandemic.

The proposed research efforts are reciprocal, as we seek to provide a small monetary incentive to participants during a time of economic uncertainty. Parents of at least one child under the age of 18 will be asked to complete a brief electronic questionnaire at two time points – mid June and late September. Achieving the proposed aim will increase our knowledge about immediate effects of a global pandemic on the health and well-being of African American children and families. Results from this study will also serve as preliminary data for a future grant submission to NIH (i.e. National Institute of Minority Health Disparities). These research efforts are timely and will facilitate larger-scale funding opportunities aimed at understanding COVID-19's effects on the health and well-being of underrepresented populations. Moreover, findings from the present study will inform policies aimed at crisis preparedness, employee supports, and public health efforts for individuals residing in rural and urban communities in North Carolina.

RESEARCH STRATEGY

Research Design

The World Health Organization has declared the COVID-19 crisis a global pandemic. However, little is known about its short- and long-term effects on American households. Of particular concern is the health and well-being of vulnerable populations – namely African Americans and those that may be geographically isolated. This project proposes a mixed methodological design aimed at understanding COVID-19's influence on the health, parental stress, perceived support, and food sufficiency of African American families.

Procedure. To achieve the study aim, the proposed project will utilize a unique dataset collected by the principal investigator. Data will be collected with approval from North Carolina Central University's Institutional Review Board. Approximately 100 African Americans will be recruited from four counties in North Carolina (i.e. Cabarrus, Durham, Halifax, and Wake), including both rural and urban areas at two time points in 2020 (June and September). Durham and Wake counties provide a strong context for studying the impacts of COVID-19. Both counties are heavily populated and make up approximately 11% of the states' total cases of COVID-19. Cabarrus and Halifax are two rural counties and make up approximately 2.5% of the state's total cases. African Americans comprise one fourth of North Carolina's total population. Durham and Wake counties are two of eight counties that comprise more than half of North Carolina's African American population (Tippett, 2015). While the prevalence of the virus is lower among counties in our state, compared to other states, its onset has triggered an immediate and noticeable reaction among all Americans. The proposed study is well positioned to glean a deeper understanding of these effects on African American families residing in the aforementioned communities.

Recruitment and sample

Data will be collected with approval from the North Carolina Central University's Institutional Review Board (an application has already been submitted for expedited review). Recruitment of participants will be broad, utilizing word-of-mouth and distributing recruitment flyers through established list-serves and social media. Of key importance are the established relationships that exist with the targeted counties for recruitment. The principal investigator has access to community liaisons in Halifax and Cabarrus counties. Similarly, the project investigator has an existing participant database from a previous research study conducted in Durham and Wake counties. The project investigator plans to rely on the expertise and assistance of the BBRI's Community Engagement Core. Collectively, these resources will prove useful in recruitment efforts. One hundred individuals will be recruited from the four targeted counties (approximately 25 participants/county) who meet the following criteria: (1) individuals must be 18 years of age or older; (2) individuals must identify as African American; and (3) individuals must have at least one child under the age of 18.

Survey Instrument

The online survey will be administered 2 times – once in June and a second time in September. The survey will consist of 50-60 items. The survey is expected to take 20 to 30 minutes to complete. Participants will receive a \$15 incentive for each survey completed (a total of \$30 to be distributed to each participant if the survey is completed at both time points). Participants will be asked to report on demographic characteristics such as age, gender, income, race/ethnicity, education, marital status, employment status, number of children and adults in the home, and health-related quality of life. The survey will include detailed questions about parent-child interactions, parental stress, perceived support, and food sufficiency. A modified survey will be administered at the second assessment and will not include the demographic questions asked initially (with the exception of current health status).

Measures.

Parent-Child Interactions

Items from three parent-child interaction subscales will be used. The Parent-Child Aversiveness and the Daily Parent Withdrawal scales both include items on a 4-point scale ranging from "strongly disagree" to "strongly agree". Items measure harsh, withdrawn, and warm parenting interactions. Items include "I took my frustration out on my child" and "My child and I laughed often". Both scales have been used in prior studies and have been pilot tested for clarity and cultural appropriateness with diverse families.

Parental Stress

The Parental Stress Scale will capture parents' perceived level of stress. The 20-item surveys include items such as "I am happy in my role as a parent.". The Likert-scale responses range from 1 to 5 and have shown to be valid and reliable in community samples.

