

KINGDOM IMPACT FRAMEWORK

Pilot 2 Report for

Living Water International (LWI) Zambia

Executive Summary

This report describes the second pilot assessment of the Kingdom Impact Framework (KIF) of Eido Research in partnership with Living Water International (LWI) Zambia. It includes an introduction to the KIF project, a description of the fieldwork in Zambia, results from the sample population in Keembe district, a discussion of key findings and what these might mean for LWI Zambia and their programmes.

The KIF Beneficiary Survey was piloted in five different areas of Keembe, Zambia in September 2018. This is a Water and Sanitation (WASH) Program Area of Living Water International. Each of the survey sites had received slightly different water and sanitation, and gospel proclamation and church envisioning interventions. Ten school graduates were trained with the help of LWI's local staff to carry out the KIF surveys. The training, pre-testing, and surveys were carried out over the course of just five days, with qualitative focus groups also on the fifth day.

The sample population from Keembe, Zambia showed remarkably high scores across KIF 'love for God' categories in particular, i.e. spiritual well-being. Most of these categories were higher than the previous pilot in Philippines. Meanwhile self-management and emotional well-being were two particular areas that did not score well.

The population was far from uniform in its scores too. Men (self-)scored significantly higher than women across many categories, which could be a 'true' measure or a reporting bias. Meanwhile older people scored much higher on love for God than younger people, and respondents in their 20's appeared particularly lonely. Those less educated also scored much lower across social and spiritual well-being categories.

Overall, there was not a great perception of the local church and yet trust in church leaders was quite high. Respondents tended to value spiritual well-being over physical well-being, and there appears to be an effect between those who have been helped by the local church and their perception of it.

In terms of key traits that associate with other outcomes, high scores on salvation was a strong 'indicator' of high scores on multiple social and spiritual well-being 'fruit', while 'coping with God' emerged as an important set of skills as well as 'self-management'.

Finally, it emerged that individuals' livelihoods had a strong relationship with multiple KIF outcomes. For example, there were a number of jobs such as tending livestock, charcoal making, and working in agriculture that were strong predictors of love for God outcomes such as spiritual disciplines and experiencing God.

The findings have a range of interesting consequences for LWI in Zambia. Some results require further investigation (e.g. men scoring higher or the unclear pattern between

wards) and we discuss reasons behind results in detail in this report. The key recommendations however are as follows:

- 1) Living Water Zambia are in a good position to engage with a widespread local church, while there is work to be done on envisioning them for integral mission locally.
- 2) Given the importance of self-management skills and yet relatively low scores for this attribute, LWI Zambia could think about addressing this gap.
- 3) LWI Zambia could focus discipleship interventions on young people, who currently lack purpose and emotional well-being.
- 4) LWI Zambia should investigate the link between education levels and many measures of social and spiritual well-being, again potentially focusing interventions on the least educated and poorest.
- 5) There is a clear relationship between types of occupation and KIF outcomes. LWI Zambia could use this information to target particularly vulnerable groups with targeted programming.
- 6) Given the mixed results from the different wards, LWI Zambia should track change over time as well as keeping careful note of what interventions have occurred where.
- 7) It is worth continuing to measure outcomes (fruit) as well as actions, given that the relationship between the two is often mixed. It is also worth keeping track of salvation as a measure, and how people 'cope with God'.
- 8) Further qualitative investigation into views of integral mission, and trust of church leaders would be useful.
- 9) Further investigation is needed in order to understand why score higher in various categories, especially salvation and theology.
- 10) We do not have enough validity 'proofing' to make solid conclusions for other ministries, however given the type of findings above we expect this in future.

Many learnings and reflections for improvement on the KIF also came from this pilot and we are incredibly grateful to the local team for facilitating the fieldwork. We hope this report will be useful for LWI Zambia, and look forward to sharing ongoing development of the tool.

Glossary

Kingdom Impact Framework (KIF): The overall set of categories and measures that make up the measurement of social and spiritual impact.

Values, Actions and Fruit: These are the three different ways in which we measure an individual's social and spiritual well-being. They relate to what people think, what people do, and what people experience. Values, Actions and Fruit crosscut all dimensions and categories.

Dimension: The KIF Beneficiary Survey is primarily split into three 'dimensions' – Love for God, love for self and love for others. These dimensions each contain a number of categories and were also derived from the original literature review.

Category: In each KIF Dimension, there are a number of categories that capture different aspects of social and spiritual well-being. These include Values categories such as identity or value for connection, Actions categories such as sharing faith or self-development, and Fruit categories such as spiritual growth or emotional well-being.

Statement: The statements are the specific question form presented in the KIF. Each category contains two to seven statements that capture slightly different but related elements of that category.

Factor analysis: The KIF surveys are analysed through a 'factor analysis' in each pilot. This analysis tests which statements should fit into which categories.

Introduction

This report describes the work of Eido Research in partnership with Living Water International (LWI), in running the second pilot of the Kingdom Impact Framework (KIF) project. It is written primarily for the Zambia Office of LWI, focusing mainly on relevant findings for their work. It describes the context of the project, the overall KIF approach, and findings relevant to LWI Zambia.

Zambia was chosen as the KIF pilot location for LWI, where LWI have good research capacity. Given rainy seasons, the fieldwork was arranged for late September and James Waters travelled to Lusaka September 16th to 22nd to oversee and carry out the pilot.

The KIF Vision and Piloting Process

The vision of the KIF is to create a measurement and communication tool that will help Christian development and missions organisations; social enterprises and Kingdom businesses; and impact funds to understand, improve and demonstrate their social and spiritual impact to all stakeholders. We want to develop the tool in collaboration with practitioner organisations, and so to have an iterative piloting process.

Our approach seeks to balance academic rigour with practitioner needs, and we acknowledge that those needs differ across the three main users mentioned above. This report is focused on our NGO Partners. The end goal for our NGO Partners is a tool that helps them to understand the specific social and spiritual impact of projects and programmes they carry out, using surveys that capture change over time. This will be assessed through their Culture, People and Resources. The current pilot with LWI focuses on the KIF Beneficiary Survey that measures impact on People (beneficiaries as well as staff). We hope this survey tool will be used to understand beneficiaries' needs better, improve their programmes, and sensitively, as appropriate to communicate impact to wider stakeholders and supporters.

The goal of the KIF piloting process is to start with a longlist of measures and to refine over successive pilots, to a set of measures that are validated in different contexts. We acknowledge that the measures may not be the same in all contexts, however we will explore this as the pilots continue.

Piloting with LWI (Methods)

Living Water Zambia fieldwork context

The second version of the KIF Beneficiary survey was piloted in five different 'wards' of the Keembe Water and Sanitation (WASH) Program Area, Zambia. Keembe is a 'constituency' that is part of the Chibombo District of central Zambia. The study sites were all communities that LWI are working in, through their church and community mobilization, water and sanitation service delivery, and sanitation and hygiene promotion.

These communities had received different levels of WASH intervention, and gospel proclamation or church mobilization. The levels of each intervention in the different wards is shown below.

Wards Sampled	WASH Interventions	Gospel Proclamation / Church Mobilization
Kakoma	Rehabilitated broken down wells and conducted hygiene & sanitation interventions	Shared the Gospel at Water points, Jesus Films and started Church Envisioning
Chitanda	Began rehabilitating broken down wells and hygiene & sanitation interventions	Started Church Envisioning
Mashikili	Rehabilitated broken down wells, drilled new wells and hygiene & sanitation interventions	Shared the Gospel at Water points, Jesus Films and started Church Envisioning
Lunjofwa	Nothing yet	Nothing yet
Ipongo	Nothing yet	Nothing yet

Enumerator training and survey design

The fieldwork for this pilot was carried out in just one week. James Waters worked with LWI's Zambia Monitoring and Evaluation Manager and Church Mobilization and Gospel Proclamation Coordinator to help train ten school leavers as enumerators for the study. As there was not time/capacity to translate beforehand, translation occurred alongside training on Day 1. Given the inexperience of the surveyors, training started with an orientation to Living Water International as an organisation, and the KIF project. Some general guidance on carrying out semi-structured interviews was given, as well as specific training for starting an interview, introducing the survey and gathering consent. Surveyors practised this important part of the interview on each other, and then in turn in front of the group, receiving feedback until all were confident.

Next, we went through each statement in turn, finding an appropriate and meaningful translation in the two local languages that would be used. LWI's local staff facilitated this, ensuring the statements would be easy to understand, and that the surveyor team were all in agreement for each statement. The same process then occurred for the different

statement response options. Again, surveyors then practised the survey on each other until confident.

During Day 1, especially as we went through the process of translating statements, we agreed to make a number of edits in order to contextualise and ensure comprehension of the questions. These included adapting the options for religious denominations, contextualising the question about a job/livelihood, changing the phrasing of “myself” which did not translate, adapting “finances” to “money”, and changing “stressed or worried” to “overwhelmed”. A few other changes were made in order to help the ‘flow’ of the survey, and these edits were sent back to the Eido team in London who edited the survey online.

Having not managed to pre-test the survey on Day 1 (given all the training we covered), we started Day 2 with some pre-testing of the survey using the tablets within the team. Two different versions of the survey were piloted (single and multiple question view), and enumerators gained confidence running through the survey. As in Pilot 1, we printed out the response options for enumerators to use. Once they were confident, the enumerators ran their first pre-test with individuals in the nearby community, and we started surveying ‘live’ Day 2 afternoon.

Days 3 to 5 involved intensive surveying by the team of ten enumerators, except for the final day when three of the team helped with focus groups. There were few further edits that needed to be made, although we debriefed with all the team at the end of each day to gather any specific feedback on survey experience and comprehension.

As in the previous pilot, James and one of the LWI local staff sat with each of the surveyors during one of their interviews on Day 2 or 3, ensuring questions were being asked consistently and to help with any general interviewing guidance. We also analysed all surveyors’ responses, for possible survey fatigue, confirmation bias and question comprehension, especially checking the negative statements that particularly revealed this.

In terms of sampling design, we used a probability proportional to size (PPS) sampling approach. Our LWI colleagues calculated the number of individuals we aimed to sample in each region based on the proportional population of that area, relative to the others. Individuals were then sampled within each community based on a strategic random approach, each enumerator covering a different area of the community. This gave us a random, representative sample of the WASH Program Area (WPA) for Keembe, while also gathering 288 surveys for the KIF piloting analysis.

Data collection and ethics

The KIF part of the survey took on average 36 minutes to go through with respondents. We attempted to avoid survey fatigue and ensure comprehension through still using a

number of 'reversed' statements, asking enumerators to occasionally stop to check comprehension especially if the respondent was unsure, and checking respondents understood each response scale using both the pictures and words before starting each section.

Similarly, the questionnaire was delivered using an adaptation of the previous pilot's ethics and consent procedures. Participants were informed who was interviewing them on behalf of which organisation, as well as the purpose and intended outcomes of the survey. They were informed that their participation was voluntary, what questions would be covered and that their responses would be anonymised and only analysed as part of the wider sample. They were told the length of the survey and who to approach with any further questions, complaints or requests. A copy of the consent form use is in Appendix 4.

We were not able to analyse and respond to the data daily in the same way as for previous KIF pilots, but we still sent the data back to London each day, if not more regularly where we could establish a 'hotspot' connection. Our analysts gave useful feedback as to which questions were performing 'well'. They also helped check responses for surveyors where pre-testing revealed some statement delivery needed checking. As before we checked for: comprehension of statements, ceiling and floor effects, acquiescence and confirmation bias, and response variation.

Focus groups

Building on the Pilot 1 methodology, for this pilot we added focus groups on Day 5 of the fieldwork. The purpose of these was to test statement and response scale comprehension, as well as understanding of ordinality. In preparation, we divided up the core KIF survey into 6 sections. We then ran three simultaneous 'mini-focus groups' of three to five individuals, in two locations. James oversaw the exercise while the LWI local staff and two particularly competent surveyors facilitated the micro groups.

The mini-focus group participants represented different portions of the population sample – we recruited at least one group for each of older men, older women, younger men and younger women. Given the relatively even distribution of men and women, and people across age groups in the population (see Table 2 below), this purposive approach was deemed appropriate for the sample.

