**Global Mindedness Dispositions Instrument**

**Final report**

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**Preamble**

The original aim of this project was the design of an instrument to map trends in the formation of global mindedness in relation to CIMO's international programmes. According to CIMO’s Strategy (2009, p.3), key characteristics of global mindedness are (1) being open minded; (2) seeing the big picture; (3) being open to new things; (4) seeing differences as richness; (5) having awareness of one’s own prejudices; and (6) having a willingness to interact with different kinds of people. Our purpose in this project was to create an instrument that was both theoretically and methodologically sound in mapping (as opposed to measuring) these characteristics. As we started to review the literature in this field, it became clear that existing approaches were limited in their understanding of dispositions of global mindedness. This not only necessitated further theoretical exploration of the idea of global mindedness but also the development of a new instrument, which we called the **Global Mindedness Dispositions** (GMD) Instrument. In order to comply with rigorous scientific criteria of validity and reliability any new instrument needs to be tested several times with sufficiently large datasets generated by a sufficiently large number of respondents, and this usually takes a few years from inception to publication. Therefore, this report provides information about the initial development and validation of the GMD instrument. The research team will continue to work with CIMO in the development of the instrument.

**Executive summary**

**What is the GMD instrument?**

The primary aim of this project has been to develop an *analytical* and *educational* instrument for characterising **dispositions** of global mindedness and for mapping tendencies of change in these dispositions over time. n this project, we define global mindedness as a **multi-dimensional concept** that is concerned with the ways in which individuals **think about the world and engage with difference** in contexts characterised by plurality, complexity, uncertainty, contingency and inequality (see Andreotti 2010[[1]](#footnote-1)).

The GMD instrument is based on a distinction between three different ways in which individuals can think about and engage with difference. We refer to these as the dispositions of **t**ourism, **e**mpathy and **v**isiting. The distinction between the three dispositions was originally developed by Biesta (2010[[2]](#footnote-2)), based on ideas from the philosopher Hannah Arendt. In this project, the refinement of the distinctions has also drawn on recent academic discussions about education, cosmopolitanism, post-structuralism, pragmatism and postcolonialism in postmodern societies.

The GMD instrument was designed to be both educational (preparing respondents for the international experience by drawing attention to different dispositions) and investigative (both to characterise the particular composition of the dispositions of individuals and to map change as a result of international experience) The GMD instrument offers a way of situating individual cognitive, affective and performative attributes in the context of international and intercultural encounters, inviting respondents to engage in productive dialogue with its results (as an educational experience).

**How is the GMD instrument useful for CIMO?**

CIMO funding recipients will take two surveys: one before and one after their international experience. In the first survey they will answer 21 GMD questions and a set of socio-demographic questions. In the second survey they will answer the GMD questions again and a selection of questions that evaluate the impact of their international experience.

The GMD instrument will enable CIMO to identify respondents’ composition of dispositions prior and after the international experience and will make it possible to identify changes. CIMO will be able to use these data to assess educational needs of respondents and design resources that can support international engagements. CIMO will also have data on respondents’ own evaluation of their international experiences (self-report), including data on how the experiences have contributed to the development of awareness, competencies, skills and attitudes, as well as key stories of successes and difficulties encountered. At a later stage, respondents will be able to see their GMD results after completing the survey and offer their views on the result. This feature will enhance the educational potential of the survey.

**What are the GMD instrument’s dispositions?**

The GMD instrument consists of three dispositions. Each disposition has specific cognitive, affective and performative configurations and they offer different scopes of possibilities for recognition and engagements with difference in situations characterised by complexity, plurality, uncertainty, contingency and inequality.

Different from ‘competencies’, dispositions do not guarantee behavioural patterns. In fact, the GMD instrument suggests that we carry all three dispositions with us at any time and when we face a concrete encounter with difference (which highlights plurality, complexity, uncertainty, contingency and/or inequality) a combination of dispositions will manifest itself in response to contextual characteristics and qualities. The GMD instrument makes it possible to assess which disposition or combination of dispositions is available to individuals. It also makes it possible to map change in available dispositions over time. Since we assume that international experiences will have an impact on individuals, the GMD instrument thus provides a way to assess the impact of such experiences on people's dispositions.

The GMD instrument’s dispositions are represented through the metaphors of caravan (tourism), tent (empathy) and backpack (visiting) developed in contrast with the metaphor of a fenced house (not inclined to leave one's home).



The three dispositions are oriented towards travelling (as opposed to staying at home) and therefore all three dispositions offer possibilities for an extended engagement with the world. The caravan disposition is most restrictive of possibilities for engagements with difference in situations of complexity, plurality, uncertainty, contingency and inequality because it is based on the assumption that there is ultimately one correct way to describe and understand the world. The tent disposition broadens the scope of possibility by expanding frameworks of understanding on the assumption that human beings all have different perspectives on the world and that it is possible, through processes of learning and knowledge production, to completely understand each other's perspectives. The backpack disposition is based on the assumption that human beings live in different worlds, so that engagement with otherness and difference is not a matter of understanding other people's perspectives but of opening oneself to other ways of doing and being. All three dispositions can be functional in particular situations and in this regard we do not see change over time as a process of development. Nonetheless, in order for the backpack disposition to be effective, we assume that individuals need to distance themselves from the tourism and empathy dispositions. While the backpack disposition may be the most enabling of new possibilities in encounters with difference, it may not be the ideal disposition for all international and intercultural encounters.