Perceived Support

A subscale of Krause's (2005) Perceived Support Scale will be used in the proposed study – namely items that capture tangible and emotional support. Participants are asked, "Have you (or any member of your household) received any of the following other sources of household income or support?" Responses include, "Unemployment Insurance" and "Money given to the family". Respondents will also be asked about supports received from their employer.

Food Sufficiency

A short-form scale will be created using three food security scales – the Household Food Security Scale, Adult Food Security Scale, and Children's Food Security Scale. All scales and subsequent items have been validated using both ethnographic and statistical methods.

Controls

Demographic data on participants' age, income, education, and number of siblings in the home will be included on the survey. These variables will serve as controls in all data analyses.

Stata 13 software will be used to in-put and analyze study data. Quantitative assessments will employ ordinary least square regressions. Nvivo will be used to analyze the qualitative components of the study variables.

Retention

After obtaining informed consent for study participation, we will request preferred contact information (e.g. email address, phone number) for follow-up communication. Participants will be reminded of the additional assessment and the subsequent incentive that comes when participating a second time. The project investigator will place an intermediate call/email to each participant midway between assessment one and two to remind participants about the upcoming survey.

Activities and Timeline

Table 1. Timeline of project activities

	Year 1 1-3 months		Year 1 4-6 months		Year 1 7-9 months		Year 1 10-12 months	
IRB Approval								
Sample recruitment								
Data collection								
Data analysis and manuscript writing								
Write R21 grant								
Dissemination of findings								

Budget

The proposed study funding will enable the researcher to collect data in four North Carolina counties. Funds will be used to provide incentives for participants and purchase mailing supplies (i.e. mailing envelopes and postage). Costs and corresponding justifications for each category are further outlined below.

Table 2. Budget

Budget Category	Costs	Justification
Supplies	\$1000	Envelopes; Postage costs to mail participant incentives (\$1.20 x 200 mailings), print, office supplies, advertisement
Research Assistant	\$2700	\$12/hr for 15/week for 15 weeks
Incentives	\$3,000	\$15 per participant x 100 participants* (2 time points) – covered by NCCU internal funds
Summer support (0.5 months) including fringe	\$4800	PIs effort
TOTAL	11,500	

*100 is the target number of participants. The incentive cost may be lower if I do not reach my targeted number of participants.

Total requested: \$11,500; CARES - \$8500 and NCCU internal funds: \$3000

BIOGRAPHICAL SKETCH

NAME: Nina Smith

eRA COMMONS USER NAME (credential, e.g., agency login): NINA_SMITH

POSITION TITLE: Assistant Professor of Human Sciences

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Spelman College, Atlanta, GA	BA	05/2004	Psychology
North Carolina Central University, Durham, NC	MA	05/2008	Psychology
University of North Carolina at Greensboro, Greensboro, NC	PhD	08/2012	Human Development and Family Studies
Duke University, Durham, NC	Postdoctoral Research Associate	08/2013	African and African American Studies; Center for Child and Family Policy

A. Personal Statement

Dr. Nina Smith is an assistant professor in the Department of Human Sciences at North Carolina Central University. (B.A. Spelman College, 2004; M.A. North Carolina Central University, 2008; Ph.D. University of North Carolina at Greensboro, 2012). Before coming to NCCU, Dr. Smith was a postdoctoral research associate at Duke University. Dr. Smith is the area coordinator for the child development and family relations concentration area within the Department of Human Sciences.

Grounded in ecological and developmental frameworks, Dr. Smith's training and specific research interests center around the impact of economic conditions such as poverty, parental job loss, and parental work characteristics on the well-being of children and families. She is currently funded by the RCMI and National Institute of Minority Health Disparities to estimate the associations among work demands, family processes and mental health in African American families. Findings from her work are intended to inform policies aimed at creating family-friendly workspaces and improved health-related quality of life for underrepresented groups. The impact of work demands on racial/ethnic minority individuals is of particular interest given the varied work patterns and health disparities among these groups.

B. Positions and Honors

2013-present, Assistant Professor, Human Sciences, North Carolina Central University (NCCU).

2014-present, Area Coordinator, Child Development and Family Relations, Department of Human Sciences, NCCU.

2013-2017, Research and Faculty Affiliate, Research Network on Racial and Ethnic Inequality, SSRI, Duke University.

2012-2013, Postdoctoral Research Associate, African and African American Studies, Center for Child and Family Policy, Duke University.

