# Measuring environmentally significant values

The values scale used with the ENLITEN cohort can be found below. Where there was more than one occupant per household, the respondent was asked to fill in the form on behalf of the household as a whole. The work on the validity of such proxy judgements performed within the ENLITEN project has shown that respondents are fairly accurate when doing this.

## Methodology

Self-transcendence (Altruistic & Biospheric) and self enhancement (Egoistic & Hedonic) values orientations are measured using a 16 item scale similar in content to that used Steg, Perlaviciute, van der Werff, & Lurvink (2012) which was based on the Schwartz value (Schwartz, 1992). However, anecdotal pilot work suggested that some participants found the original format confusing. Two changes were made in an attempt to increase comprehension and accessibility; the scale items were reworded and a different response scale was used.

The original scale presents participants with the names of 16 values accompanied by a short description (e.g. “EQUALITY: equal opportunity for all”). In the present study participants were presented with statements describing the same 16 values accompanied by the prefix “It is important for you…”. For example, the value Equality was converted to “It is important for you….. That everyone is given equal opportunities”. The new phrasings were reviewed by a leading expert in the field to ensure that they retained their original meanings (DeGroot, J. personal communication initiated by on of the project members -Elizabeth Gabe-Thomas).

The original scales require participants to rate how important each value is to them on a nine point scale ranging from -1 (opposed to my views), 0 (not at all important) to 7 (of supreme importance). In the ENLITEN project respondents indicated how important the values statements were to them on a five point Likert scale with verbal anchors for each rating ranging from ‘Not important at all’ to ‘Extremely important’. The decision to change the rating scale was taken after consideration of the fact that the -1 point rating label “Opposed to my views” cannot be considered part of the 0-7 continuum. Furthermore, previous research has found that a shorter Likert scale can capture the theoretical structure of human values more accurately that the original 9 point scale (Raymond, Ward, & De Groot, 2011).

*Please note: the following Cronbach’s alpha coefficients are from the ENLITEN cohort. Calculate new reliability analyses if you collect additional data*.

### Altruistic values

The four altruistic value statements (“That everyone is given equal opportunities.”, “That the world is at peace, free of war and conflict.”, “That there is social justice and that we care for the weak.” & “To be helpful and work for the welfare of others.”) formed a reliable construct (α= .66).

### Biospheric values

The four biospheric value statements (“To respect the earth and live in harmony with other species.”, “To live in unity and fit in with nature.”, “To protect the environment and preserve nature.” & “To prevent pollution and protect natural resources.”) formed a highly reliable construct (α= .90).

### Egoistic values

The five egoistic value statement (“To have social power e.g. control or dominance over others.”, “To be wealthy. To have material possessions and money.”, “To have the right to lead or command and have authority over others.”, “To be influential and have an impact on people and events.” & “To be ambitious, hardworking and aspiring.”) formed a reliable construct (α= .77).

### Hedonic values

The three hedonic value statements (“To have pleasure, joy and to satisfy our desires.”, “To enjoy life by enjoying food, sex, leisure activities etc.” & “To be self-indulgent and do pleasant things.”) formed a moderately reliable construct (α= .59).

# Cautions

Because scale items and ratings were changed slightly, caution must be taken when comparing the magnitude of value orientations revealed in the present study with populations from studies which used the original scale. Indeed, Raymond et al, (2011) found that the original scale reveals lower egoistic value orientations that a 6 point Likert scale, while the altruistic and biospheric value orientations were comparable across the two scales.

# References

Raymond, C. M., Ward, J. R., & De Groot, J. I. M. (2011). The effect of the numerical rating scale on the distribution and structure of environmentally relevant values. In *Symposium: The role of values in environmental behaviour*. University of Groningen, Groningen, the Netherlands.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology Vol. 25*. Orlando, FL: AcademicPress.

Steg, L., Perlaviciute, G., van der Werff, E., & Lurvink, J. (2012). The Significance of Hedonic Values for Environmentally Relevant Attitudes, Preferences, and Actions. *Environment and Behavior*. doi:10.1177/0013916512454730