The focus groups covered three main areas: a) going through 20 statements asking what they felt the statement meant and if there was anything unclear; b) discussing what they felt the scales meant and testing ordinality; and c) answering five questions on the survey experience (including questions on 'how did you feel', 'which questions were difficult to answer', 'how can the running of the survey be improved in your opinion'). 'Ordinality' was tested by asking individuals where they would place each of the response options on a

sliding scale from 'entirely negative' (-100) to 'entirely positive' (+100). This was done just on a piece of paper for ease, but later reviewed and analysed.

After the five days of surveying, the team had a debrief with all surveyors, giving them an opportunity to feedback on any specific questions or topics that were challenging to ask about, general survey experience and any other constructive criticism on the process. This is written up in the Learnings section below.

Analysis

The analysis for this report focused on two key questions (of the five for the whole project):

- 4) What do the LWI results tell us about their work and the population they are working with?
- 5) What do these results mean for other ministries in other contexts?

Details of the analysis methods used to calculate the findings below can be found in the full report.

Results

Firstly, the table below the basic information about the individuals in our sample.

Table 2. LWI Survey participant information

Total number of participants		288
<i>(All of them consented)</i>		
Gender	Male participants	121
	Female participants	167
Age	17 or younger	5
	18-20	16
	21-29	68
	30-39	85
	40-49	66
	50-59	28
	60 or older	20
Marital status	Married	199
	Widowed	16
	Divorced	13
	Separated	12
	Single	48
Religion	Jehovah's Witness	15
	Seventh Day Adventist	122
	Catholic	30
	Pentecostal	25
	New Apostolic	13
	Baptist	20
	United Church of Zambia (UCZ)	25
Other	37	
Ward	Chitanda	70
	Kakoma	75
	Lunjofwa	36
	Mashikili	100
Family members	More than 6	141
	5 or 6	61
	4 or less	86
Highest education	Never attended / kindergarten only	22
	Primary school	151
	Some Secondary school	87
	Graduated from Secondary school	17
	Some College	8
	Associate's Degree	1
Income	Other professional/ academic qualification	2
	Average household income (last year)	ZK7451(\$512)
	Average PPI	33 out of 100

Understanding and improvement to the survey

The focus groups show that most statements are well understood. Based on a few different individuals' opinions on each statement in these focus groups, **72% of statements are clearly understood, 22% seem to be mostly understood (requiring further investigation) and 6% did not seem to be understood.** The statements that are questionable or not understood were flagged to possibly be removed.

Then, after analysing all of the categories and checking the questions further, a number of questions were removed. A total of 26 statements were removed, 13 from Love for God (including 5 theology statements for now; more on that in the Learnings), 6 from Love for Self, and 7 from Love for Others. We made sure negative statements remained in each. In total, the survey went from 118 to 92 statements, with further iteration of course planned.

The resulting framework consists of 3 dimensions, 24 categories and 93 statements. **We made these changes (removing unhelpful questions etc) before calculating the analysis below.**

Table 3. Number of statements removed

	Total statements	Removed
ICM	146	35
LWI	118	26

LWI Results

The scores of individuals in the LWI sample, for each category of the KIF, are presented in the graphs below. The Values (attitudes), Actions and Fruit (experiences) categories are presented in turn. As in Pilot 1, we present the proportion of respondents who answer either of the top 2 options, for example 'Agree' and 'Strongly agree', or 'Daily' and 'Multiple times a day'. This gives more comprehensible results than average scores.

In each graph, we present the LWI results alongside those from ICM for a comparison. Where only LWI results are showing, it is because these are new categories for LWI specifically.

1. Respondents' scores for the KIF categories

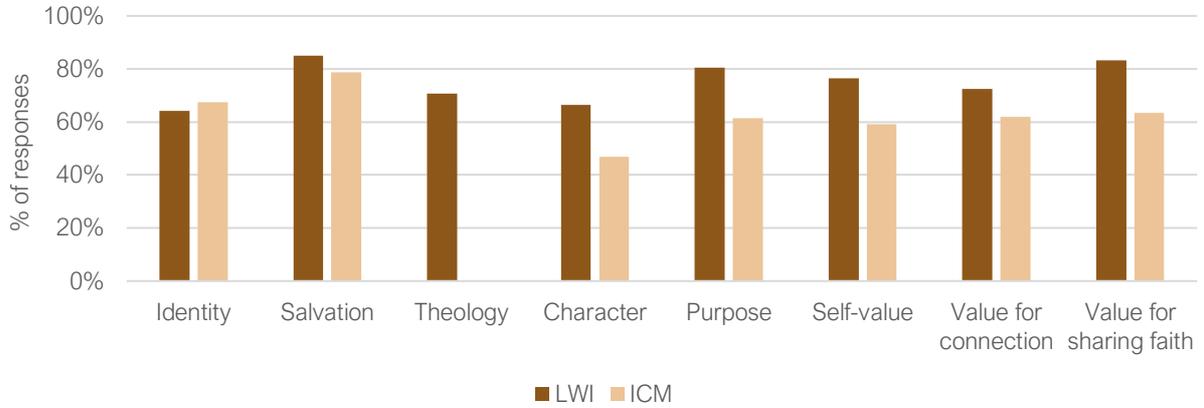
In this Living Water pilot, individuals have relatively high social and spiritual values scores for most categories, with 65-85% of respondents answering either 'Agree' or 'Strongly agree'. Salvation is particularly high with 85% of individuals in these top 2 responses for 'I have made a personal commitment to Jesus Christ that is still important today' and 'I believe I can have a personal relationship with Jesus.' Respondents also have a particularly high purpose, and value for sharing faith. Overall, values scores do not show much variation.

In terms of actions, respondents score particularly highly on coping with God, intimacy with God and spiritual disciplines on their own. There is greater variation between action categories than for values, with only 8% responding 'daily or 'multiple times a day' for spiritual disciplines with others, compared to 45% for intimacy with God.

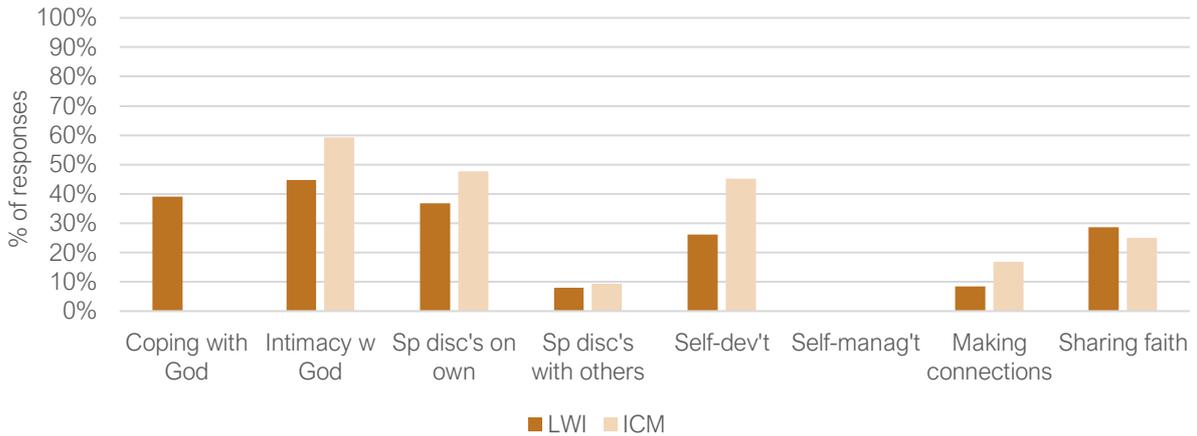
Nearly 70% of the sample respond 'Often' or 'Almost always' to statements about experiencing God, such as 'I have enjoyed worshipping God' and 'I have experienced God's love in every situation.' Fruit categories that also score highly in this population are trust in God and isolation (i.e. being supported). Of the three dimensions, there is most variation within Fruit categories, with emotional well-being for example scoring only 13% in the top 2 response options.

It should be noted that differences may reflect the way statements were understood or cultural differences. However, there appear to some interesting patterns in the results.

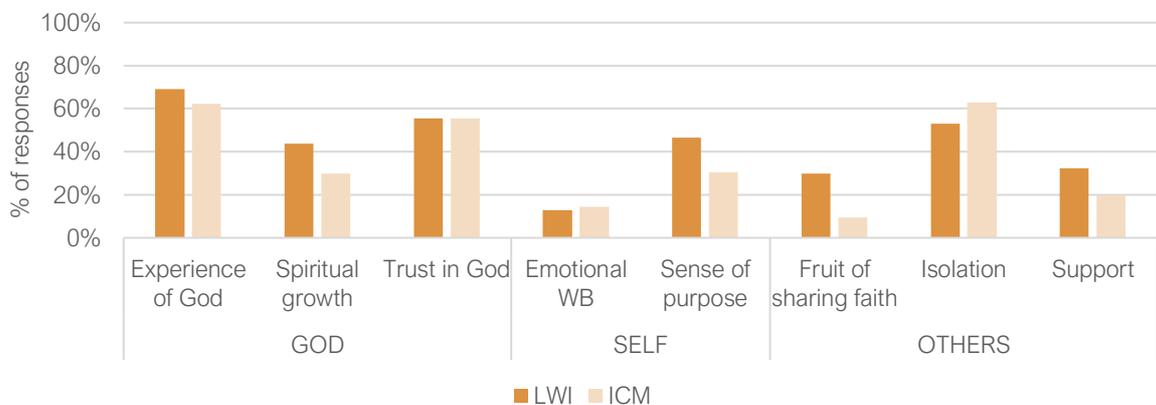
Values statements *(Agree/Strongly agree)*



Actions statements *(Daily/Multiple times a week)*



Fruit statements *(Often/Almost always)*



2. Variation between groups

We now turn to look at differences between various groups in the LWI sample population. There are a number of significant differences summarised here – for further detail and data tables, see the full report.

- **Men tend to score higher on a number of different KIF categories** (n=167 women, 121 men)
 - Men score higher across love for God (salvation, theology; coping with God; trust in God and spiritual growth), love for Self (Character, purpose; self-management; sense of purpose), and love for others (value for sharing faith and sharing faith). The greatest differences are in salvation (e.g. 'I believe I can have a personal relationship with Jesus') and theology (e.g. 'I could tell someone the story of the Good Samaritan'), and then spiritual growth (e.g. 'I have felt I am growing spiritually') and trust in God ('I have been aware of God's plans in my daily life').
- **Older people participants score higher especially in love for God**
 - Individuals 60 and older score higher than those 18-20 or 21-29 across a number of love for God categories – theology, salvation, spiritual growth and trust in God. This is all three love for God Fruit categories that the 60+ category score higher in. They also score higher for purpose and emotional well-being. The other key result here is that individuals 20-29 are by far the most isolated, scoring significantly lower than those 40-49, 50-59 and 60+.
- **There are no significant differences between married and single people**
 - This was not expected but was analysed as a 'control'.
- **Individuals who indicated that they do not read or write well score significantly lower on a number of categories**
 - This was the case within love for God – identity, salvation, theology; coping with God, intimacy with God, spiritual disciplines on own; experience of God and trust in God. Within love for Others – value for connections, value for sharing faith and support. Within love for Self – self-development, self-management; and sharing faith. These categories span love for God, Self, and Others, but most categories that show a significant difference are within the love for God dimension. Notably the individuals who cannot read and write also score lower on both self-management and self-development, associated action categories.
- **The small proportion of respondents who had higher than 'some secondary school' education score higher than those with less education**
 - in identity, spiritual growth, self-development, self-management and sense of purpose.
- Individuals with greater than average income and Poverty Probability Index (PPI) score higher on a number of KIF categories. **The standout KIF outcome that appears higher in both is 'sense of purpose'.**

- KIF categories that are higher in individuals with greater than average income / PPI are shown below. Interestingly, those with higher income score higher primarily on love for Self categories, while those with higher PPI scores have higher love for God scores.

Income	PPI
Fruit of sharing faith	Theology
Self-development	Salvation
Self-management	Coping with God
Sense of purpose	Sense of purpose
Value for connection	Spiritual growth
Support	

- **There are some significant differences between wards in the LWI sample**
 - Individuals in Chitanda score higher on character, self-value, sense of purpose, and trust in God than respondents from Kakoma. Mashikili by contrast scores higher than Kakoma on experience with God and scores higher than Chitanda and Lunjofwa on intimacy with God. The significance of this in light of the different programme implementation in each ward is discussed below.