Honors

2018-2019 40 Under 40 Alumni Award, NCCU

2015-2016 Honorary Member Award, National Society for Leadership and Success, NCCU

2014-2015 Eagle Advocate Award, Student Disability Services, NCCU

2013-2014	College of Behavioral and Social Sciences Mini-Grant (\$4,000), NCCU
2011-2012	Kappa Omicron Nu Honor Society, UNCG
2008-2009	School of Human Environmental Sciences Scholarship (\$1,300), UNCG
2007 -2008	Outstanding Research in Health Disparities, NCCU

C. Contributions to Science

Select Publications

1. Smith, N. & Glass, W. W. (2019). Ready or not: Teachers perceptions of young children's school readiness. *Journal of Early Childhood Research*, 17(4), 329-346.
2. Royal, K., Eaton, S., **Smith, N.**, Cliette, G., & Livingston, J. (2017). The Impact of parental stress and social support on child behavior outcomes of children in African American single mother households. *Journal of Black Sexuality and Relationships*, 4(2), 1-26.
3. **Smith, N.**, Crosby, D. A., Scott-Little, C., Payne, C., & Livingston, J. (2017). Assessing the links among maternal nonstandard work schedules, early learning environments and young children's academic achievement. *Journal of Psychology and Clinical Psychiatry*, 8, 1-15.
4. **Smith, N.** (2016). *Employment patterns among black immigrant mothers: Implications for child well-being*. In Harper, J. C., Johnson, C. D., Frazier, T. A., & Hargrove, J. L. (eds). *Topics in African diaspora history*. Kendall Hunt: Dubuque, IA.
5. Livingston, J., Merryweather, J., Mohabir, J., Smith, C. L., **Smith, N.**, et al. (2014). Dramatic plays as a tool to educate young African-American females about HIV/AIDS. *Journal of Health Disparities Research and Practice*, 7(2), 1-9.
6. Zaslow, M., Crosby, D. A., & **Smith, N.** (2013). *Issues of quality and access emerging from the changing early childhood policy context: Towards the next generation of research*. In Gershoff, E., Mistry, R., & Crosby, D. A. (eds). *Societal contexts of child development*. Oxford University Press: NY, NY.

Other publications:

1. Livingston, J., **Smith, N.**, et al. (2013). A Case for university teaching and engagement: A Culturally relevant intervention to educate young African American women about breast cancer. *World Medical and Health Policy*, 5, 96-110.
2. **Smith, N.**, et. al. (2010). Theater as tool to educate African Americans about HIV/AIDS: The role of historically black colleges. *African American Research Perspectives*, 11, 65-81.
3. Livingston, J., **Smith, N.**, et al. (2009). Theater as a tool to educate African Americans about breast cancer. *Journal of Cancer Education*, 24, 297-300.
4. Livingston, J., Holley, J., Eaton, S., Cliette, G., Savoy, M., & **Smith, N.** (2008). Achieving cultural competence: Understanding the intersection of culture, ethnicity, and psychology. *Best Practices in Mental Health: An International Journal*, 4, 1-14.

Select Presentations

1. **Smith, N.** (April, 2017) Maternal work schedules and young children's physical well-being. Presented at the biennial meeting for The Society for Research in Child Development, Austin, TX.
2. **Smith, N.** (October, 2016) Assessing the links between fathers' nonstandard work schedules and academic readiness among young boys of color. Presented at the special topics meeting on babies, boys, and men of color for The Society for Research in Child Development, Tampa, FL.

3. Legette, K., & **Smith, N.** (March, 2015) School class composition and youth 3rd grade reading achievement. Poster presented at the biennial meeting of The Society for Research in Child Development, Philadelphia, PA.
4. **Smith, N.** (September, 2014) Great recession, great promise? Understanding child and youth resilience during uncertain economic times. Invited presentation at the Innovations in Behavioral and Social Science Research Lecture Series, NCCU's College of Behavioral and Social Sciences, Durham, NC.
5. Kintner-Duffy, V., Scott-Little, C., & **Smith, N.** (June, 2013) "We're all the same": Cultural practices of early childhood professionals. Presented at the annual meeting of The National Association for the Education of Young Children, San Francisco, CA.

D. Additional Information: Research Support and/or Scholastic Performance

1. 2014 - Mini-grant recipient for Project "Parental Perceptions of Child Care" College of Behavioral and Social Sciences, North Carolina Central University (Award: \$4,000).
2. 2018 – *Project DEEAL*. RCMI Center for Health Disparities Research and the National Institute of Minority Health Disparities (\$52,620)