

# Moving Well-Being Well: evidence and background to the development of the MWBW physical literacy intervention for children

## BACKGROUND

- Irish adolescents are not displaying the attributes of physical literacy that would see them engage in physical activities for life (Belton et al, 2014).
- Reciprocal relationship between actual competence and PA changes with developmental age (Stodden et al. 2008).
- Suggestions have been made that the reason physical activity is infrequent in many people's lives is motivation (Whitehead, 2010).
- Fundamental movement skills (FMS) do not equal physical literacy (Almond, 2014). Nevertheless, research has identified that mastery in FMS can predict physical activity (PA) levels in children (Barnett, Morgan, Beurden, & Beard, 2008)

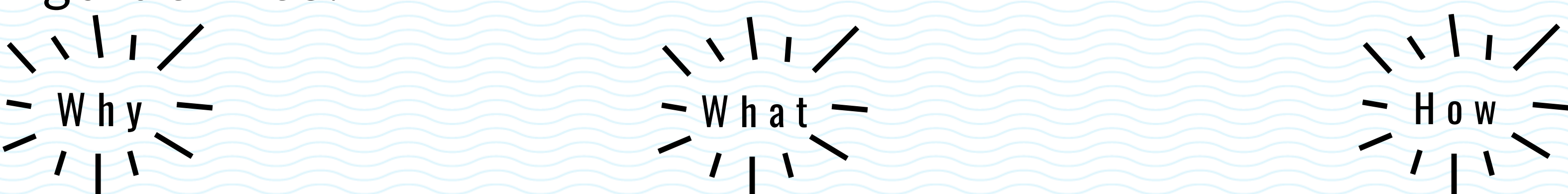
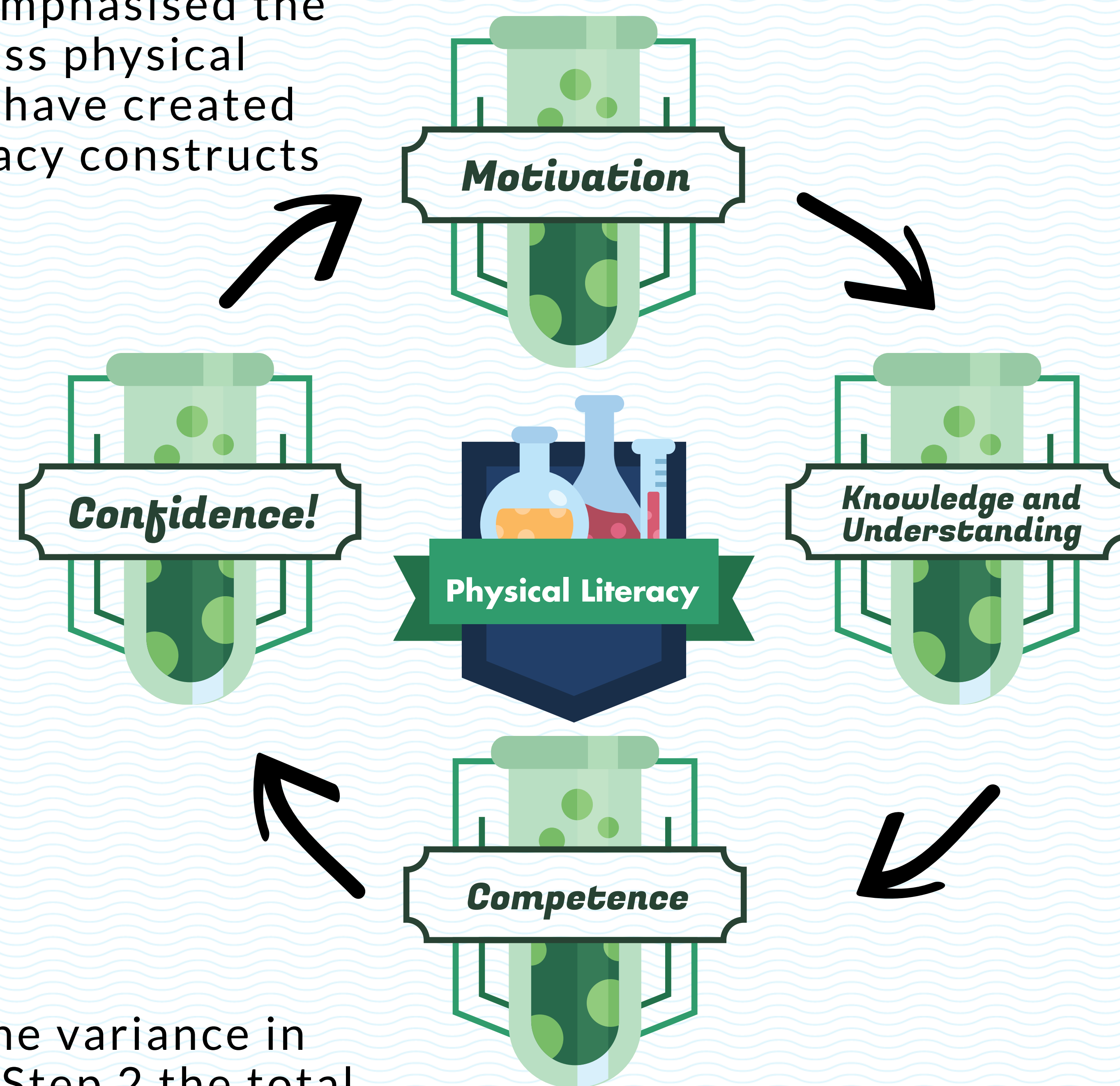