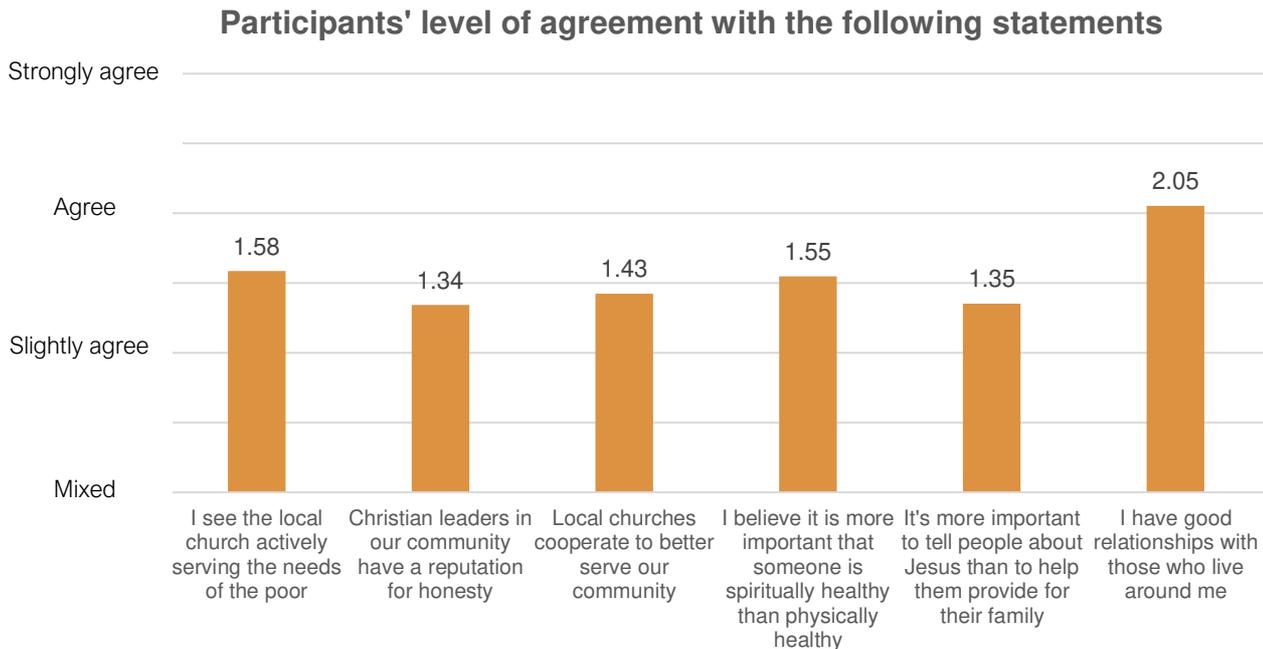
3. Relationships between KIF categories

We also looked at the relationship between different KIF variables, through a correlation analysis. We also looked at the relationship of KIF variables with measures of poverty and livelihoods – the Poverty Probability Index (PPI). Given the large number of potential results, we focus here on the key findings that are highly statistically significant. In order to give some sense of comparison, we compare some results to the previous pilot.

- **There is a weak relationship between Values (what people believe) and Actions (what people do).**
 - This is especially true between the values categories of identity, character and value for sharing faith, and intimacy with God actions. The value for sharing faith is also not strongly associated with spiritual disciplines as it was before.
- **The value for sharing faith, and other values, have less association with spiritual Fruit (experience of God, spiritual growth and trust in God). Salvation remains a strong relationship however.**
 - The values of character, purpose and identity all have less association with love for God Fruit, while salvation remains a strong correlator. Isolation, by contrast to most Fruit categories in this sample, is more strongly associated with Values than in the previous pilot.
- **Actions are less strongly associated with Fruit (experiences) than in the previous pilot.**
- **'Coping with God' is the most associated action with love for God fruit, specifically spiritual growth.**
- **The fruit of sharing faith remains a unique outcome, with no strong relationships.**
- **In terms of income and livelihoods, there is a weak relationship with KIF outcomes.**
 - Total household income does correlate highly with PPI score, showing these two measures are picking up related aspects of poverty.
 - The KIF categories that significantly associate with income are: values – salvation, coping with God; actions – self-development, making connections (negative), sharing faith; and fruit – experience of God, fruit of sharing faith and isolation. The categories that associate with PPI by comparison are: values – salvation, as well as theology; actions – coping with God, as well as intimacy with God, spiritual disciplines on own, and self-management (no relationship with making connections); and fruit – spiritual growth, trust in God, sense of purpose and isolation.
- **The only KIF category that associates with tithes and giving is the fruit of sharing faith.**

4. Questions on Integral Mission & Perception of the Local Church

The additional questions on integral mission, perception of the local church and trust in the communities that LWI requested yield some interesting findings.



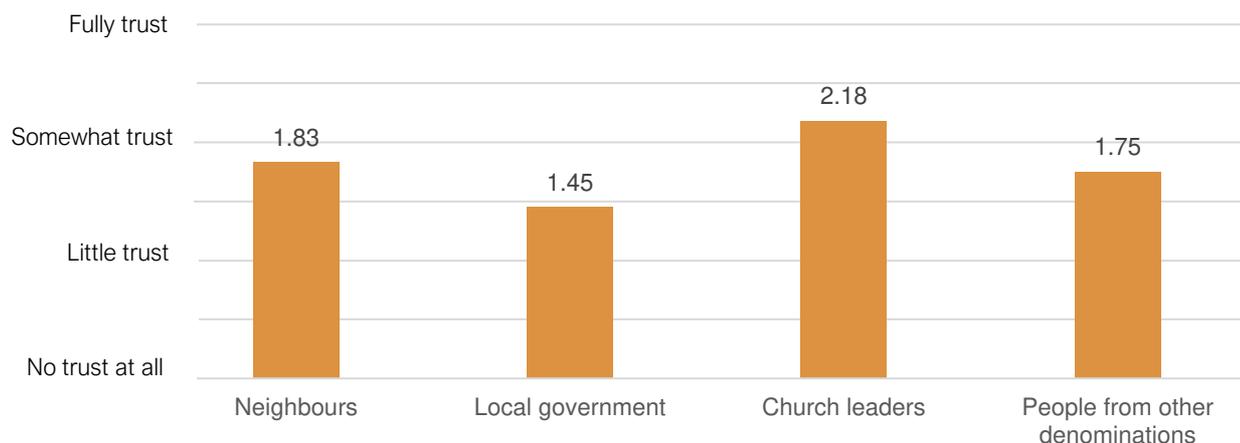
The first two questions above were designed to capture positive perception of the local church; the next an indication of unity amongst the churches; the following two views on integral mission; and the final statement is an indication, though admittedly not ideal, of the average level of trust across the community.

Firstly, there is not a great perception of the local church. On average, individuals in this sample less than 'agree' that they see the local church serving the needs of the poor and are closer to only 'slightly agree' that Christian leaders have a reputation for honesty. There is a similarly mediocre view of how well local churches cooperate to serve the community, on average slightly agreeing.

Secondly, most respondents appear to value spiritual well-being over physical well-being, although slightly less so when it comes to providing for their family.

Thirdly, individuals in this sample are more positive about their relationships with those who live around them, scoring higher than 'agree' on average.

Participants' level of trust in the ...



The next graph (above) shows the results of four questions around 'To what degree do you trust the following groups of people?', from not at all to fully trust.

- **Despite most individuals not feeling that Christian leaders have a good reputation for honesty, they trust them quite highly.**
 - Respondents score highest for church leaders. Trust in neighbours is also quite high reflecting the good relationships people have, and similarly for people from other denominations. The most common response for all statements in this group of questions was 'fully trusted', which is encouraging on one hand, although also shows the range of responses that exist for the means to be markedly lower.
- **People over 60 years old have more trust of neighbours, church leaders and people from other denominations.**
 - Individuals from larger families also trust their neighbours more than those from smaller families.
- **Notably, trust in local government is significantly lower (relatively) than the other groups of people, which is a finding that should be noted for programming purposes.**

Turning to the help the local church provided:

- **Of those surveyed, 56% reported that they have been personally helped by the church in this area.**
- **If individuals had been helped, they are more likely to think the church meets the needs of the poor and think Christian leaders have a reputation for honesty.**
 - They also feel that churches cooperate more. Unsurprisingly, they have a higher view of the church having been helped.
 - And they report to having better close relationships and trusting local groups more.

5. Connection between demographic factors and KIF outcomes

The final analysis involved looking for which demographic factors ‘explained’ certain KIF outcomes. This was done through a ‘multiple regression analysis’. Only very significant results are presented below.

Firstly, there are no significant demographic variables for predicting change in integral mission. Admittedly, our measures for understanding views of integral mission were simpler and less refined than our KIF measures, but this result is notable given the models below.

Below are the demographic factors such as livelihood and age, and views on integral mission, that influence each KIF outcome. Demographic factors are noted in order of importance:

- **Character** – being in the area of Kakoma is actually the highest predictor of character. Working in agriculture positively influences, as well as larger families and trusting that Christian leaders are honest. Working in construction was negatively associated.
- **Value for connections** – tending livestock and selling goods strongly negatively drive this outcome, while literacy and trusting church leaders and neighbours are positive.
- **Self-management** – tending livestock, being unemployed or working as a driver strongly negatively influence, while dairy consumption and being male positively.
- **Coping with God** – literacy is the strongest positive influence, with being older than 40 and male also positively associated with coping with God. Also significant are thinking it’s more important to be spiritually healthy, trusting in other denominations, and church leaders.
- **Theology** – being a service worker has the most overall negative association with any outcome. Being male is another strong explanatory variable, after which thinking that it’s more important that someone is spiritually healthy, seeing the local church serving the poor and that Christian leaders have an honest reputation also associate.
- **Salvation** – tending livestock is again a strongly negative predictor. Living in Mashikili has a positive influence, followed by being older than 40, trusting church leaders, having good relationships around and thinking it’s more important to tell people about Jesus than to help provide for their family.
- **Value for sharing faith** – tending livestock again is a strong negative predictor, while having good relationships and trusting church leaders and neighbours positively explained this outcome.
- **Spiritual disciplines on own** – for this outcome being a charcoal maker strongly predicts poor scores, as well as working in agriculture and tending livestock. Meanwhile literacy, being over 40 and thinking it’s more important someone is spiritually healthy positively predict spiritual disciplines on one’s own.

- **Spiritual growth** – in this area, being unemployed is the strongest predictor of poor performance while selling goods and working in agriculture are also negative. Again literacy has a strong positive association, as well as thinking it's more important that someone is spiritually healthy and has good relationships.
- **Experience of God** – for some reason being in Mashikili is the strongest predictor of experience of God, with less strong explanatory variables being thinking it's more important someone is spiritually healthy, seeing the local church helping and cooperating, and having good relationships.

While the results are discussed in more detail in the following section, it is useful to tease out two powerful repeating patterns from all of these results:

- **Literacy has a strong positive effect on many KIF outcomes.**
 - For instance, on value for connections and coping with God, as well as spiritual disciplines on own and spiritual growth.
- **Certain livelihoods have a strong negative relationship with a number of spiritual variables.**
 - Most commonly tending livestock but also charcoal making, working in agriculture, being a service worker and being unemployed.

Discussion of LWI key findings for Zambia

The following sections focus on what these results mean, especially in light of LWI's work in Zambia. In the final section, ('Final reflections and recommendations'), we discuss how LWI Zambia could respond.

Reasons for key findings from LWI Zambia

Values scores are particularly high in the LWI Zambia population, including love for God fruit. There is an indication that some spiritual behaviour might be legalistic however, not leading to actual 'fruit' in people's lives.

- It is hard to say why some of the love for Self and Others values are higher in the Zambian context than our previous pilot in Philippines, but the love for God fruit being higher is not surprising – while the Philippines is a Christian country, Zambia is arguably even more so (based on the 2010 World Factbook¹, 92.2% of Philippines are estimated to be Christian, while 95.5% of Zambians). This may explain some of the higher love for God fruit scores, but not the 20% higher score in Zambia.
- If love for God fruit are higher in Zambia, it is surprising that intimacy with God and spiritual disciplines are higher in the Philippines sample. As one partner mentioned in discussions however, it could show that 'religious' actions do not necessarily equate to spiritual fruit in people's lives, as some can be quite legalistic actions. **For LWI, it will be important to measure 'fruit' not just actions – as it seems there could be some legalistic behaviour going on.**
- (In fact, there was a more similar pattern between Values and Fruit, than Actions and Fruit in our previous pilot too. This suggests it is still important to measure what people believe.)