1. **Theoretical background**

*Global mindedness and the GMD instrument: A multi-dimensional approach*

From May to August 2011 we reviewed about 60 published academic studies related to global mindedness, world mindedness, interculturalism, internationalism, epistemological development and spiritual and emotional intelligence, and/or mobility outcomes with a view to identify existing relevant knowledge in relation to theoretical and methodological issues in these areas (see appendix 1). We have confirmed that while studies are methodologically sophisticated, the vast majority of projects were under-theorised. In reviewing the literature we encountered three particular problems. One was that the formation of global mindedness and equivalent concepts tended to be conceptualised in a **binary** way, such as in terms of 'local' versus 'global,' 'self-centred' versus 'other-centred,' or 'citizen of the nation' versus 'citizen of the world,' thus generally leading to a **one-dimensional** understanding of global-mindedness. A second problem was that questions about the formation of (attributes relevant to) global mindedness tended to be approached in a **developmental** way, that is, where a local, ethnocentric, self-centred or national perspective is seen as over time being *replaced* by a global, ethno-relative, other-centred, or worldly perspective that guarantees related competencies and behaviours. Thirdly, we noticed a tendency in at least some of the instruments and frameworks to focus on (the development of) **understanding** cultural otherness and difference and thus to see the formation of global mindedness predominantly as a process that works through the development of awareness and cognition (i.e. the acquisition of knowledge about the world or other cultures).

In developing an alternative framework we wanted to be able to encapsulate that the formation of global mindedness is not necessarily a process that operates through awareness and cognition. We wanted to be able to acknowledge, in other words, that **knowledge or understanding** of cultural otherness and difference is a **neither a necessary nor a sufficient condition** for responsible engagement with the other, and sometimes can actually hinder such engagement. Also, we wanted to create a conceptual model of global mindedness that took account of contextual factors in encounters with difference, moving away from a developmental understanding focusing on individual capacities towards situated contextual modes of engagement. And we wanted to stay away from a binary and one-dimensional representation of global mindedness so as to be able to highlight **qualitative differences within** engagement with cultural otherness and difference, and thus to conceive of **global mindedness as a multi-dimensional construct**.

**Our multi-dimensional approach** therefore starts from a distinction between three different ways of thinking about the world and engaging with cultural otherness and difference to which we refer as **tourism, empathy and visiting** respectively. While there are significant and important differences between these three ways of engagement – see below – we do not wish to see them as developmental *stages* that would describe individuals' competencies and behaviours in each stage of development. We rather see tourism, empathy and visiting as elements of a '**repertoire of dispositions**.' *Empirically* this makes it possible to **characterise the particular configuration of this repertoire** at individual level at different points in time (thus allowing both for the characterisation of qualitative differences in global mindedness and for mapping change over time). *Educationally* it means that rather than aiming to shift individuals from one orientation to another, the focus should be on **enlargement of the repertoire** itself (see below). While we do anticipate that 'tourism' and 'empathy' will, at least initially, be more prevalent than a 'visiting' orientation, and while we do believe that 'visiting' is a desirable disposition in terms of thinking and acting in contexts characterised by complexity, plurality, uncertainty and inequality, our approach makes it possible to acknowledge that which orientation prevails in a particular situation is the result of the *interaction* of individual and contextual factors. Thus the prevailing orientation will be conditioned, but not determined by dominant dispositions in one’s repertoire (see below). In other words, an individual with a dominant visiting disposition may revert to tourism depending on contextual factors. Therefore, rather than running the risk of demonising particular orientations, our approach makes it possible, from a research point of view, to understand individual variety (i.e., the fact that the same individual may act in qualitatively different ways in different situations) and, from an educational point of view, to highlight the importance of exploring the significance of the differences between tourism, empathy and visiting with a view to enlarge repertoires. Finally, as we will discuss below, the idea of 'visiting' introduces an understanding of global mindedness that is **less biased towards awareness and cognition** than prevailing conceptions tend to be and, in this sense, represents a more ***existential* approach** (see Biesta 2010[[3]](#footnote-3)).

*Tourism, empathy and visiting (campervan, tent and backpack)*

We see tourism, empathy and visiting as three qualitatively distinctive ways of engaging with cultural otherness and difference. Unlike parochialism which – literally and metaphorically – means to stay at home and not to engage with otherness and difference at all, tourism, empathy and visiting are all forms of engagement. They can therefore be seen as enactments of different conceptions or notions of global mindedness. Epistemologically, **tourism** is connected to **objectivism** – that is, to the idea that the world can ultimately be understood and described in one way; **empathy** is connected to **relativism** – that is, with the idea that we all have different *perspectives* on the world; **visiting** is connected to **pluralism** – that is, with the idea that we all live in different *worlds*. **Empathy** is therefore based on the assumption that it is possible to move oneself to the position of the other and see and understand the world from the other's perspective. Unlike **tourism**, which is the position of the spectator who, when encountering otherness and difference, in a sense already knows what he or she will find – which means that other cultures can only appear as other and different – empathy is based on the assumption that it is possible to bridge the difference between self and other through acts of understanding and interpretation. Empathy thus trades the position of the spectator for that of the native who identifies with the other culture so as to avoid the discomfort of being in an unfamiliar place. **Visiting**, on the other hand, tries to work through this discomfort. Unlike tourism, which always maintains a distance between self and other, visiting entails locating oneself in a different place, not with the ambition to think and feel like others in that place do, but to have *one's own thoughts, feelings and experiences* in a location that is different from one's own – a location where one is with and in the presence of others and exposed to the world. This means that while tourism ultimately *overrides* difference, and empathy aims at a *fusion* of perspectives, visiting has an orientation towards an *encounter* of worlds. While tourism and empathy in a sense contribute to the **empowerment** of individuals to engage with otherness and difference and thus literally make them stronger, visiting comes with an orientation towards **disarmament**, an 'opening up' of the individual so that the other – the human other, the world – can 'speak' and the visitor can be spoken to. While empathy aims at the development of *common* understanding – often informed by the idea of a common human identity and the possibility of consensus – visiting has an orientation towards *multiplicity*. In short: tourism eliminates difference; empathy confines difference; visiting enlarges difference. In terms of broader theoretical outlooks we might say, in sum, that tourism is connected with ethno-centrism, empathy with ethno-relativism, and visiting with existentialism (see Table 1).

