Japan Children's Study

Longitudinal study for exploring the developmental mechanims of social ability

1.Research topic

The longitudinal work into development- especially from infancy to toddle to child to adolescent is very important for two main reasons: first, nearly no work exist and no data of such a long period are available as is collected by the researchers involved. Second, only this type of longitudinal research can reveal the underlying mechanisms. Mechanisms that can be further examined in smaller (short-term) additional studies. A strong and important factor of the research is that the social and educational factors are considerate from a multidimensional perspective. I am of the opinion that this combination of social and environmental factors in combination of DNA analysis is highly contemporary and has the potential to make important scientific discoveries. The outcome could provide guidelines for practical settings.

2.The research team

The research team was very strong, but became even stronger with new members that joined (e.g. prof. dr. Akio Nakai). This team of experts (brain sciences, pedagogy, paediatrics developmental psychology, and statistics) works in close corporation with some younger researchers in their earlier career. By 'educating' these younger members through the more experience researchers, the program will also have for the future the necessary expertise. The latter makes it possible to continue and elaborate this program with more short-term research (e.g. 1-year projects), which is of utmost importance for the future. Especially with respect to the continuation of the multi-disciplinary aspect of the research programme.

3. Outcome and future directions

The DNA analysis data presented during the conference are indicating already some of the underlying mechanism. However, more samples are needed. Further, the statistical analysis showed several significant relationships between the different social components. Unexpected was the lack of relationship between 30 and 42 months of age. This could be of utmost important (e.g. underlying mechanism?) and

needs somehow further examined by new short-term data collection. This transition period is maybe non-linear, which then should require a more intensified data collections during the period between 30 and 42 months, for instance, every month. The findings with respect to new design of the Stanford 'marshmallow' task in order to examine the children stable versus unstable behaviour is really interesting. A nice new experimental set-up and the findings are ready to get published international scientific journals.

4. Conclusion

The research program shows promising findings and progress has been made. The program would benefit from some short-term intensified data collection (see 3), which would enrich the research significantly. Further analysis is needed in order to investigate the transitions between the different age period, e.g. toddle to childhood in order to determine the factors that contribution to sociability. It is plausible that their different actors for every transition. Final, the program deserves more global attention and therefore the research group should also seek for international collaboration.

Nishinomiya, 29 of August 2019

prof. dr. G.J.P.Savelsbergh

Faculty of Behavioural and Movement Sciences, Vrije University, Amsterdam, The Netherlands, & Research Institute Amsterdam Movement Sciences, The Netherlands, & Institute for Brain and Behaviour Amsterdam, The Netherlands