Why do men score significantly higher on a number of categories? Either they are genuinely doing better in those qualities, or they have a more optimistic self-perception than women, or they feel the need to over-inflate their reporting of their strength in these areas.

- At this stage, knowing the real reason (or likely combination) is very hard, but we will know more when we gather data on change in these aspects.
- If the higher scores are 'true', it might be in this context that women have less time for themselves hence scoring lower on self-development and sense of purpose; however this would not explain the lower scores within love for God categories.

Older people in this sample are clearly 'loving God' more across a number of categories, as well as having more purpose and emotional well-being.

- This is not surprising given the frequent global studies finding an increase in faith and religious attachment in older generations. Explanations vary for this trend, from an

increase in 'existential insecurity' to the socio-economic differences in younger generations. (Turner 2010)².

Meanwhile the lower levels of religious commitment in younger people could be seen as a reason for the higher levels of loneliness experienced by these individuals.

- The link between religious commitment and social wellbeing has been an established fact in social research for decades (Kim-Prieto and Miller in Villani et al., 2019)³. The stark finding that individuals in their 20's feel markedly more lonely than older generations ('At my church I have felt isolated', 'I have felt distant from people') therefore could be explained as a symptom of a lower level of religious commitment and experience of 'meaning' in their lives. Indeed, various studies have shown that when a younger individual is doubting their worldview, or experiencing a lower level of religious attachment, there often follows higher level of social and emotional distress (Abu-Raiya et al. 2015)⁴. This again is a useful finding for an organisation to be aware of and potentially respond to.

Why do literate individuals score higher on a remarkable number of KIF categories than non-literate individuals?

- Literate individuals score higher on love for self categories such as self-development and self-management. One might expect these to correlate with an ability like reading and writing. But love for God categories such as identity, salvation, intimacy with God and experience of God, as well as love for others categories such as value for connections, also correlate.
- Given the large number of Christian schools that were established by missionaries in sub-Saharan Africa during the colonial era, it has been suggested that educational attainment is strongly lined with religious commitment (Pew Research Centre, 2011)⁵.
- Indeed, when we look at broader measures of education, whether individuals had attended secondary school, there is a more understandable range of categories that score higher for those more educated in the sample. It is understandable and encouraging that those with more education are doing better at self-management (e.g. 'I am able to manage my finances', 'I am able to face setbacks without discouragement'), self-development (e.g. 'I do things to grow my skills', 'I do things that fulfil my purpose') and sense of purpose (e.g. 'I have felt growing in my professional skills'). The higher identity and spiritual growth results suggest that the impact of education might overspill into 'spiritual confidence' (e.g. 'I believe my prayers are powerful', 'I trust God has good plans for my life') and desire to grow.
- **Either way, LWI should note that education and literacy clearly have broad associations with individuals managing their lives well, and other positive aspects of social and spiritual well-being.**

Economic well-being is associated with sense of purpose and self-management, but also clearly tied with spiritual well-being.

- Individuals with higher income tend to score higher on love for self actions and fruit, those with higher PPI on love for God values, action and fruit. There is an understandable link

between those who are better off materially and having a greater sense of purpose and feeling that they can cope with God. However the same individuals scoring higher on theology and salvation is intriguing. As for income, there are clear links to self-management and -development (e.g. 'I do things that grow my skills', 'I am able to manage my finances'), but it also seems individuals with higher income have a greater value for connection, which turns into fruit of sharing faith. This is worth further consideration, including in later pilots.

Variation between wards

The differences in KIF outcomes between different areas in this study might tell us more about the influence of LWI's programmes in Zambia. As described, Chitanda area scores higher on character, self-value, purpose and trust in God. Meanwhile Mashikili scores higher on intimacy with God and experience of God (fruit categories), in this case than Chitanda and Kakoma respectively.

It is encouraging in one sense that Chitanda scores higher in these outcomes as this area had received some of LWI's church envisioning programme. One could imagine how this programme would encourage purpose and self-value. This result would be encouraging if say, it scored higher than areas that had received no gospel proclamation or church mobilization. **However, Chitanda scores higher than Kakoma as well, an area that had received gospel proclamation and church envisioning.**

There is an argument that the gospel proclamation may have brought greater conviction of need for God, and therefore more 'humble' self-scoring on areas like trust in God in Kakoma. However, Mashikili also received some gospel proclamation and yet scores higher on experience of God and intimacy with God.

It appears therefore that there is some pattern related to the areas surveyed – Mashikili scoring higher on love for God fruit, and Chitanda primarily on love for self values and fruit. However, given the limited information we have on the depth of discipleship engagement in each of the areas it would make sense to a) investigate this with data over time, and b) look into the specific causality of impact from programmes in more detail, say through additional qualitative enquiry. In other words, we need to check if this pattern is just related to the background populations or whether there is a programme-related effect.

Relationships between KIF categories

- Like in the previous pilot, many values associate with **personal well-being** (sense of purpose and emotional well-being). But in LWI Zambia, coping with God as well as self-management emerge as the key actions.
- Again, many values and actions correlate with **spiritual well-being**, but this time coping with God emerges as the key action alongside salvation as the most associated value (self-management remains highly associated).
- Self-management is again one of the only actions that correlates with **social well-being** (love for Self fruit), but this time also with 'making connections'.
- Self-management and self-development again appear to be quite distinct actions, not correlating with values as most other actions do. Given they associate with many Fruit categories however, it potentially makes them very useful actions to measure.
- The fruit of sharing faith is once again an anomaly in showing very few correlations with values or actions. The only values it associates with are salvation and theology, while moderately associating with most actions.
- Many values associate with Love for God fruit including identity and value for sharing faith strongly, but **only salvation associates with all three God fruit categories strongly**. This suggests a reason to have measures of salvation, if not theology.
- The correlation analysis brings out a unique finding for a second time – that **wealthier individuals appear less good at making friends**.
- **At the same time wealthier individuals**, as measured by Poverty Score and income, are better at coping with God, self-development, and tend to have higher spiritual growth and trust in God.

What does this mean for LWI Zambia?

- Coping with God is evidently an important trait to help develop in individuals given its relation to both personal and spiritual well-being.
 - This is something that could really be considered in the context of integral mission programming and teaching.
- Similarly, self-management could be considered in the context of whole-life discipleship.
 - It is important to note that it is distinct from self-development too, as one of the only actions to correlate with income. It appears that self-management skills help individuals to 'cope' and maintain well-being, while self-development skills are associated with individuals progressing economically.

The unique findings around wealthier individuals are interesting – while less good at making friends they are better at coping and self-development. As mentioned, the relationship with self-development makes sense whilst not making connections is intriguing. The fact that they have higher spiritual growth and trust in God could be because individuals living above ‘desperate’ levels of poverty are more able to consider spiritual growth, but this should be investigated further.

Integral mission and perceptions of the local Church

The results around integral mission and perceptions of the local Church are not encouraging, whilst also not awful.

Respondents feel that the local church is helping the needs of the poor, although only somewhat. More discouraging is the view of the honesty of local Christian leaders, especially given that most individuals trust church leaders. This could also be addressed within LWI’s programmes, if they are able to consider pastor discipleship with this in mind.

Individuals in this sample did not seem to have a strong understanding of integral mission, i.e. the view that proclamation and demonstration of the gospel are equally important, or that individuals’ physical needs are important just as their spiritual ones are.

- Most individuals agreed that people’s spiritual well-being is more important than their physical well-being. This is perhaps not surprising given the Christian background of the area as discussed above, and the centrality of salvation in most church teachings there. However, from the perspective of integral mission, it is encouraging that not as many respondents thought that telling someone about Jesus is more important than helping them meet the needs of their family. Overall however, it appears that there is more work to be done if LWI want people to fully grasp the concept of integral mission.

It is also clear from the results that there is some relationship between individuals receiving help from the church and their view of the local church and integral mission.

- When helped, they trust the church more and think it’s doing a better job (meeting local needs and cooperating). They also report to have better neighbourly relationships and trust local groups more, as well as thinking that spiritual health is more important than physical health. These positive associations could be because individuals are already connected to the local church, and this was why they received help, i.e. they were already more positive about the church and their view didn’t necessarily change because they received support. Similarly, they might just be more positive people who are grateful for some support they perceive, as well as their neighbours. If they were already connected to the church, it would explain their higher value for spiritual well-being. In other words, whether the local church supporting people actually changes their perceptions is hard to identify from these results, but there is clearly the potential for the church meeting local needs to have wider impact in people’s lives.

Connection between demographic factors and KIF outcomes

Finally, understanding the link between demographic factors and KIF outcomes might help LWI Zambia to target some of their programmes better.

Firstly, it is not clear why there are no clear drivers of views of integral mission in this population.

- This could show that there is little variation in opinions on integral mission at this stage in the population, but it might also be because our questions are not refined enough to measure this concept yet. If Living Water are keen to measure change in this, it might be worth expanding these questions and looking for change.

Individuals' occupations appear to have a powerful influence on their spiritual outcomes. This could well have significant implications for LWI Zambia's programmes.

- It makes sense that people working in agriculture, as charcoal makers or tending livestock have low spiritual disciplines on their own, as these are all time-intensive occupations that probably make it hard to have personal spiritual disciplines such as reading the Bible regularly. Why individuals who tend livestock associate with lower scores on value for connections, self-management, salvation, value for sharing faith as well as spiritual disciplines on their own is more intriguing. It seems that tending livestock is a rather isolating occupation, explaining the low value for connections, and perhaps one requiring low intelligence hence the low self-management. Why these individuals also score poorly on salvation and value for sharing faith is less clear. Similarly, why being a service worker is the strongest predictor of any variable, for theology i.e. their view of the Bible, is intriguing.

Literacy appears to be a clear predictor of more than just economic well-being. Improving literacy therefore may help increase many other aspects of social and spiritual well-being.

- After occupations, literacy is the most common explanatory variable of KIF outcomes, specifically value for connections, coping with God, spiritual disciplines on own and spiritual growth. This aligns with the literate versus non-literate analysis above. It could be that literacy is an indicator of individual motivation to learn, which would explain also not scoring highly on statements like 'I pray on my own', 'I think about what God wants in my life', or 'I do things to grow spiritually' (spiritual disciplines on own). The fact that many of the questions about spiritual growth are around understanding the Bible (e.g. 'When I read or listen to the Bible I have felt that I get to know God better' or 'Reading or listening to the Bible has helped me to behave more like Jesus') would also explain this association. Whatever the causal mechanism, it is useful to know that individuals who are illiterate and/or uneducated score lower on spiritual as well as social well-being outcomes, which might be an important lesson for LWI programmes.

Individuals from larger families tend to score higher on character (e.g. ‘Godly actions speak louder than words’ and ‘What I do is the real measure of my character’).

- Being a part of a larger family may create the healthy tensions that cause people to value ‘Godly actions’ for instance.

Certain aspects of spiritual health are stronger in those over 40 years old.

- In this analysis, being older particularly associates with salvation, coping with God and spiritual disciplines on your own. In the age group analysis above, this showed up just in the over 60’s category. Perhaps this is because older people in this population have more time or have ‘matured’ into their faith, but either way is a useful finding for programming looking to grow discipleship across the community.

Views on integral mission often influence KIF outcomes.

- It is not surprising that a value for spiritual health, albeit captured in the phrase ‘I believe it is more important that someone is spiritually healthy than physically healthy’, associates with coping with God, theology, spiritual disciplines on their own, spiritual growth and experience of God. In fact, it may be that having such a polarised statement is a really good way of capturing individuals’ value for spiritual well-being. Given slight confirmation biases, this statement might not be ideal to capture views on integral mission and indeed someone’s position on the relative importance of spiritual and physical needs. It would probably be useful to have more statements, including negative ones to truly capture this.
- Furthermore, the more extreme statement ‘It’s more important to tell people about Jesus than to help them provide for their family’ associates with a number of KIF outcomes – self-management, coping with God, and salvation. The relationship with salvation scores is obvious, but with coping and self-management questions is more intriguing.

Qualitative verification of survey methods

As described in the methods section, we employed multiple mini-focus groups on the final day of fieldwork, in order to verify three areas of the survey:

- Comprehension of each survey statement,
- Understanding of scales and testing ordinality, and
- Asking about the survey experience.

The high-level results of this are that:

- a) The majority of the survey statements in this pilot with LWI were understood either completely or to a good degree, so that the meaning was not changed or diluted. From our detailed review of the focus group notes, we found 72% of statements were fully understood, 22% partially, and 6% not much. While there are obviously

causes for concern there, all of those in the partial and not understood were reviewed and some removed; and 72% being fully understood is encouraging.