**Table 1: Conceptual differences**

|  |  |  |
| --- | --- | --- |
| **Tourism (campervan)** | **Empathy (tent)** | **Visiting (backpack)** |
| objectivism(there is only one true account of reality) | relativism(we have different perspectives on the same world) | pluralism(we all live in different worlds) |
| spectator: we always understand the other through our own knowledge, and we already know what the other is | native: we can understand the world from the perspective of the other | exposure: having one's own thoughts and feelings in a location that is different from one's own |
| distance between self and other | fusion of self and other | encounter of self and other |
| empowerment | empowerment | disarmament |
| single understanding | common understanding | multiplication of understanding |
| eliminating difference | reducing different/plurality | increasing difference/plurality |
| *ethnocentrism* | *ethno-relativism* | *existentialism* |

While tourism, empathy and visiting are related to different ways of understanding, they are not just different perspectives on otherness and difference. They are, in other ways, not merely located at the level of cognition but have cognitive, affective and performative dimensions. They are about what we (claim to) *know*, about how we (are predisposed to) *feel* and about what we (are enabled or unable to) *do*. Tourism, empathy and visiting should therefore not be understood as different cognitive schemes, but as **dispositions**, that is, as ***embodied possibilities for action***. Dispositions are different from capacities in that capacities are fully-formed ways of acting, whereas dispositions are embodied *possibilities* for action. Capacities are, in other words, in the 'possession' of the individual who can either decide to deploy them in a particular situation or not, while the idea of dispositions as embodied possibilities for action makes it possible to acknowledge that how individuals will act in concrete situations always depends on the ***interaction* between dispositions and situational characteristics**. To understand why individuals will act in a particular way thus requires both an insight in the available dispositions and an insight in the ways in which individuals are affected by, perceive and interpret the characteristics of a particular situation, including the (perception of the) power-relations that are 'at work' in such situations. By seeing tourism, empathy and visiting as dispositions, it thus becomes possible to make sense of the fact that the same individual may act differently in different situations and also that such different responses are, in a sense, 'rational' – that is, they 'make sense' for the individual in the particular situation he or she is in.

While there are important differences between the three dispositions, we do not see the formation of global mindedness as a process in which one disposition is superseded by the other. In this sense we not only **reject a staged developmental understanding** of global mindedness, but hold that each disposition exemplifies a different conceptual understanding of global mindedness. As visiting presupposes a different approach to knowledge than empathy, it requires a cognitive and/or affective critical dissociation from aspects of empathy. Similarly, as empathy presupposes a different approach to cultural difference than tourism, it requires a cognitive/affective critical dissociation from aspects of tourism. However, these cognitive and/or affective critical dissociations do not guarantee performative dissociations as action in individual situations will depend on the interaction between dispositions and situational characteristics.

We argue that the **formation of global mindedness should focus on the enlargement of the repertoire of dispositions of individuals**, both at the level of acting – that is providing them with different ways of engagement and response – and at the level of understanding – that is, supporting an understanding and appreciation of the differences between tourism, empathy and visiting. More concretely we argue that a desirable outcome of engagement with cultural otherness and difference through international mobility would consist of en enlargement of the repertoire of dispositions and an enhanced understanding of the differences between tourism, empathy and visiting.

1. **Operationalization**

Our chosen approach necessitated the development of **a scale that can map dispositions at individual level**. By applying the scale at two points in time, before and after the mobility or international experience it is possible to identify changes in dispositions. As we do not rely on a staged developmental model and therefore can assume that – at least in principle – individuals may have more than one disposition, we focus on measuring **the particular combination of dispositions and their relative intensity**. We refer to this as '**dispositional configurations'** (see below). For this we have constructed a **questionnaire** containing three scales, one for tourism, one for empathy and one for visiting. While the scales do not measure cognitive, affective and performative aspects directly, the questions are phrased in such a way that they cover these three dimensions in sufficient degree. Items are scored on a 4-point Likert scale (strongly disagree; disagree; agree; strongly agree). We have run a pilot of our instrument (together with a trial of the larger questionnaire) with n=103 participants (dataset 1), and have conducted a factor analysis on the outcomes. Based on the factor analysis and further input from other parts of the questionnaire, we adjusted the questions for the GMD instrument and ran a second pilot with n=127 participants which helped improve the discriminatory power of the instrument.[[4]](#footnote-4) We have also developed and tested a number of hypothetical scenarios related to the three dispositions with an educative aim.

