Impact Statement

This thesis is part of the first research project assessing infant neurocognitive development in rural Africa. As such, it is part of a newly emerging area of research concerned with understanding the impact of environmental adversity, as frequently experienced in low and middle income countries (LMIC's), on early cognitive development.

The presented research contributes to the field in two key ways. First, it provides evidence about the efficacy of neuroimaging methodology for the study of young infants in low-resource settings. This thesis in particular is the first to demonstrate the utility of electrophysiological markers of infant development in a low income country. This will help inform future research about both methodological considerations when setting up similar studies, as well as provide some context as to the observations made in other populations. Secondly, the findings presented in this thesis contribute to the definition of early markers of atypical cognitive development associated with environmental risk factors frequently encountered in LMIC's. This will be of importance for future research seeking to evaluate the efficacy of specific interventions, as well as in clinical practice seeking to identify infants most at risk of a compromised outcome.

Findings presented in this thesis have been disseminated within the wider scientific community through presentation at several national and international meetings. The rationale and importance of this line of research has further been communicated to participants in The Gambia and the UK during dedicated outreach events as well as to wider lay audiences, which has demonstrably increased awareness regarding the importance of healthy brain development and the need for global action.

Ultimately, this line of research will provide a foundation for the implementation and evaluation of interventions targeted at improving developmental outcomes for infants and children globally.