- b) The scales were well understood. In fact, during the tests of ordinality, most individuals placed the different response options (e.g. agree/strongly agree etc.) exactly evenly across a -100 to +100 scale.
- c) Almost all feedback regarding the survey experience was positive. That being said, about one third commented that it was either too long and/or repetitive. A few commented that questions about family were not appropriate as they felt too 'prying'.

This represents just our initial analysis of the focus groups. In the run-up to our next pilot, we will combine the back-translation transcripts of both ICM and LWI surveys with a more detailed analysis on each statement comprehension (a) above), in order to make another review of statements before Pilot 3.

Limitations and Learnings

What we learned from debriefing with the surveyors and local field team

On our final day of fieldwork, we gathered with all of the surveyors and discussed their experiences and feedback from the KIF piloting. Each surveyor took it in turn to say freely what they enjoyed, what they found challenging, and what they would do to improve the KIF survey in future on both content and implementation. Given the good rapport developed amongst the team by this stage, we received honest and useful feedback.

From this meeting, the **majority of the surveyor feedback was positive**. As young people keen to learn and grow in community engagement and monitoring skills, they all commented that they learned a lot through the training and implementation.

As mentioned, some commented that **particular questions were awkward to ask, especially around family**. We had already removed certain questions, but we learned that in this context we had to be really careful about anything to do with 'love for family'.

The surveyors that helped us run the focus groups did comment that they did **not feel well trained enough to facilitate these mini focus groups**. That was a good lesson that for qualitative data capture that requires quite nuanced facilitation skills, dedicated and more detailed training is required.

About half also commented that the survey was too long (there was quite a difference in the average length of time they each took – from around 25 minutes to nearly 45 minutes). They all commented that they got quicker as surveying went on. When asked what proportion of participants commented on the length of the survey, it was from 5-50%.

Lastly almost all of the surveyors talked about positive experiences for both themselves, and many participants, in considering their spiritual feelings and experiences, and how people enjoyed thinking through these issues.

Following a debrief meeting between James and the LWI key local staff member, we received some thought-through and useful feedback (with Eido comment in parentheses):

- In-country staff to be oriented in the KIF Framework before commencement of the Enumerator training.
- KIF Survey to be trimmed to avoid repetitive questions (some of this repetition comes from measuring values, actions and fruit so is unavoidable but as mentioned the KIF will certainly be shortened again a number of times).
- KIF Study questionnaire to be shared with in-country staff before commencement of Enumerator training to give feedback on the questions and context.

- Focus Group discussions to be facilitated by Enumerators and not Eido staff to prevent bias in responses given (this is potentially challenging given the training required, but potentially a hybrid of oversight with local implementation would work well).
- Enumerator training to include pretesting, role playing, hand-outs of material (questionnaires), research etiquette and probably, be conducted for 3 days. The training should also cover facilitation of the Focus group discussions. (Following discussion with LWI leadership we agree with this feedback although think could probably be carried out in 2 days total.)

In addition to the survey feedback, this is all valid and useful feedback that we plan to include in future pilots.

What we learned from our Partners Roundtable and expert consultation

Following our KIF pilot in Zambia with Living Water, we had a number of opportunities to discuss progress and ongoing questions with both our Roundtable partners as well as a number of external experts.

A more detailed description is found in the full report, in terms of the lessons we learned about using longitudinal data, quantitatively analysing Likert scales, using just 'I-statements', qualitative data we should be capturing in future with the tool, and what is needed to make the tool useful to implement. As most learnings relate more to the overall KIF development, they are not included in this report.

Key changes to future KIF pilots

Based on these learnings, we suggest the following changes to future KIF pilots.

For the fieldwork:

- Before fieldwork, orient in-country staff with the KIF Framework and request feedback on question sensitivity and applicability.
- Plan two weeks for fieldwork to give at least two days for training, including pre-testing, role-playing, research etiquette and more in-depth focus group facilitation training.
- Have enumerators run focus groups, not directly by Eido staff.
- Include more qualitative data collection in the focus groups such as causal reasons for changes experienced.

In general:

- Shorten the KIF survey again as per analysis in this pilot.
- Write up the literature review including Evidence table of sources (in process)
- Complete back translation for Pilots 1 and 2.
- Start to include/consider both retrospective questions, and causality questions.
- Engage more in-depth discussion of theological perspectives, perhaps from a theologian/academic.
- Continue to test ordinality, through focus groups and other investigation.
- Continue to be careful with social desirability bias, using independent enumerators as in this pilot where possible.
- Explore self-administered survey methodology, as used by Water Mission.
- Investigate research funding for possible experimental design to test changes picked up in the survey.

Final reflections and recommendations for LWI programming

Through this pilot with LWI, we set out to answer these five questions:

- 1) Is the KIF framework practical to deliver on the ground?
- 2) Does the framework produce statistically robust results? (The categories and questions are a hybrid of many current best practice tools, but do they work together?)
- 3) How accurately is the KIF measuring spiritual and social impact?
- 4) What do the LWI results tell us about their work and the population they are working with?
- 5) What do these results mean for other ministries in other contexts?

For the LWI Zambia context, we answer questions 1), 4) and 5) below. A discussion of questions 2) and 3) is found in the full report.

Is the KIF framework practical to deliver on the ground?

As in the first pilot, the overall answer to this is yes – the KIF beneficiary survey was once again relatively practical to deliver using simple tablets and training previously inexperienced enumerators. We were able to train these enumerators in a short amount of time, capture a lot of data in just one week, and also run focus groups that gave us some insights on the comprehension and experience of the survey.

However, there are definitely improvements that can be made for the KIF survey implementation. In addition to more in-depth training, there is still more information we need to gather from the focus groups, and we can work on pre-fieldwork acclimatisation to the questionnaire. We also need to continue to shorten the survey, not just so that it can be a more manageable experience for respondents, but also so that we can start to include questions on causality and change over time.

What do the LWI results tell us about their work and the population they are working with?, and What do these results mean for other ministries in other contexts?

Much of the results and discussion above should be useful for LWI as findings in themselves, about the population they are working with. **But here we focus on the programmatic and evaluation implications of these findings, and recommendations from those.**

- 1) **Living Water Zambia are in a good position to engage with a widespread local church, while there is work to be done on envisioning them for integral mission locally.**
 - There is a high level of salvation and also trust in the local church. However, Christian leaders do not have a good reputation for honesty, and there does not appear to be a strong value for integral mission.

- 2) **Given the critical importance of self-management skills and yet relatively low scores for this attribute, LWI Zambia could think about addressing this gap.**
 - While levels of 'salvation' and love for God fruit are all relatively high, scores for self-management and emotional well-being are relatively low in this population. However, there are strong correlations between self-management and many important aspects of personal well-being. Given the positive correlation between self-management skills and emotional well-being, this intervention could help to address low emotional well-being too.

- 3) **LWI Zambia could focus discipleship interventions on young people.**
 - Given that young people score much lower on theology, salvation, spiritual growth and trust in God, it suggests they would benefit from outreach and discipleship interventions. Furthermore, with many respondents in their 20's reporting to be lonely, it appears that this age group might deserve attention in terms of both falling away from faith, and loneliness. While possibly outside LWI's programme remit, this is something to consider even for ensuring young people attend their church envisioning programmes.

- 4) **There is a clear relationship between types of occupation and KIF outcomes. LWI Zambia could use this information to target particularly vulnerable groups with targeted programming.**
 - The strong relationship between occupations and KIF outcomes suggests that attention should be paid to individuals' livelihoods as it relates to engaging with church envisioning or gospel proclamation, for example. It may be that people tending livestock would find it more challenging attending a gospel event, and it appears there may be associated difficulties around regular spiritual disciplines such as reading the Bible. It might be worth asking specific occupations how they would most easily and best engage with that sort of programme. It could be worth exploring this in the context of literacy and building self-management skills as mentioned earlier.

- 5) **LWI Zambia should investigate the link between education levels and many measures of social and spiritual well-being, again potentially targeting interventions on the least educated and poorest.**
 - As with young people, it seems this is a particularly vulnerable group, scoring poorly on all three KIF dimensions most notably love for God fruit. Similarly, those with lower than average income and PPI score poorly on sense of purpose. It appears therefore that even amongst this relatively poor population sample, those who are most poor, and illiterate are least likely to thrive. While not surprising, it seems sensible for LWI to track individual income and literacy therefore, alongside other measures as programmes are put in place. In terms of those interventions, it might be worth ensuring those most poor and illiterate are included.

- 6) **Given the mixed results from the different wards, LWI Zambia should track change over time as well as keeping careful note of what interventions have occurred where.**
- The comparative results for each ward sampled are hard to understand given the level of interventions in each. Our simple recommendation at this stage would be to track change over time and keep referring to the level of intervention at time of measurement. This could be coupled with qualitative enquiry, asking for instance 'What was it in particular that caused this change in your spiritual growth?'. Further, it would be interesting to investigate if there is any reason why the background level of many personal and spiritual well-being outcomes is lower in Kakoma, despite having received gospel proclamation and church envisioning interventions. There may be a complex effect of gospel proclamation initially resulting in some conviction leading to lower scores, but this is conjecture for now.
- 7) **It is worth continuing to measure outcomes (fruit) as well as actions, given that the relationship between the two is often mixed. It is also worth keeping track of salvation as a measure, and how people 'cope with God'.**
- Our correlation results suggest that it is important to keep measuring actions and fruit, given that the pattern of relationships between types of variable is not always the same.
 - Salvation certainly is a good 'predictor' of Fruit in this population, and so is worth measuring. Given its strong links with love for God fruit, 'coping with God' seems an important set of actions to both encourage in individuals and keep measuring too.
- 8) **Further qualitative investigation into views of integral mission, and trust of church leaders would be useful.**
- As already mentioned, views of integral mission could certainly be understood in more detail. Furthermore, the apparent difference between relatively high trust in church leaders, and relatively low view of church leaders' honesty deserves further enquiry.
- 9) **Further investigation is needed in order to understand why score higher in various categories, especially salvation and theology.**
- While it could be that women in this population are less committed to the Bible and making life decisions in line with the Bible, it is worth deeper enquiry as perhaps men are simply self-reporting more positively. From unrepresentative focus group observations, it appears the women are just as faith-filled, so this result should be investigated.
- 10) **We do not have enough validity 'proofing' to make solid conclusions for other ministries, however given the type of findings above we expect this in future.**

Conclusion

To conclude, this pilot with LWI Zambia has helped us refine the KIF framework whilst also revealing some clear traits of the population sampled, differences between demographic groups, key aspects of social and spiritual well-being that affect the others, as well as some practical programming areas that LWI Zambia could focus on to improve outcomes.

In terms of fieldwork, it was a different experience to the first pilot, being administered in just one week with benefits and disadvantages to this. The questionnaire was relatively well understood however, while a number of questions were removed to improve the overall framework.

There were significant differences between various groups in the population, for example men scoring higher across many KIF categories, young people in their 20's scoring high on isolation or loneliness, and older people showing greater love for God and emotional well-being. Education levels appeared to influence broad categories of spiritual well-being as well as livelihoods, and there was a link between economic and spiritual well-being too.

Interesting relationships between categories also appeared, with actions such as self-management and self-development correlating strongly with personal and spiritual well-being, but this time also the new 'coping with God' category.

These findings translated into some tangible learnings for LWI Zambia, including particularly vulnerable groups who could be targeted in programming (e.g. the youth and particular occupations), specific areas to build on (self-management skills), and areas that require further investigation (e.g. the difference between men and women).

We received some invaluable feedback on the fieldwork and survey implementation, made a good first attempt at capturing useful qualitative information through focus groups but have significant work to do in capturing causality and change over time.

Next steps involve taking these learnings into our next KIF pilots, analysing back translations, and refining qualitative methods in particular.

We are incredibly grateful for our partners' hard work in making this pilot happen, both at 'HQ' and on the ground in Zambia.