It is important to emphasise that this work will generate a number of sub-scales to map dispositional variances, however, it **does not aim to explain the variance**. This would require a further study. If CIMO is interested in extending this work, several aspects of the scales (particularly with regard to background variables and outcomes) need to be given further consideration.

*Profiling dispositional configurations*

As mentioned, we neither operate on the assumption that individuals will only display *one* particular disposition, nor on the idea that over time a particular disposition will be *replaced* by another disposition. We rather assume that individuals will have a particular 'mix' of (aspects of) dispositions, which means that it is both important to characterise the particular mix and also the relative strength of each disposition. Based on our theoretical framework and outcomes from our pilot study with n=103 participants, we have identified **eight different dispositional configurations**, which each represent a particular combination of elements from tourism, empathy and visiting. In some configurations one of the dispositions is dominant; in other configurations two dispositions are dominant (that is, relatively equal in strength); there are also two configurations where all three dispositions are relatively equal in strength (albeit that the actual strength differs; see below). In the coding we have used for the different dispositional configurations we indicate the dominant disposition in capital letters and the presence of characteristics from other dispositions with lowercase letters. We distinguish the following eight dispositional configurations (see also figure 1):

**Table 1: Eight dispositional configurations**

I Caravan 1 TOURISM – empathy – visiting

II Caravan 2 TOURISM – EMPATHY – visiting

III Caravan 3 TOURISM – empathy – VISITING

IV Caravan 4 TOURISM – EMPATHY – VISITING

V Tent 1 tourism – EMPATHY – visiting

VI Tent 2 tourism – EMPATHY – VISITING

VII Backpack tourism – empathy – VISITING

VIII non-dominant tourism – empathy – visiting

**Figure 1: Typical dispositional configurations**

In aiming to make these different dispositional configurations visible in the data of our pilot study, we performed the following operations. We recoded the data combining scores on 'strongly disagree' and 'disagree' in each scale and gave them the value '0'. We also combined the scores on 'agree' and 'strongly agree' in each scale and gave them the value '1'. We decided that for a disposition to be characterised as dominant we would need to have a total score on a scale of at least '4' – meaning at least four items scored as 'agree' or 'strongly agree' out of a total of 7 items. Similarly we decided that for a disposition *not* to be characterised as dominant, we would need to have at least four items scored as 'disagree' or 'strongly disagree' (which would mean a score on those scales of less than 4). In this way the eight dispositional configurations can be characterised as follows:

**Table 2: Eight dispositional configurations with score profiles**

number code score on combined scale

 T E V

I Caravan 1 TOURISM – empathy – visiting **≥4** <4 <4

II Caravan 2 TOURISM – EMPATHY – visiting **≥4 ≥4** <4

III Caravan 3 TOURISM – empathy – VISITING **≥4** <4 **≥4**

IV Caravan 4 TOURISM – EMPATHY – VISITING **≥4 ≥4 ≥4**

V Tent 1 tourism – EMPATHY – visiting <4 **≥4** <4

VI Tent 2 tourism – EMPATHY – VISITING <4 **≥4 ≥4**

VII Backpack tourism – empathy – VISITING <4 <4 **≥4**

VIII non-dominant tourism – empathy – visiting <4 <4 <4

The particular findings of our pilots (datasets 1 and 2), including the two datasets used to identify the GMD-questions are presented in the next section. The results do indicate a range of different patterns within the two groups of respondents. When running a pre- and post-experience version of the instrument we will be able to explore whether there are any shifts in the dispositional configurations at individual (and, if relevant also at group) level. The questionnaire also allows us, at a later stage, to explore correlations between these configurations and other data (i.e. background or evaluation of experience)

*Social and individual desirability*

There is one additional point that is important in understanding the differences between the dispositional configurations – and our argument here is partly based on our theoretical framework and partly informed by analysis of the data from the pilot and from answers to the open questions in the pilot questionnaire. The issue has to do with the question of how we should understand those configurations where there are two or three dispositions of equal (positive) strength (this concerns the following configurations: II, III, IV and VI). While one could argue that in such a case there are simply two different dominant dispositions that in some contingent way will impact on how the individual will respond to particular situations, we suggest that, because of the qualitative differences between the dispositions, there will actually be a particular interaction between the two dominant dispositions. When we look, for example at the combination of tourism and visiting (configuration III) we may wonder how it is possible for a person both to agree with items on the tourism scale and on the visiting scale. One possible explanation for this is in terms of social desirability, that is, the fact that the respondent is aware of the fact that items on the visiting scale are the more socially desirable answers. In addition we have evidence to suggest that there is also another 'mechanism' at work, which we suggest to term 'individual desirability.' Several respondents have made the point in the open questions that they were sometimes responding to items in terms of what is the case and sometimes in terms of what they would like to be the case – sometimes, therefore, their answers focus on their actual ways of thinking, doing and being, and sometimes their answers display how they would like to think, do and be. Based on this we hypothesise that a respondent with configuration II (with tourism and tent as dominant dispositions) is generally characterised by a tourism disposition, and that the positive response to empathy items represents an individual and/or socially desirable response. We also think that this could be the case for configurations III, IV and VI. For configuration III the score on the visiting disposition can be understood as an individual and/or socially desirable response; for configuration IV the scores on empathy and visiting can be understood as an individual and/or socially desirable response; for configuration VI the score on visiting represents an individual and/or socially desirable response.