## METHODS

- 1 Following Whitehead's theory on physical literacy, a questionnaire was designed and administered to 956 children (47.5% female, 9.17 ± 2.03 years).
- 2 Assessment of motor skill proficiency involved was measured using the Test of Gross Motor Development (TGMD-3; Ulrich, 2013) on a unique app developed by the research team.
- 3 Reviews from Giblin et al and Lundvall (---) emphasised the current lack of robust empirical tools to assess physical literacy. While this work does not declare to have created such a tool it has amalgamated physical literacy constructs into one battery.

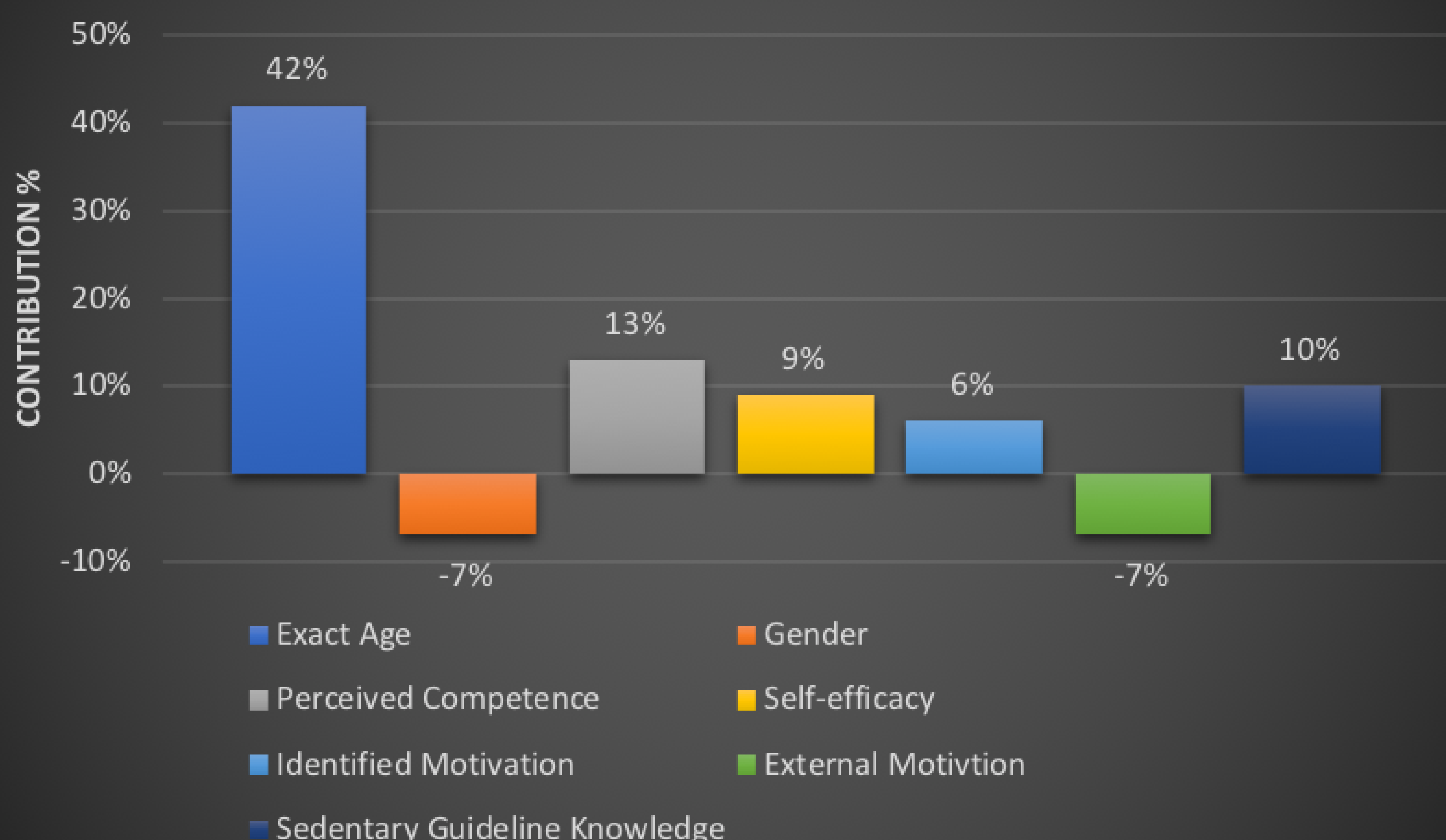
## RESULTS

Preliminary results indicate that the majority of children (77.5%) did not achieve the FMS proficiency expected for their age. Children scoring above average on self-efficacy and motivation scales scored significantly higher ( $p < 0.01$ ) on the gross motor quotient (GMQ) than those who fell below the population average. Regardless of their GMQ, children had poor knowledge and understanding, with 54.8% not knowing the minimum recommended MVPA guidelines.



Age and gender were entered at Step 1, explaining 21.4% of the variance in FMS proficiency. After entry of the physical literacy scales at Step 2 the total variance explained by the model as a whole was 30.5%,  $F(7, 855) = 41.7, p < .001$ . The seven control measures explained an additional 9.1% of the variance in FMS proficiency, after controlling for age and gender