Appendices

Appendix 1. Full list of questions for Living Water Pilot

Green highlight: New statements
 Yellow highlight: Edited statements

SUB-DIM.	CATEGORY	QUESTIONS	Source	V-A-F
Demographics / Livelihoods				
Demographics / Livelihoods	Giving	If you go church, how much to you give per month?		
		How many members does this household have?	Zambia PPI	
		Is your house connected to electricity?	Zambia PPI	
		Does this household own a Television?	Zambia PPI	
		Does this household own a Mbaula/Brazier?	Zambia PPI	
	LIVELIHOODS	Does this household own a Gas or Electric stove?	Zambia PPI	
		Does this household own an Iron?	Zambia PPI	
		Does this household own a Lounge Suite/Sofa?	Zambia PPI	
		Did this household purchase/consume/receive milk (fresh), milk (powdered, excl. baby milk), cheese, or other dairy products during the last 2 weeks?	Zambia PPI	
		"I am able to provide basic needs for my family"	Shalom FW	
EDUCATION		What is the highest level of school you attended?	TMP	
		What is the highest (class/form/year) you completed at that level?	TMP	

SUB-DIM.	CATEGORY	QUESTIONS	Source	V-A-F
KIF Questions (Self / Others / God)				
GOD	Theology	Jesus is...	CARM	Values
		Sin is...	CARM	
		Hell is...	CARM	
		Salvation is...	CARM	
		Salvation is attained by...	CARM	
		The Bible is inspired by God	LWI	
		I make my life decisions in line with the Bible	LWI	
		I could tell someone else the story of the Good Samaritan	LWI	
	Salvation	I have made a personal commitment to Jesus Christ that is still important in my life today	Barna born again	
		I believe I can have a personal relationship with Jesus		
	Identity	I see myself as a son or daughter of God	COSA adapted	
		I believe that God is impersonal and not interested in my daily situations	SWBS	
		I do not have much in life to be thankful for	Gratitude scale	
		I believe that God loves me and cares about me	SWBS	
		Worshipping God is not important to me		
		I believe my prayers are powerful	BSSM	
	Sp disciplines with others	I believe that God can speak to me personally		
		I trust God has good plans for my life		
		I want to keep growing spiritually		
		I worship God with others		
I read or listen to the Bible		ICM		
	I attend church services	HOPE		
			Action	

SUB-DIM.	CATEGORY	QUESTIONS	Source	V-A-F		
GOD	Sp disciplines on own	I thank God that I am completely forgiven by Jesus	COSA	Action		
		I think about what God wants in my life				
		I choose to think holy and wholesome thoughts				
	Intimacy with God	I pray on my own				
		I do things to grow spiritually				
		I do things to know God more				
	Coping with God	I thank God for His plans for my life			RCOPE	Action
		I express all my feelings to God				
		I ask God what He says about me				
		When dealing with a personal crisis, I sought God's love and care				
	Experience of God	When dealing with a personal crisis, I tried to see how God might be trying to strengthen me in this situation			RCOPE	Fruit
		When dealing with a personal crisis, I wondered whether God had abandoned me			RCOPE	
		When dealing with a personal crisis, questioned God's love for me			RCOPE	
		I have enjoyed worshipping God			SWBS	
	Spiritual growth	I have not found much satisfaction in private prayer with God			SWBS	Fruit
		I have enjoyed praying to God			SWBS	
		My relationship with God has made me feel better about life			SWBS	
		When I worship I have experienced God's love			SWBS	
Spiritual growth	I have not experienced any satisfaction from my relationship with God	SWBS	Fruit			
	I have experienced God's love in every situation	COSA				
	I have felt comfortable interpreting Scripture on my own	HOPE				
	When I read or listen to the Bible I have felt that I get to know God better					
Spiritual growth	Reading or listening to the Bible has helped me behave more like Jesus		Fruit			
	I have experienced meaning in my relationship with God	SWBS				
		I have felt I am growing spiritually	COSA			

SUB-DIM.	CATEGORY	QUESTIONS	Source	V-A-F		
GOD	Trust in God	I have been aware of God's plans in my daily life	See RCOPE possibility above SWBS	Fruit		
		I have not seen my prayers answered				
	Value for connection	I have fully trusted God in the hard times				
		I have got a lot of personal strength and support from God				
OTHERS	Value for connection	My family are important to me	Mercy	Values		
		I should put the needs of my husband / wife above my own				
	Value for sharing faith	Good friendships are important to me				
		I am not important to my friends				
	Meaningful connection	I can share everything with people close to me			ICM adapted Sov/ICM HOPE adapted	Action
		Being a part of my local church community is important to me				
It is important to me to serve those in need						
It is important to me to tell people about Jesus to those who don't know him						
Sharing faith	Meaningful connection	I spend meaningful time with my family	Market	Action		
		I spend meaningful time with friends				
	Sharing faith	I connect deeply with my friends				
		I share honestly with people about my problems				
		I go to my neighbours for advice or practical help				
Sharing faith	Meaningful connection	My neighbours come to me for advice or practical help	COSA			
		I tell others that Jesus is my Lord and saviour				
		I pray with others				
Sharing faith	Meaningful connection	I pray with people about my problems	COSA			
		I show God's love to those around me through acts of service				
		I show God's love to those around me through telling them about Jesus				

SUB-DIM.	CATEGORY	QUESTIONS	Source	V-A-F
OTHERS	Isolation	I have felt distant from people	Market	Fruit
		At my church I have felt judged	ICM	
		At my church I have felt isolated	ICM	
	Support	My family have appreciated having me around	Market adapted	
		I have felt happy in my family life	ICM	
		I have felt sad in my marriage		
		My friendships have felt supportive and rewarding	Flourishing	
		I have enjoyed being with friends	Market	
	Fruit of sharing faith	I have felt spiritually supported by my close friends	ICM	
		I have felt that my neighbours understand and know me	Market	
I have felt I know and understand my neighbours				
SELF	Character	People around me have asked about my faith		Values
		Godly actions speak louder than words	EIS modified	
		What I do is the real measure of my character	EIS modified	
	Self-value	I would rather be unpopular than compromise God's standards	EIS modified	
		I do not love who I am		
		I can see and replace unhealthy behaviours in my life	MERCY	
		I do not believe looking after my physical health is important		
Purpose	I believe that God wants me healthy			
	I love myself	TSOS		
	I believe there is some real purpose for my life	SWBS		
	I do not believe I have a unique calling from God			
	I believe God has given me unique gifts and skills			
	I believe God will use all my struggles for good			

SUB-DIM.	CATEGORY	QUESTIONS	Source	V-A-F
SELF	Self-management	I am able to read and write well	ICM	Action
		I am able to handle criticism well		
		I change my behaviours to avoid temptation		
		I am able to manage my finances		
		I am able to face setbacks without discouragement		
		When I start feeling stressed, I am able to manage it		
	Self-development	I behave in line with my values	TSOS adapted	
		I do things that bring me pleasure	ICM adapted Kessler adapted / opposite in TSOS	
		I do things that fulfil my purpose		
		I do things that God has called me to		
		I do things to grow my skills		
		I have felt worthless		
		I have felt valuable		
		I have felt free from sin		
I have not enjoyed much about life				
Emotional WB	I have felt hopeless	SWBS	Fruit	
	My life has been filled with joy	Kessler		
	I have fallen asleep easily and rest soundly throughout the night	HOPE		
	I have been energetic and alert throughout the day	Market		

SUB-DIM.	CATEGORY	QUESTIONS	Source	V-A-F
SELF	Sense of purpose	I have felt good about the direction my life is headed in	SWBS adapted	Fruit
		I have felt growing in my professional skills		
		I have felt growing in my God-given strengths		
		I have had inner peace even when things go wrong	HOPE adapted (TSOS)	

SUB-DIM.	CATEGORY	QUESTIONS	Source	V-A-F
New sections for LWI				

New sections for LWI		I see the local church actively serving the needs of the poor	World Relief	
		I have been personally helped by the church in this area	World Relief	
		Christian leaders in our community have a reputation for honesty	Water Mission simplified	
		I believe it is more important that someone is spiritually healthy than physically healthy		
		It's more important to tell people about Jesus than to help them provide for their family	Tearfund quote	
		Local churches around here cooperate and work together	Water Mission simplified	
		I have good relationships with those who live around me		
		To what degree do you trust the following groups of people (0-not at all, 1-a little, 2-somewhat, 3-fully trust):		
		Neighbours		
		Local government/authorities		
	Church leaders			
	I fully trust people from other church denominations			

Appendix 2. Additional statements for Living Water

- | | |
|--|---|
| Perception of the local church | <ul style="list-style-type: none">• I see the local church actively serving the needs of the poor• I have been personally helped by the church in this area• Christian leaders in our community have a reputation for honesty |
| Understanding, attitudes towards and practice of integral mission | <ul style="list-style-type: none">• I believe it is more important that someone is spiritually healthy than physically healthy• It's more important to tell people about Jesus than to help them provide for their family |
| Unity amongst the churches | <ul style="list-style-type: none">• Local churches cooperate to better serve our community• I have good relationships with those who live around me |
| Level of trust in the community | <ul style="list-style-type: none">• To what degree do you trust the following group of people• To what degree do you trust the following group of people• To what degree do you trust the following group of people• To what degree do you trust the following group of people |

Appendix 3.

Area of impact		Company values	Company actions	Company fruit
Culture	Vision & mission / Core values	Values / objectives towards the culture of a company.	Actions to influence company culture and operations.	Shared vision and core values that are experienced by staff and wider stakeholders.
	Governance / Operations			
People	Leadership	Values / objectives to impact the personal (including financial & vocational), social, and / or spiritual well- being of stakeholders.	Actions to increase the wellbeing of stakeholders.	Stakeholders growing in their personal well- being (including vocational development, and financial stability), social well-being, and spiritual well-being.
	Employees			
	Customers / suppliers			
	Community			
Resources	Finances	Company Values / objectives for the stewardship of financial resources.	Company actions, stewarding these resources well.	The firm's financial health, stability, and growth rate, so it creates jobs.
	Environment			

Appendix 4. Consent form

Hello, my name is [*name of the enumerator*], and I am working with Living Water International. We are working to best understand the impact of our work, and for that would appreciate your participation in our surveys.

Your participation in this is completely voluntary, and if you do agree to participate, we will ask you questions about your household demographics, livelihood, religiosity and general well-being. You may refuse to answer any of the questions we ask during the interview. Additionally, your answers will not affect the work we do and benefits you might receive from a Living Water program in any way.

We will follow ethical and legal practice and all information about you will be kept confidential. All information collected for interviews will be stored securely and only accessible to the research team. We will not use your name or identity in the final report, or any other written work or presentations that are produced from the consultation data (unless you explicitly give us permission to do so). **Therefore, please be as real and honest as you can be!**

The survey today should take around 30-45 minutes to complete. If you have any questions or problems now, during or after the questionnaire please feel free to discuss it with us or let us know.

If you have any concerns or questions after the questionnaire, you can contact us...