While, at first sight, it might seem plausible to assume that this also works in the opposite direction – that is, that a dominant orientation on, for example tourism and visiting could also be understood as a situation in which, from a visiting perspective, the answers on the tourism scale are given because of individual and/or social desirability, we wish to argue that this is actually not the case. (This means, in technical terms, that the interaction between dominant dispositions is directional rather than non-directional.) There are two, related, reasons for this. One way to look at it is to say that it is unlikely that from a visiting perspective items on the tourism scale would be seen as individually and/or socially desirable. But the more important point here is that to have a visiting disposition actually requires that one dissociates oneself from a tourism and an empathy position. The visiting disposition, in other words, requires a different orientation to knowledge and implies an understanding of the limitations of the tourism disposition and the empathy disposition. For this reason we assume that the first four dispositional configurations, because they all involve a positive (i.e., 4 or higher) score on the tourism scale, should all be understood as dispositions in which the tourism outlook is dominant because it is based on a specific conceptualization of knowledge and provides a particular outlook on empathy and/or visiting. To have an empathy disposition requires that one dissociates oneself from a tourism disposition, just as having a visitor disposition requires that one dissociates oneself from a tourism and empathy disposition. These insights are particularly important for further research using the GMD instrument – and we acknowledge that further research is also needed to strengthen the empirical case for what we assume here – but we do wish to present these insights as they are also important for giving meaning to the differences between the different dispositional configurations.

*Working summary of dispositional outcomes*

In practice, the difference between tourism, empathy and visiting indicates different attitudes towards complexity (CP), plurality (PL), uncertainty (UN), contingency (CT), and inequality (IN), as well as different levels of personal (social and emotional) investments in specific conceptualizations of knowledge (i.e. as certain/universal and or uncertain/relative). These attitudes can be constructed as:

* Intolerance, denial and resistance (i.e. rejection of multiplicity)
* Anxiety (apprehension, uneasiness)
* Ambivalence (hesitation, indecision, tentativeness)
* Relative openness (conditional openness)
* Comfortableness (unconditional openness)

Table 3 presents working definitions on possible dispositional outcomes (which require further study) related to the qualitative and quantitative questions in the pilot study.

|  |  |  |
| --- | --- | --- |
|  | Associations/Dissociations | Possible dispositional outcome |
| Caravan 1(caravan dominant) | associates positively with caravandissociates from tent and backpack | **Attitude of intolerance**, **denial**, or **resistance** towards **CP, PL, UN, CT** and **IN**; **strong investment** in **certain** knowledge and control of processes and outcomes |
| Caravan 2(caravan dominant, tent socially and individually desirable) | associates positively with caravan and tent; dissociates from backpack | **Ambivalence** towards **PL**; **anxiety** towards **CP, UN, CT** and **IN** ; **strong investment** in **certain** knowledge and control of processes and outcomes. |
| Caravan 3(caravan dominant, backpack socially and individually desirable) | associates positively with caravan and backpack; dissociates from tent | **Ambivalence** towards **CP, UN,** and **CT**; anxiety towards ‘fixed’ **PL** and **IN** (i.e. identity politics); **investment** in certain knowledge and control of processes and outcomes. |
| Caravan 4(caravan dominant, tent and backpack socially and individually desirable) | associates positively with caravan, tent and backpack | **Ambivalence** towards **CP, PL, UN, CT** and **IN**, **anxiety** towards challenges to own ‘positive identity’ (assumption that ‘I am already open’) preventing expansion of referents and possibilities; **investment** in **certain** knowledge and control of processes and outcomes. |
| Tent 1(tent dominant) | associates positively with tentdissociates from caravan and backpack | **Relative openness** towards ‘manageable’ **CP, PL, UN,** and **CT**; willingness to address **IN**, anxiety towards challenges to positive identity may prevent expansion of possibilities; **investment** in **certain** knowledge**, able to accommodate** diverse processes and outcomes |
| Tent 2(tent dominant, backpack socially and individually desirable) | associates with tent and backpackdissociates from caravan | **Relative openness** towards ‘manageable’ **CP, PL,** and **UN**, willingness to address **IN**; **reduced investment** in **certain** knowledge, **able to accommodate** diverse processes and outcomes |
| Backpack(backpack dominant) | associates with backpackdissociates from caravan and tent | **Comfortable** **with the discomfort** of living with **CP, PL, UN,** and **CT** ; willingness to address **IN**; ability to **deconstruct certain** knowledge, **able and willing to negotiate** diverse processes and outcomes |
| Non-dominant | dissociates from backpack, tent and caravan |  |

1. **Pilot study methodology**

In our pilot study we used two datasets to identify questions for the GMD instrument through a number of tests. The first pilot consisted of a survey of 42 GMD questions, background questions and evaluation questions. This survey was completed by 103 respondents (mainly from Finland). The second pilot survey consisted of 32 GMD questions and background questions. This survey was completed by 127 respondents (40% from South America, 19% from Finland, 8% from other European countries, 16% from Canada and 7% from other countries).