## Unique Contribution



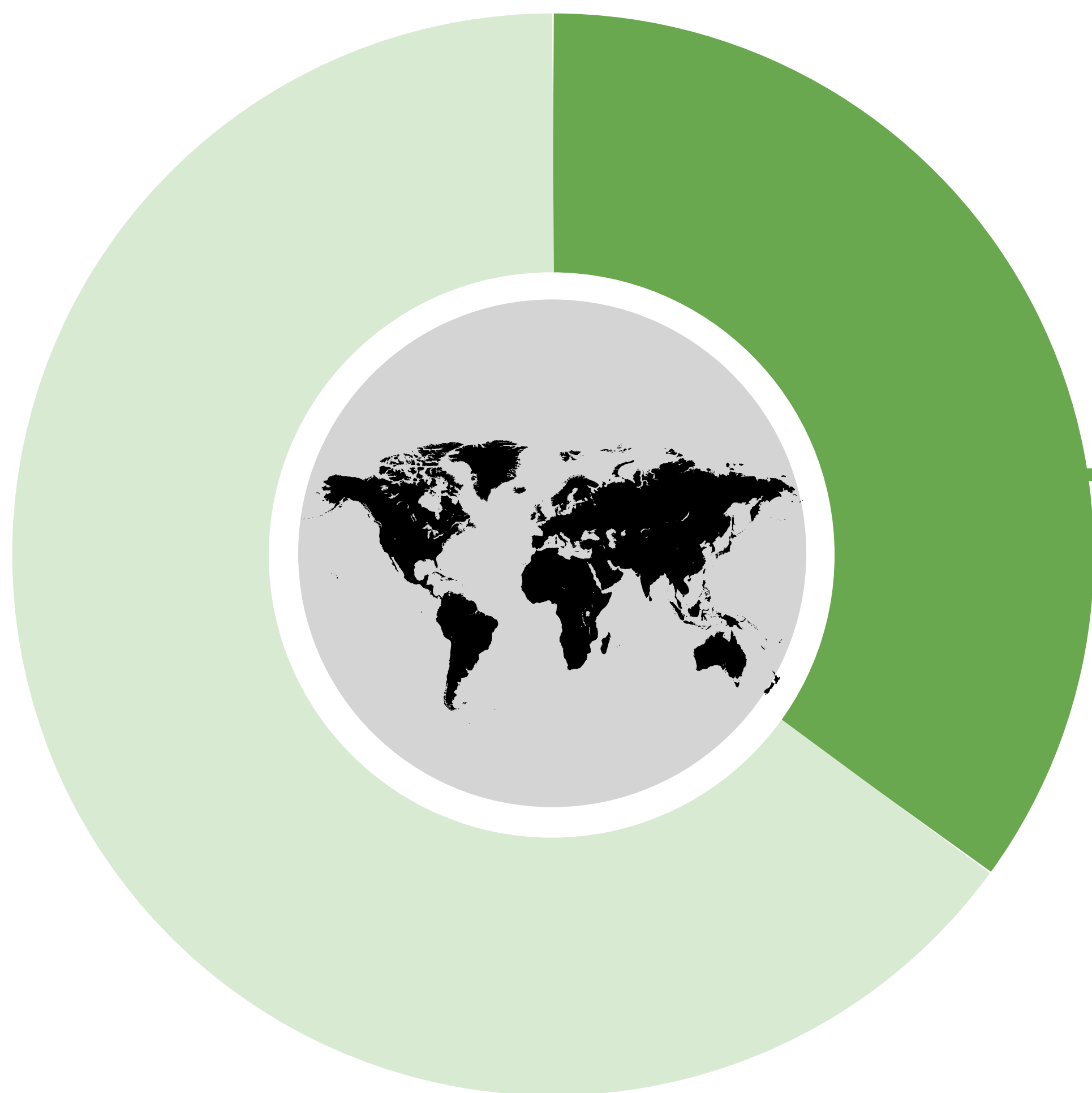
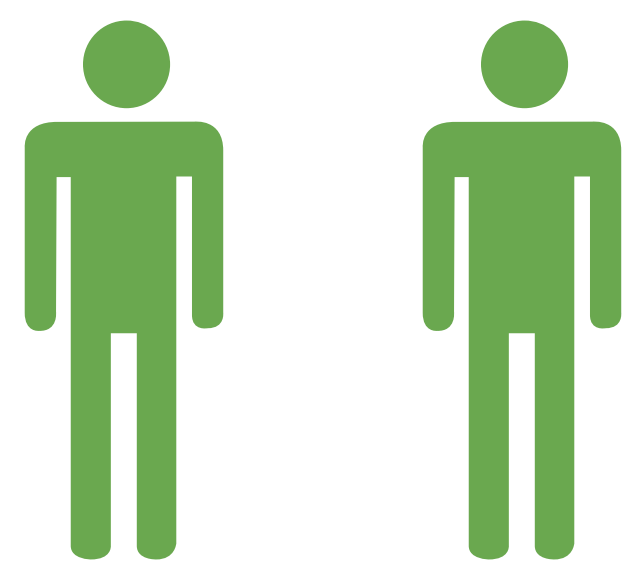
## CONCLUSIONS

In this model perceived competence, self-efficacy and knowledge of sedentary guidelines continued to make a unique contribution to prediction of FMS proficiency. Interestingly once broken into their subscales two forms of motivation were statistically significant, identified motivation and external motivation.

As competence becomes more pivotal in continuing PA it is fascinating to see what drives, or hinders, middle-late children and how we can tailor interventions to their needs. With intrinsic motivation heralded as a vital facet, yet not significant in this study we must consider that the maintenance and enhancement of this inherent propensity requires supportive conditions, as it can be fairly readily disrupted by various non-supportive conditions.