Do you agree to take part in the above research? **Yes/No**

Appendix 5. Removed statements

SUB-DIM.	CATEGORY	QUESTIONS	V-A-F
GOD	Theology	Jesus is...	
		Sin is...	
		Hell is...	
		Salvation is...	
	Identity	Salvation is attained by... A) Grace through faith, B) A state of your mind, C) Obeying all of God's Laws	
		I do not have much in life to be thankful for	Values
		I believe that God is impersonal and not interested in my daily situations	
	Sp disciplines on own	I think about what God wants in my life	
		I choose to think holy and wholesome thoughts	Action
	Coping with God	When dealing with a personal crisis, I wondered whether God had abandoned me	
Experience of God	Trust in God	I have not seen my prayers answered	
	Purpose	I have not found much satisfaction in private prayer with God	Fruit
		I have not experienced any satisfaction from my relationship with God	
SELF	Self-value	I do not believe I have a unique calling from God	
	Self-management	I do not believe looking after my physical health is important	Values
		I do not love who I am	
	Emotional WB	I am able to read AND write well	
		I have not enjoyed much about life	Fruit
OTHERS	Value for connection	I have felt worthless	
		I am not important to my friends	Values
	Support	I should put the needs of my husband / wife above my own	
Sharing faith		I pray with others	
Making connection		I pray with people about my problems	Action
Support	Support	My neighbours come to me for advice or practical help	
		My family have appreciated having me around	Fruit
		I have felt sad in my marriage	

Appendix 6. Factor loadings for ICM + LWI (compared to ICM)

Dimension	Category	Statement	V-A-F	ICM old	ICM+LWI
GOD	Experience of God	I have enjoyed praying to God	F	1	1
GOD	Experience of God	My relationship with God has made me feel better about life	F	1	1
GOD	Spiritual growth	I have experienced meaning in my relationship with God	F	1	1
GOD	Experience of God	I have enjoyed worshipping God	F	1	1
GOD	Experience of God	When I worship I have experienced God's love	F	1	1
GOD	Experience of God	I have experienced God's love in every situation	F	1	1
GOD	Spiritual growth	When I read or listen to the Bible I have felt that I get to know God better	F	1	1
GOD	Trust in God	I have fully trusted God in the hard times	F	1	1
GOD	Trust in God	I have got a lot of personal strength and support from God	F	1	1
OTHERS	Sharing faith	I pray with others	A	13	2
GOD	Sp disciplines on own	I think about what God wants in my life	A	A-6	2
GOD	Sp disciplines on own	I choose to think holy and wholesome thoughts	A	12	2
GOD	Sp disciplines with others	I read or listen to the Bible	A	9	2
GOD	Sp disciplines on own	I thank God that I am completely forgiven by Jesus	A	A-6	2
GOD	Intimacy with God	I express all my feelings to God	A	30	2
GOD	Sp disciplines on own	I pray on my own	A	12	2
GOD	Intimacy with God	I thank God for His plans for my life	A	30	2
GOD	Sp disciplines on own	I do things to grow spiritually	A	A-6	2

Dimension	Category	Statement	V-A-F	ICM old	ICM+LWI
GOD	Sp disciplines on own	I do things to know God more	A	12	2
OTHERS	Isolation	I have felt distant from people	F	3	3
OTHERS	Isolation	At my church I have felt judged	F	3	3
OTHERS	Isolation	At my church I have felt isolated	F	3	3
GOD	Experience of God	I have not found much satisfaction in private prayer with God	F	22	3
GOD	Experience of God	I have not experienced any satisfaction from my relationship with God	F	22	3
SELF	Emotional WB	I have felt valuable	F		4
OTHERS	Making connections	I share honestly with people about my problems	A	13	5
OTHERS	Sharing faith	I pray with people about my problems	A	13	5
OTHERS	Making connections	My neighbours come to me for advice or practical help	A	A-2	5
OTHERS	Making connections	I spend meaningful time with friends	A	A-2	5
OTHERS	Making connections	I go to my neighbours for advice or practical help	A	A-2	5
OTHERS	Making connections	I connect deeply with my friends	A	A-2	5
SELF	Purpose	I believe God has given me unique gifts and skills	V		6
OTHERS	Value for connection	Being a part of my local church community is important to me	V		6
OTHERS	Value for connection	I can share everything with people close to me	V		6
OTHERS	Value for connection	Good friendships are important to me	V		6
OTHERS	Value for sharing faith	It is important to me to serve those in need	V		6
SELF	Self-value	I do not believe looking after my physical health is important	V		7
SELF	Purpose	I do not believe I have a unique calling from God	V	5	7
SELF	Self-value	I can see and replace unhealthy behaviours in my life	V	5	8

Dimension	Category	Statement	V-A-F	ICM old	ICM+LWI
GOD	Sp disciplines with others	I worship God with others	A	9	9
GOD	Sp disciplines with others	I attend church services	A	9	9
SELF	Self-management	I am able to handle criticism well	A	17	10
SELF	Self-management	I am able to manage my finances	A	17	10
SELF	Self-management	I am able to face setbacks without discouragement	A	A-4	10
SELF	Emotional WB	I have felt hopeless	F	F-8	11
GOD	Identity	I believe that God is impersonal and not interested in my daily situations	V	4	11
SELF	Character	Godly actions speak louder than words	V		12
OTHERS	Value for connection	I am not important to my friends	V		12
OTHERS	Support	I have felt spiritually supported by my close friends	F	F-6	13
OTHERS	Support	I have felt I know and understand my neighbours	F	F-6	13
OTHERS	Support	I have felt that my neighbours understand and know me	F	0	13
SELF	Emotional WB	My life has been filled with joy	F	F-1	14
OTHERS	Value for connection	I should put the needs of my husband / wife above my own	V		14
OTHERS	Support	I have felt happy in my family life	F	F-1	14
SELF	Purpose	I believe God will use all my struggles for good	V		15
OTHERS	Value for connection	My family are important to me	V		15
GOD	Salvation	I believe I can have a personal relationship with Jesus	V	26	16
GOD	Identity	I believe that God loves me and cares about me	V	V-9	16
GOD	Identity	I trust God has good plans for my life	V	V-9	16
SELF	Self-development	I do things to grow my skills	A	31	17
SELF	Self-development	I do things that bring me pleasure	A	31	17

Dimension	Category	Statement	V-A-F	ICM old	ICM+LWI
SELF	Self-development	I do things that God has called me to	A	31	17
SELF	Sense of purpose	I have felt growing in my God-given strengths	F	10	18
OTHERS	Value for sharing faith	It is important to me to tell people about Jesus to those who don't know him	V		19
SELF	Character	What I do is the real measure of my character	V		20
SELF	Sense of purpose	I have felt good about the direction my life is headed in	F		20
OTHERS	Sharing faith	I show God's love to those around me through telling them about Jesus	A	13	21
OTHERS	Sharing faith	I show God's love to those around me through acts of service	A	13	21
SELF	Emotional WB	I have been energetic and alert throughout the day	F		22
SELF	Emotional WB	I have felt free from sin	F	F-3	22
OTHERS	Fruit of sharing faith	People around me have asked about my faith	F	F-6	22
SELF	Self-value	I believe that God wants me healthy	V		23
GOD	Identity	I see myself as a son or daughter of God	V	V-9	23
GOD	Trust in God	I have not seen my prayers answered	F	22	23
SELF	Purpose	I believe there is some real purpose for my life	V	5	24
SELF	Sense of purpose	I have felt growing in my professional skills	F	10	24
GOD	Trust in God	I have been aware of God's plans in my daily life	F	1	24
GOD	Salvation	I have made a personal commitment to Jesus Christ that is still important in my life today	V	26	26
GOD	Identity	I believe my prayers are powerful	V	V-9	26
SELF	Self-development	I do things that fulfil my purpose	A	31	27
OTHERS	Support	I have enjoyed being with friends	F	0	28
GOD	Intimacy with God	I ask God what He says about me	A	30	28

Dimension	Category	Statement	V-A-F	ICM old	ICM+LWI
SELF	Emotional WB	I have felt worthless	F	14	29
SELF	Emotional WB	I have not enjoyed much about life	F	F=9	30
SELF	Sense of purpose	I have had inner peace even when things go wrong	F	F-11	30
SELF	Emotional WB	I have fallen asleep easily and rest soundly throughout the night	F		32
GOD	Identity	I believe that God can speak to me personally	V		32
SELF	Self-management	When I start feeling worried or overwhelmed I am able to manage it	A	17	33

Appendix 7. List of statements that did not significantly load into factors

Dimension	Category	Statement	V-A-F
SELF	Character	I would rather be unpopular than compromise God's standards	V
SELF	Self-management	I change my behaviours to avoid temptation	A
OTHERS	Making connections	I spend meaningful time with my family	A
OTHERS	Sharing faith	I tell others that Jesus is my Lord and Saviour	A
OTHERS	Support	My friendships have felt supportive and rewarding	F
OTHERS	Support	My family have appreciated having me around	F
GOD	Identity	I do not have much in life to be thankful for	V
GOD	Identity	I want to keep growing spiritually	V
GOD	Identity	Worshipping God is not important to me	V
GOD	Spiritual growth	I have felt comfortable interpreting Scripture on my own	F
GOD	Spiritual growth	I have felt I am growing spiritually	F

Appendix 8. Factor loadings for Living Water only (compared to ICM)

Dimension	Category	Statement	V-A-F	ICM old	LWI (full data)
GOD	Experience of God	I have enjoyed praying to God	F	1	1
GOD	Experience of God	My relationship with God has made me feel better about life	F	1	1
GOD	Spiritual growth	I have experienced meaning in my relationship with God	F	1	29
GOD	Experience of God	I have enjoyed worshipping God	F	1	25
GOD	Experience of God	When I worship I have experienced God's love	F	1	1
GOD	Experience of God	I have experienced God's love in every situation	F	1	1
GOD	Spiritual growth	When I read or listen to the Bible I have felt that I get to know God better	F	1	8
GOD	Trust in God	I have fully trusted God in the hard times	F	1	22
GOD	Trust in God	I have got a lot of personal strength and support from God	F	1	8
OTHERS	Sharing faith	I pray with others	A	13	33
GOD	Sp disciplines on own	I think about what God wants in my life	A	A-6	No factor
GOD	Sp disciplines on own	I choose to think holy and wholesome thoughts	A	12	No factor
GOD	Sp disciplines with others	I read or listen to the Bible	A	9	6
GOD	Sp disciplines on own	I thank God that I am completely forgiven by Jesus	A	A-6	2
GOD	Intimacy with God	I express all my feelings to God	A	30	2
GOD	Sp disciplines on own	I pray on my own	A	12	31
GOD	Intimacy with God	I thank God for His plans for my life	A	30	6
GOD	Sp disciplines on own	I do things to grow spiritually	A	A-6	23
GOD	Sp disciplines on own	I do things to know God more	A	12	31
OTHERS	Isolation	I have felt distant from people	F	3	32
OTHERS	Isolation	At my church I have felt judged	F	3	28
OTHERS	Isolation	At my church I have felt isolated	F	3	28

Dimension	Category	Statement	V-A-F	ICM old	LWI (full data)
GOD	Experience of God	I have not found much satisfaction in private prayer with God	F	22	No factor

GOD	Experience of God	I have not experienced any satisfaction from my relationship with God	F	22	13
SELF	Emotional WB	I have felt valuable	F		15
OTHERS	Making connections	I share honestly with people about my problems	A	13	No factor
OTHERS	Sharing faith	I pray with people about my problems	A	13	2
OTHERS	Making connections	My neighbours come to me for advice or practical help	A	A-2	27
OTHERS	Making connections	I spend meaningful time with friends	A	A-2	No factor
OTHERS	Making connections	I go to my neighbours for advice or practical help	A	A-2	6
OTHERS	Making connections	I connect deeply with my friends	A	A-2	2
SELF	Purpose	I believe God has given me unique gifts and skills	V		7
OTHERS	Value for connection	Being a part of my local church community is important to me	V		5
OTHERS	Value for connection	I can share everything with people close to me	V		20
OTHERS	Value for connection	Good friendships are important to me	V		5
OTHERS	Value for sharing faith	It is important to me to serve those in need	V		25
SELF	Self-value	I do not believe looking after my physical health is important	V		33
SELF	Purpose	I do not believe I have a unique calling from God	V	5	No factor
SELF	Self-value	I can see and replace unhealthy behaviours in my life	V	5	19
GOD	Sp disciplines with others	I worship God with others	A	9	23
GOD	Sp disciplines with others	I attend church services	A	9	6
SELF	Self-management	I am able to handle criticism well	A	17	16
SELF	Self-management	I am able to manage my finances	A	17	17
SELF	Self-management	I am able to face setbacks without discouragement	A	A-4	16
SELF	Emotional WB	I have felt hopeless	F	F-8	32
GOD	Identity	I believe that God is impersonal and not interested in my daily situations	V	4	23
SELF	Character	Godly actions speak louder than words	V		9
OTHERS	Value for connection	I am not important to my friends	V		18

Dimension	Category	Statement	V-A-F	ICM old	LWI (full data)
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OTHERS	Support	I have felt spiritually supported by my close friends	F	F-6	27
OTHERS	Support	I have felt I know and understand my neighbours	F	F-6	22
OTHERS	Support	I have felt that my neighbours understand and know me	F	0	22
SELF	Emotional WB	My life has been filled with joy	F	F-1	10
OTHERS	Value for connection	I should put the needs of my husband / wife above my own	V		11
OTHERS	Support	I have felt happy in my family life	F	F-1	21
SELF	Purpose	I believe God will use all my struggles for good	V		7
OTHERS	Value for connection	My family are important to me	V		No factor
GOD	Salvation	I believe I can have a personal relationship with Jesus	V	26	No factor
GOD	Identity	I believe that God loves me and cares about me	V	V-9	No factor
GOD	Identity	I trust God has good plans for my life	V	V-9	25
SELF	Self-development	I do things to grow my skills	A	31	21
SELF	Self-development	I do things that bring me pleasure	A	31	19
SELF	Self-development	I do things that God has called me to	A	31	20
SELF	Sense of purpose	I have felt growing in my God-given strengths	F	10	8
OTHERS	Value for sharing faith	It is important to me to tell people about Jesus to those who don't know him	V		25
SELF	Character	What I do is the real measure of my character	V		9
SELF	Sense of purpose	I have felt good about the direction my life is headed in	F		10
OTHERS	Sharing faith	I show God's love to those around me through telling them about Jesus	A	13	19
OTHERS	Sharing faith	I show God's love to those around me through acts of service	A	13	4
SELF	Emotional WB	I have been energetic and alert throughout the day	F		3
SELF	Emotional WB	I have felt free from sin	F	F-3	No factor
OTHERS	Fruit of sharing faith	People around me have asked about my faith	F	F-6	27
SELF	Self-value	I believe that God wants me healthy	V		No factor
GOD	Identity	I see myself as a son or daughter of God	V	V-9	26
GOD	Trust in God	I have not seen my prayers answered	F	22	15
SELF	Purpose	I believe there is some real purpose for my life	V	5	26
SELF	Sense of purpose	I have felt growing in my professional skills	F	10	8
Dimension	Category	Statement	V-A-F	ICM old	LWI (full data)