An exploratory factor analysis identifies which questions clustered together in participants’ responses. It helped identify whether the questions under tourism, empathy and visiting would measure each construct. An item remainder value (factor loading) over .30 means a satisfactory level of congruence with other questions in the same factor cluster. There is also a coefficient for internal-consistency reliability (Cronbach's α value) and a measure for sampling adequacy (Kaiser-Meyer-Olkin) that should be near or above .70 (for new scales that do not require intervention a score above .50 is acceptable). The factor analysis helped us identify questions that were ambiguous, that measured more than one concept and that were worded in problematic ways. We used the results to improve the questions for the second pilot. Missing values were treated in two different ways. For the descriptive reports (means and standard deviations) of likert scale items and sub-scales (with values 1 to 4, before they were recoded to 0-1), the missing values (skipped questions, which were very few) were replaced with the (overall) mean. For the GMD scales (after likert scale items were collapsed), the missing values were replaced with 0. A confirmatory factor analysis and latent class analysis will be used with the next dataset as it may offer a more complex and robust outlook on the sub-scales and GMD scale.

The questions that best measured caravan/tourism, tent/empathy and backpack/visiting for dataset 1 and 2 and the final GMD instrument’s dispositional scales are presented below.

**Dataset 1 Campervan/Tourism sub-scale**

|  |  |  |  |
| --- | --- | --- | --- |
| Item | factor loading | Mean | Standard deviation |
| International cooperation is necessary for everyone to benefit from modern science and technology. | .733 | 3.28 | 0.87 |
| It is important to have people from diverse backgrounds in my country so that they can serve as bridges for business with other countries according to our national interests. | .695 | 2.74 | 1.01 |
| The problems of the world are relatively simple to solve by experts with good will who can apply knowledge correctly. | .680 | 1.84 | 0.91 |
| I can easily understand other cultures and places. | .592 | 2.79 | 0.71 |
| I am confident that my knowledge allows me to deal with most situations I will encounter. | .582 | 2.71 | 0.70 |
| People should use words in the correct way in order to be understood. | .577 | 2.48 | 0.79 |
| When cultural misunderstandings happen they should not be taken very seriously. | .427 | 2.29 | 0.82 |

Tourism subscale mean= 18.17, standard deviation=3.63

**Dataset 1 Tent/Empathy sub-scale**

|  |  |  |  |
| --- | --- | --- | --- |
| The problems of the world can be solved if countries work together to achieve education, peace and human rights for all. | .731 | 3.03 | 0.73 |
| International cooperation is necessary so that we can fix the problems of the world together. | .669 | 3.42 | 0.77 |
| I am confident that I can quickly understand and adapt to most situations I will encounter. | .646 | 2.92 | 0.69 |
| I need to learn as much as possible about another culture to get the most out of the interaction. | .613 | 3.08 | 0.85 |
| Cultural mistakes can be avoided if we make an effort to understand the other culture. | .570 | 2.90 | 0.73 |
| It is ok to have different perspectives but we should strive for a common ground. | .566 | 2.66 | 0.86 |
| People often use different words to mean exactly the same thing. | .442 | 3.22 | 0.67 |

Empathy subscale mean= 21.56, standard deviation=2.93

**Dataset 1 Campervan/Visiting sub-scale**

|  |  |  |  |
| --- | --- | --- | --- |
| Before I travel, I try to learn about where I travel to, but I expect that what I will experience will be different from what I learned in advance. | .694 | 3.45 | 0.62 |
| I feel that the sense of who I am is defined by many different things and that most of these definitions constantly change. | .633 | 3.47 | 0.69 |
| International cooperation is necessary so that we can start to see problems and solutions differently. | .629 | 3.62 | 0.59 |
| It is important to have people from diverse backgrounds and diverse ideas in my country so that we can be challenged to think differently about what we take for granted. | .619 | 3.76 | 0.48 |
| When I encounter things that do not make much sense I find it interesting and exciting. | .590 | 3.11 | 0.80 |
| I am aware that my assumptions can get in the way of new experiences  | .560 | 3.48 | 0.57 |
| People use words in different ways and it is impossible to know exactly what they mean. | added question | 2.84 | 0.78 |

Visiting subscale mean= 23.77, standard deviation=2.64

**Dataset 1 Reliability Statistics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Tourism** | **Empathy** | **Visiting** |
| Cronbach's Alpha | .727 | .714 | .673 |
| Cronbach's Alpha Based on Standardized Items | .725 | .715 | .682 |
| Kaiser-Meyer-Olkin Measure of sampling adequacy | .827 | .725 | .704 |
| N of Items | 7 | 7 | 6 |

We created three sub-scales using 7 questions from each category above (we added a question for visiting and deleted one for tourism). We collapsed the likert scale items from 4 categories to 2 (with values of 0-1). Next, we calculated the scores of each respondent within each sub-scale. Next, we applied the GMD calculation (described in section 2) across the three scores to provide a GMD score from 1 to 8 for each respondent. The results were the following:

**Dataset 1 GMD scale frequencies:**

|  |  |
| --- | --- |
| I. Caravan 1 | 0 |
| II. Caravan 2 | 1 |
| III. Caravan 3 | 2 |
| IV. Caravan 4  | 67 |
| V. Tent 1 | 0 |
| VI. Tent 2  | 20 |
| VII. Backpack | 13 |
| VIII.non-dominant | 0 |
| Total n respondents | **103** |

When we preliminarily cross-tabbed the dispositional scales with background information, the following items were statistically significant in explaining variance in the pilot study (and, therefore, should not be removed from the final survey):