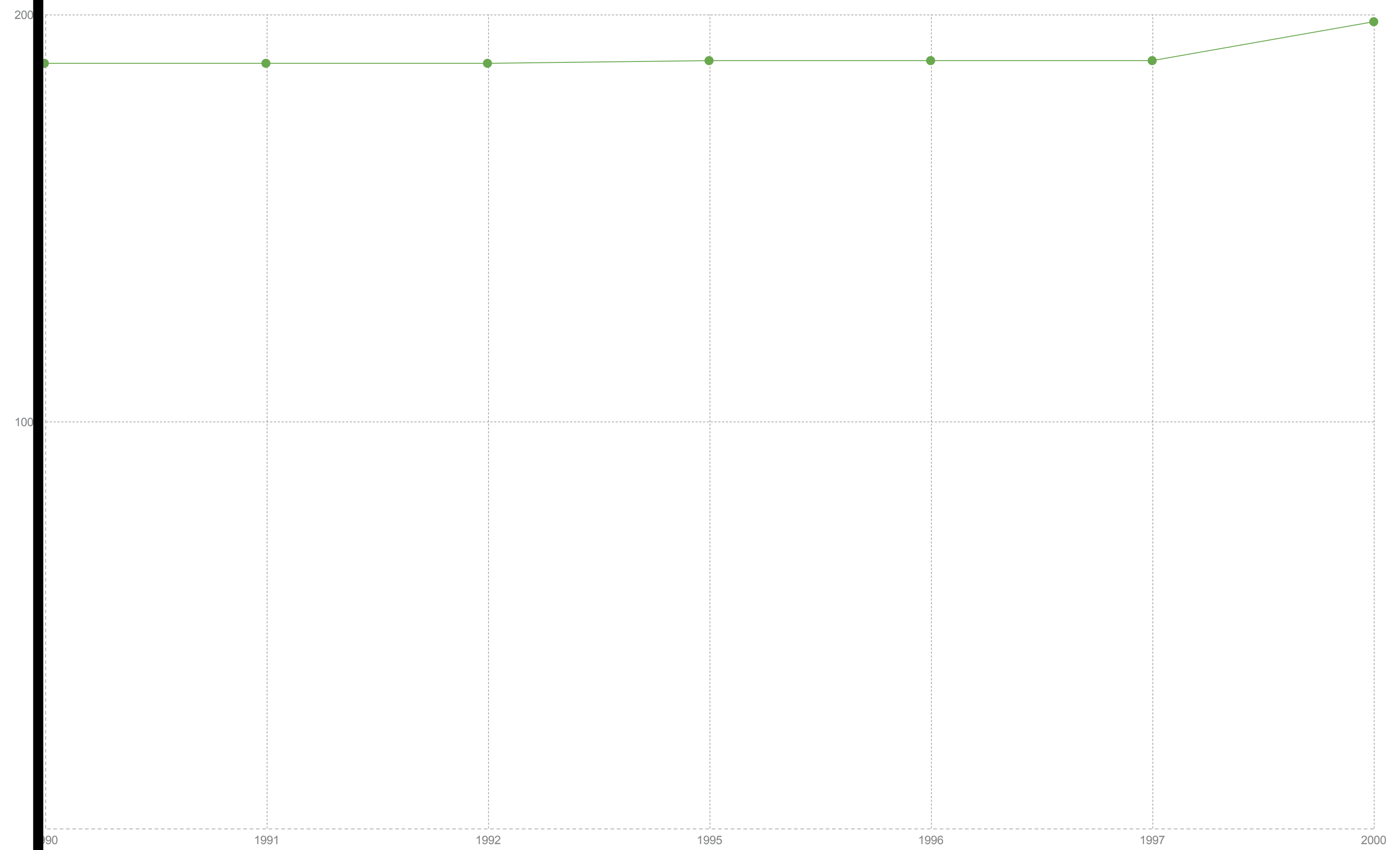


Latest data shows that more than 2 billion people are going hungry, based on their regular calorific intake



That's around **35%** of the world's population.

As you can see from the table below, there has a steady increase in the number of people going hungry since 1990.