* Scenario 3
* Gender
* age
* Majority/minority culture
* Neighbourhood where you grew up
* Confidence
* Curiously
* Understanding the consequences of my actions
* Ability to act in different cultural settings
* Ability to deal with uncertainty
* To compromise
* To learn knowledge and skills from different countries
* To work in solidarity with people who are less well off
* To donate to charity
* The way I see the countries I visited or work with
* Internationally cooperative
* Of acknowledging that everything is interconnected
* To form bonds with other countries (close to sig)
* Understanding inequalities (close)

Dataset 2 consisted of revised GMD questions and background questions only. The statistical tests indicated more variance amongst respondents (hence the slightly lower scores):

**Dataset 2 Tourism sub-scale**

|  |  |  |  |
| --- | --- | --- | --- |
| Item | factor loading | Mean | Standard deviation |
| International cooperation is necessary so that we can help other countries achieve what we have achieved. | .674 | 2.46 | 0.94 |
| The problems of the world are relatively simple to solve by experts with good will who can apply knowledge correctly. | .653 | 1.65 | 0.79 |
| When people from other cultures have difficulty to adjust, it is because they do not really understand our ways of doing things, so they need to make more effort to fit in. | .635 | 2.03 | 0.82 |
| My knowledge of my own culture prepares me well for interactions with other cultures because all human beings are the same and want the same things. | .497 | 2.07 | 0.93 |
| Communication between cultures is only possible if people use language in the correct way. | .457 | 1.89 | 0.83 |
| When two people disagree, one or both of them must be mistaken. | .457 | 1.42 | 0.66 |
| When I travel to a different country I prepare little because I don't expect many surprises. | .405 | 1.78 | 0.65 |

Tourism subscale mean= 13.33, standard deviation=3.11

**Dataset 2 Empathy sub-scale**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Factor loading 1 | Factor loading 2 | Mean | Standard Deviation |
| When people from other cultures have difficulty to adjust, we should try to understand and be open to how they see the world in order to help them better. | .760 | .192 | 3.46 | 0.62 |
| When I am expected to act in a different way in a different place, I try to adapt. | .750 | -.216 | 3.23 | 0.62 |
| I can interact better with people from other cultures who are in my country when I understand their culture better. | .596 | .226 | 3.39 | 0.61 |
| It is ok if people disagree, but we should work towards a common understanding. | .574 | .197 | 3.13 | 0.91 |
| Foreigners who come to live in my country should be able to adapt to our culture and also keep their culture to make my country multicultural. | .440 | .422 | 3.09 | 0.72 |
| In order to interact with people from other cultures, I need to completely understand how they see the world. | .008 | .790 | 2.14 | 0.81 |
| Communication between cultures is only possible if people understand each other's perspectives. | .175 | .699 | 3.09 | 0.76 |

Empathy subscale mean= 21.56, standard deviation=2.93

**Dataset 2 Visiting sub-scale**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| International cooperation is important as it helps us see our own problems differently | 0.764 | -0.007 | 3.50 | 0.60 |
| I find it exciting to watch myself being challenged by things in other cultures that do not make sense to me. | 0.607 | 0.079 | 3.46 | 0.66 |
| Communication between cultures is not a matter of understanding each other but of being open to what is new and unexpected. | 0.542 | 0.333 | 3.44 | 0.67 |
| When I am expected to act in a different way in a different place I always learn something new about myself. | 0.539 | 0.377 | 3.47 | 0.61 |
| The problems of the world are complex and interconnected and cannot be solved by the structures and thinking that created them in the first place. | 0.406 | 0.069 | 3.11 | 0.86 |
| It is important to have people from diverse backgrounds, cultures and ideas in my country so that we can be challenged to think differently about what we take for granted. | 0.109 | 0.857 | 3.67 | 0.58 |
| When people from other cultures have difficulty to adjust, it may show us something new about ourselves and our own culture. | 0.120 | 0.813 | 3.50 | 0.62 |

Visiting subscale mean= 24.18, standard deviation=2.62

**Dataset 2 Reliability Statistics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Tourism** | **Empathy** | **Visiting** |
| Cronbach's Alpha | .606 | .654 | .640 |
| Cronbach's Alpha Based on Standardized Items | .603 | .664 | .658 |
| Kaiser-Meyer-Olkin Measure of sampling adequacy | .728 | .707 | .690 |
| N of Items | 7 | 7 | 7 |

**Dataset 2 GMD scale frequencies:**

|  |  |
| --- | --- |
| I. Caravan 1 | 0 |
| II. Caravan 2 | 0 |
| III. Caravan 3 | 0 |
| IV. Caravan 4  | 15 |
| V. Tent 1 | 0 |
| VI. Tent 2  | 104 |
| VII. Backpack | 7 |
| VIII.non-dominant | 1 |
| Total n respondents | **127** |

**Comparison of datasets**

|  |  |  |
| --- | --- | --- |
|  | **Dataset 1** | **Dataset 2** |
| I. Caravan 1 | 0 | 0 |
| II. Caravan 2 | 1 | 0 |
| III. Caravan 3 | 2 | 0 |
| IV. Caravan 4  | 67 | 15 |
| V. Tent 1 | 0 | 0 |
| VI. Tent 2  | 20 | 104 |
| VII. Backpack | 13 | 7 |
| VIII.non-dominant | 0 | 1 |
| Total n respondents | **103** | **127** |

The fact respondents in both pilot datasets were mostly university students (in Finland, South America and other countries) in programmes related to internationalisation and multicultural studies may explain the high number of respondents classified as Caravan 4 and Tent 2. Further analyses of both datasets may also predict the focus of programmes in different countries and the potential educational needs of respondents depending on a desirable goal (e.g. tent or backpack).

**Time 1 and time 2 analyses (panel study)**

To analyze change in ‘repeated measures’ or Time 1 and Time 2 surveys a number of different types of statistical analyses need to be considered to test for significance between T1 and T2 GMD scores (means and variances), e.g. regression models and ANOVA-based methods. It is very important to have a case ID variable for each respondent (to make sure they respond the right T1 or T2 survey and that results can be compared). Our research team will perform the first T1 and T2 analyses for CIMO in 2012 when a sufficient number of surveys are completed.

The simplest way to calculate each respondent’s change in GMD scores is to compute each respondent’s change by subtracting their ‘Time One GMD score’ (pre-international experience) from their ‘Time Two GMD score’ (post-international experience). The simulated exercise below offers a glimpse of what can be expected when Time 1 and Time 2 data is available (dataset 3) for university international schemes.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Time 1 | Percentage | Time 2 | Percentage |
| I. Caravan 1 | 0 | 0 | 0 | 0 |
| II. Caravan 2 | 2 | 1 | 2 | 1 |
| III. Caravan 3 | 4 | 2 | 0 | 0 |
| IV. Caravan 4  | 134 | 67 | 28 | 14 |
| V. Tent 1 | 0 | 0 | 6 | 3 |
| VI. Tent 2  | 40 | 20 | 148 | 74 |
| VII. Backpack | 20 | 10 | 14 | 7 |
| VIII. non-dominant | 0 | 0 | 2 | 1 |
| Mean |  | 4.8 |  | 5.8 |
| Total n respondents | 200 | 100% | 200 | 100% |

A possible preliminary general interpretation of this simulated exercise can focus on the increase in numbers of respondents in the Tent 2 (6) disposition and decrease in numbers of Caravan 4 (4). If the general move was towards a Tent 2 (6) disposition what can be said based on the GMD instrument is that potential outcomes of the experience include increased openness towards CP, PL, and UN, increased willingness to address IN; reduced investment in certain knowledge, and improved ability to accommodate diverse processes and outcomes. A more detailed scientific study of ‘within person’ variation would be able to explain what kinds of variables have affected the variance. In order to make substantial scientific claims related to the impact of different international schemes on participants’ dispositions, we would need an experimental design (which requires comparison groups). We will use this initial study to develop a research proposal that will enable the research team to fund the next stages of this project towards this goal.

**Final GMD instrument’s dispositional scales**

In summary, the GMD instrument consists of a combination of three dispositional scales with seven questions each: caravan/tourism, tent/empathy, backpack/visiting. These questions were selected according to the factor analyses performed in the pilot study and will be tested further in subsequent analyses.

|  |  |  |
| --- | --- | --- |
| Caravan/Tourism | Tent/Empathy | Backpack/Visiting |
| When people from other cultures have difficulty to adjust to our culture, it is because they do not really understand our ways of doing things. | When people from other cultures have difficulty to adjust to our culture, we should try to understand how they see the world in order to help them better. | When people from other cultures have difficulty adjusting to our culture, it may show us something new and important about ourselves and our culture. |
| Communication between cultures is only possible if people use language in the correct way. | Communication between cultures is only possible if people understand each other's perspectives. | Communication between cultures is not a matter of understanding each other but of being open to what is new and unexpected. |
|  | In order to interact better with people from different cultures who are in my country I should learn about their culture. | When I experience events in other cultures that do not make sense to me I find it exciting to see myself being challenged. |
| When I am expected to act in a different way in a different place, I try to adapt. | When I am expected to act in a different way in a different place I always learn something new about myself. |
| Foreigners who come to live in my country should be able to adapt to our culture and also keep their culture to make my country multicultural. | It is important to have people from diverse backgrounds, cultures and ideas in my country so that we can be challenged to think differently about what we take for granted. |
| My knowledge of my own culture prepares me well for interactions with other cultures because all human beings are the same and want the same things. | In order to interact with people from other cultures, I need to completely understand how they see the world |  |
| When two people disagree, one or both of them must be mistaken. | It is ok if people disagree, but we should work towards a common understanding. |
| International cooperation is necessary so that we can help other countries achieve what we have achieved. |  | International cooperation is important as it helps us see our own problems differently |
| The problems of the world are relatively simple to solve by experts with good will who can apply knowledge correctly. | The problems of the world are complex and interconnected and cannot be solved by the institutions and thinking that created them in the first place. |
| When I travel to a different country I prepare little because I don't expect many surprises.  |  |

1. Andreotti, V. O. (2010). Global Education in the ‘21st Century’: two different perspectives on the ‘post-’ of postmodernism. International Journal of Development Education and Global Learning, 2(2):5-22. [↑](#footnote-ref-1)
2. Biesta, G.J.J. (2010). How to exist politically and learn from it: Hannah Arendt and the problem of democratic education. *Teachers College Record* 112(2), 558-577. [↑](#footnote-ref-2)
3. Biesta, G.J.J. (2010). How to exist politically and learn from it: Hannah Arendt and the problem of democratic education. *Teachers College Record* 112(2), 558-577. [↑](#footnote-ref-3)
4. The pilot did reveal that the original GMD questions and scales were reliable and valid. There was, however, scope for improvement in distinguishing between the dispositions of 'tourism' and 'empathy' – which is something we have addressed in the new version. [↑](#footnote-ref-4)