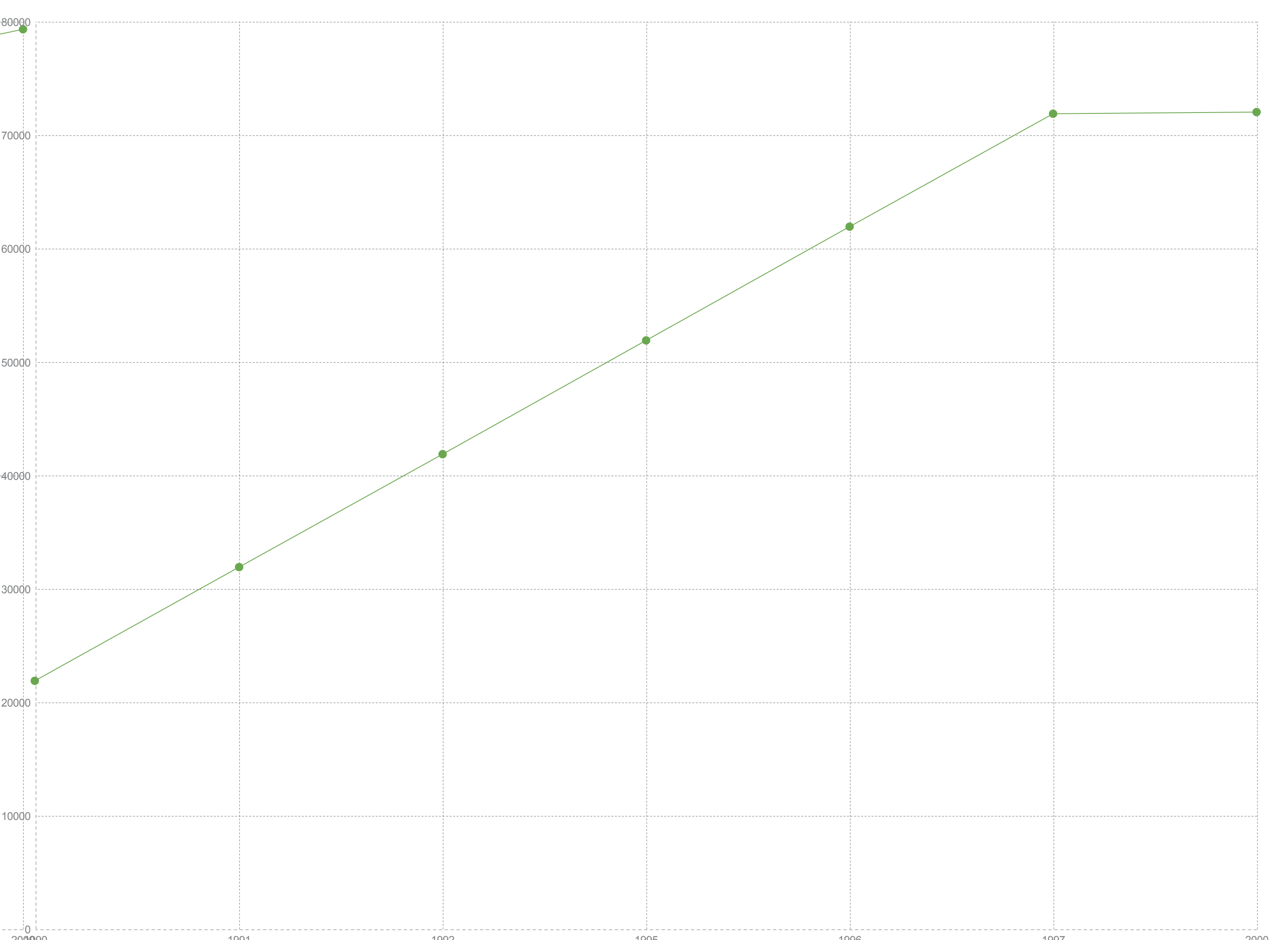
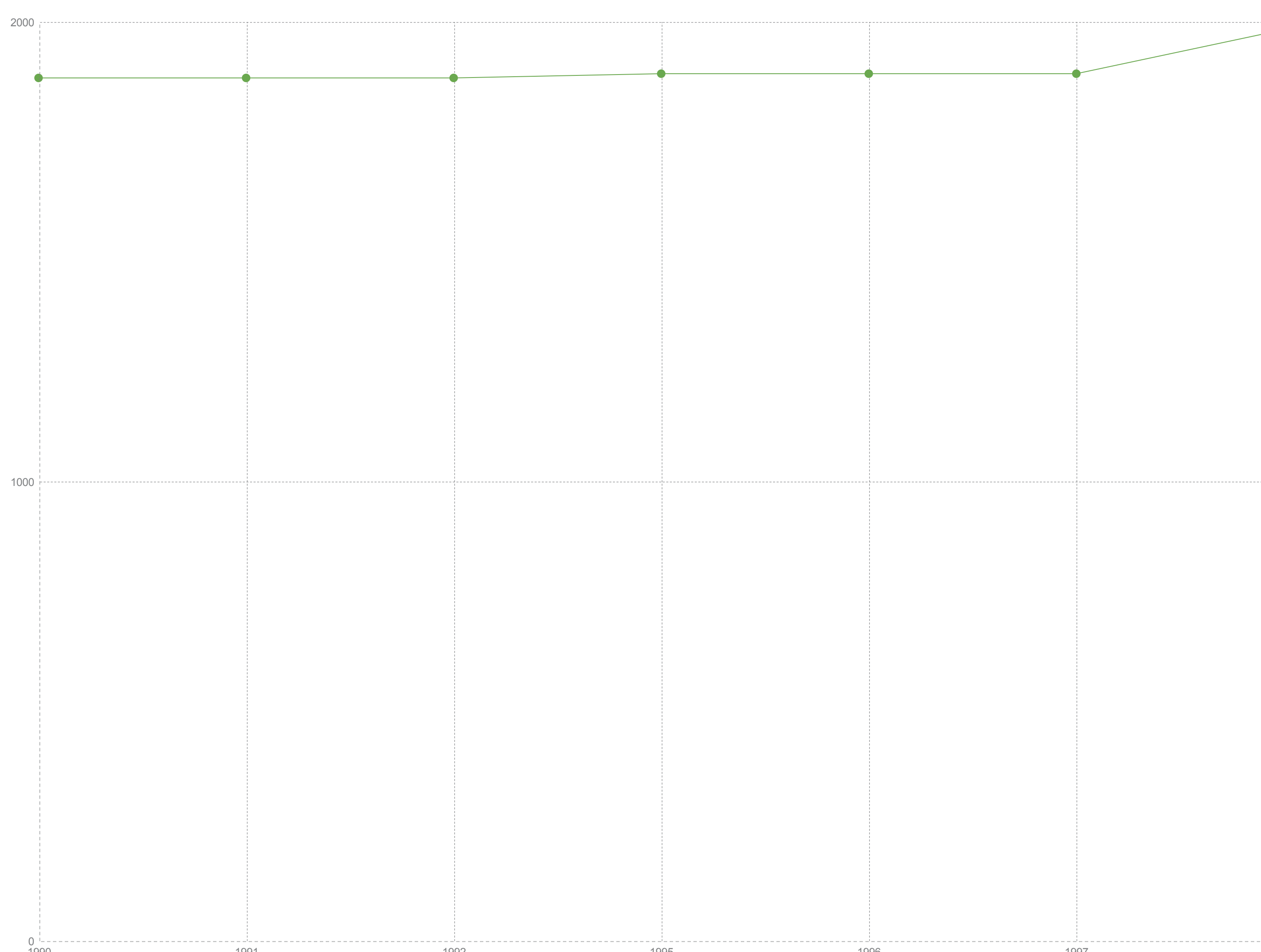
Sources :

-These numbers are from the World Bank's PovCal database online <http://iresearch.worldbank.org/PovcalNet/index.htm?0,3>

-The \$5/day line is justified via economist Peter Edward's work: Edward P (2006) 'The ethical poverty line: a moral quantification of absolute poverty' Third World Quarterly 37(2): 377-393.

Between 1990 and 2000 there was a 217% increase in global GDP...

Between 1990 and 2000 there was an increase in Poverty



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-These numbers are from the FAO 2012 report.

-To justify the use of the normal and intense activity thresholds instead of the "minimal activity" threshold the UN uses, we simply cite FAO 2012 (you can get the reference details here <http://www.fao.org/docrep/016/i3027e/i3027e.pdf>), which admits that most poor people fall in the normal and intense range.