GOD	Trust in God	I have been aware of God's plans in my daily life	F	1	No factor
GOD	Salvation	I have made a personal commitment to Jesus Christ that is still important in my life today	V	26	5
GOD	Identity	I believe my prayers are powerful	V	V-9	No factor
SELF	Self-development	I do things that fulfil my purpose	A	31	14
OTHERS	Support	I have enjoyed being with friends	F	0	No factor
GOD	Intimacy with God	I ask God what He says about me	A	30	31
SELF	Emotional WB	I have felt worthless	F	14	32
SELF	Emotional WB	I have not enjoyed much about life	F	F=9	12
SELF	Sense of purpose	I have had inner peace even when things go wrong	F	F-11	No factor
SELF	Emotional WB	I have fallen asleep easily and rest soundly throughout the night	F		3
GOD	Identity	I believe that God can speak to me personally	V		7
SELF	Self-management	When I start feeling worried or overwhelmed I am able to manage it	A	17	30
SELF	Character	I would rather be unpopular than compromise God's standards	V		9
SELF	Self-management	I change my behaviours to avoid temptation	A	10	No factor
OTHERS	Making connections	I spend meaningful time with my family	A	A-8	4
OTHERS	Sharing faith	I tell others that Jesus is my Lord and Saviour	A	13	No factor
OTHERS	Support	My friendships have felt supportive and rewarding	F	F-6	3
OTHERS	Support	My family have appreciated having me around	F	0	23
GOD	Identity	I do not have much in life to be thankful for	V	4	16
GOD	Identity	I want to keep growing spiritually	V		5
GOD	Identity	Worshipping God is not important to me	V	4	No factor
GOD	Spiritual growth	I have felt comfortable interpreting Scripture on my own	F	F-11	No factor
GOD	Spiritual growth	I have felt I am growing spiritually	F	1	17

Appendix 9. Cronbach Alpha Scores

CATEGORY NAME	ICM (Cronbach Alpha score)	LWI (Cronbach Alpha score)	LWI + ICM (Cronbach Alpha score)
Character	0.545	0.404	0.700
Coping with God	new statements for LWI	0.639	new statements for LWI
Emotional WB	0.575	0.569	0.635
Experience of God	0.840	0.847	0.796
Identity	0.740	0.656	0.607
Intimacy with God	0.777	0.697	0.846
Isolation	0.833	0.613	0.598
Making connections	0.634	0.564	0.806
Purpose	0.623	0.583	0.235
Salvation	0.668	0.623	0.719
Self-development	0.755	0.560	0.853
Self-management	0.669	0.668	0.758
Self-value	0.307	0.013	0.560
Sense of purpose	0.648	0.443	0.779
Sharing faith	0.696	0.608	0.768
Sp disciplines on own	0.830	0.761	0.890
Sp disciplines with others	0.533	0.548	0.629
Spiritual growth	0.765	0.637	0.823
Support	0.765	0.701	0.802
Theology	new statements for LWI	0.553	new statements for LWI
Trust in God	0.659	0.568	0.659
Value for connection	0.633402	0.588	0.728
Value for sharing faith	0.686	0.671	0.647

Appendix 10. Correlations

Colour coding

non-signifant correlation
small correlation (0.1-0.3/-0.1- -0.3)
moderate correlation (0.3-0.5/-0.3- -0.5)
moderate correlation (>0.5/<-0.5)

Appendix 10.1. Values and Values

	Identity	Salvation	Theology	Character	Purpose	Self-value	Value for connection	Value for sharing faith
Identity	1	0.691	0.617	0.22	0.545	0.245	0.47	0.603
	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Salvation	0.691	1	0.64	0.274	0.475	0.294	0.49	0.557
	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000
Theology	0.617	0.64	1	0.319	0.472	0.201	0.468	0.431
	0.000	0.000	0	0.000	0.000	0.001	0.000	0.000
Character	0.22	0.274	0.319	1	0.228	0.36	0.276	0.229
	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000
Purpose	0.545	0.475	0.472	0.228	1	0.365	0.459	0.446
	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000
Self-value	0.245	0.294	0.201	0.36	0.365	1	0.249	0.209
	0.000	0.000	0.001	0.000	0.000	0	0.000	0.000
Value for connection	0.47	0.49	0.468	0.276	0.459	0.249	1	0.532
	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000
Value for sharing faith	0.603	0.557	0.431	0.229	0.446	0.209	0.532	1
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0

Appendix 10.2. Values and Actions

	Coping with God	Intimacy with God	Sp disciplines on own	Sp disciplines with others	Self-development	Self-management	Making connections	Sharing faith
Identity	0.354	0.399	0.367	0.213	0.11	0.213	0.04	0.339
	0.000	0.000	0.000	0.000	0.065	0.000	0.459	0.000
Salvation	0.401	0.455	0.446	0.255	0.239	0.286	0.1	0.323
	0.000	0.000	0.000	0.000	0.000	0.000	0.073	0.000
Theology	0.298	0.37	0.413	0.313	0.323	0.279	0.149	0.379
	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.000
Character	0.151	0.175	0.226	0.11	0.162	0.205	0.128	0.05
	0.011	0.003	0.000	0.062	0.007	0.001	0.032	0.317
Purpose	0.298	0.36	0.317	0.217	0.216	0.236	0.04	0.244
	0.000	0.000	0.000	0.000	0.000	0.000	0.461	0.000
Self-value	0.302	0.255	0.152	0.184	0.209	0.191	0.11	0.04
	0.000	0.000	0.011	0.002	0.000	0.001	0.054	0.502
Value for connection	0.143	0.252	0.308	0.177	0.265	0.275	0.145	0.19
	0.017	0.000	0.000	0.003	0.000	0.000	0.015	0.001
Value for sharing faith	0.221	0.286	0.316	0.207	0.132	0.214	0.11	0.283
	0.000	0.000	0.000	0.000	0.027	0.000	0.055	0.000

Appendix 10.3. Values and Fruit

	Experience of God	Spiritual growth	Trust in God	Emotional WB	Sense of purpose	Fruit of sharing faith	Isolation	Support
Identity	0.559	0.495	0.493	0.272	0.362	0.08	0.355	0.314
	0.000	0.000	0.000	0.000	0.000	0.144	0.000	0.000
Salvation	0.548	0.505	0.502	0.314	0.367	0.1	0.282	0.396
	0.000	0.000	0.000	0.000	0.000	0.071	0.000	0.000
Theology	0.43	0.497	0.431	0.273	0.333	0.234	0.28	0.367
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Character	0.243	0.228	0.262	0.258	0.263	0.04	0.202	0.341
	0.000	0.000	0.000	0.000	0.000	0.437	0.001	0.000
Purpose	0.456	0.381	0.31	0.249	0.302	0.03	0.237	0.308
	0.000	0.000	0.000	0.000	0.000	0.578	0.000	0.000
Self-value	0.376	0.292	0.255	0.244	0.232	0.01	0.146	0.28
	0.000	0.000	0.000	0.000	0.000	0.789	0.013	0.000
Value for connection	0.357	0.364	0.332	0.338	0.339	0.07	0.27	0.405
	0.000	0.000	0.000	0.000	0.000	0.221	0.000	0.000
Value for sharing faith	0.515	0.364	0.376	0.224	0.276	0.03	0.277	0.353
	0.000	0.000	0.000	0.000	0.000	0.568	0.000	0.000

Appendix 10.4. Actions and Fruit

	Experience of God	Spiritual growth	Trust in God	Emotional WB	Sense of purpose	Fruit of sharing faith	Isolation	Support
Coping with God	0.498	0.505	0.495	0.33	0.437	0.04	0.09	0.299
	0.000	0.000	0.000	0.000	0.000	0.487	0.113	0.000
Intimacy with God	0.49	0.489	0.439	0.131	0.211	0.1	0.159	0.219
	0.000	0.000	0.000	0.028	0.000	0.083	0.008	0.000
Sp disciplines on own	0.413	0.46	0.418	0.16	0.261	0.164	0.191	0.219
	0.000	0.000	0.000	0.008	0.000	0.006	0.001	0.000
Sp disciplines with others	0.313	0.324	0.298	0.133	0.227	0.11	0.1	0.244
	0.000	0.000	0.000	0.025	0.000	0.051	0.071	0.000
Self-development	0.255	0.375	0.228	0.289	0.331	0.154	0.08	0.25
	0.000	0.000	0.000	0.000	0.000	0.010	0.139	0.000
Self-management	0.368	0.448	0.369	0.407	0.411	0.11	0.163	0.387
	0.000	0.000	0.000	0.000	0.000	0.054	0.006	0.000
Making connections	0.08	0.216	0.194	0.29	0.155	0.197	0	0.371
	0.163	0.000	0.001	0.000	0.009	0.001	0.444	0.000
Sharing faith	0.359	0.405	0.308	0.238	0.264	0.213	0.144	0.233
	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000

Appendix 10.5. Values and financial variables

	Identity	Salvation	Theology	Character	Purpose	Self-value	Value for connection	Value for sharing faith
Total income	0.06	0.129	0.08	0	0.01	0.05	0.03	0.08
	0.358	0.047	0.174	0.313	0.847	0.417	0.626	0.165
FOOD PPI	0.1	0.181	0.148	0.11	0.1	0.03	0.08	0.05
	0.091	0.003	0.015	0.055	0.093	0.517	0.147	0.324
National PPI	0.1	0.176	0.145	0.11	0.1	0.03	0.08	0.05
	0.100	0.004	0.016	0.062	0.098	0.576	0.173	0.371
Tithes and giving	-0.079	-0.010	0.041	0.076	-0.020	0.011	0.047	-0.049
	0.202	0.866	0.501	0.212	0.741	0.858	0.440	0.420

Appendix 10.6. Actions and financial variables

	Coping with God	Intimacy with God	Sp disciplines on own	Sp disciplines with others	Self-development	Self-management	Making connections	Sharing faith
Total income	0.142	0.06	0.05	0.01	0.129	0.08	-0.16	0.1
	0.029	0.343	0.434	0.808	0.049	0.206	0.012	0.113
FOOD PPI	0.184	0.147	0.127	0.04	0.127	0.192	0	0
	0.002	0.015	0.037	0.474	0.037	0.002	0.254	0.910
National PPI	0.184	0.14	0.125	0.03	0.11	0.184	0	0
	0.002	0.021	0.040	0.537	0.051	0.002	0.188	0.988
Tithes and giving	-0.036	-0.023	0.016	-0.034	0.066	0.042	0.007	0.024
	0.564	0.710	0.794	0.575	0.279	0.502	0.907	0.697

Appendix 10.7. Fruit and financial variables

	Experience of God	Spiritual growth	Trust in God	Emotional WB	Sense of purpose	Fruit of sharing faith	Isolation	Support
Total income	0.11	0.08	0.08	0	0.05	0.131	0.12	0.03
	0.066	0.172	0.189	0.313	0.432	0.043	0.060	0.583
FOOD PPI	0.07	0.165	0.129	0.08	0.137	0.05	0.148	0.09
	0.235	0.007	0.034	0.178	0.024	0.340	0.014	0.109
National PPI	0.07	0.166	0.129	0.08	0.137	0.06	0.143	0.09
	0.240	0.007	0.034	0.180	0.024	0.288	0.017	0.114
Tithes and giving	0.006	0.035	0.052	-0.040	0.007	0.131	-0.015	-0.056
	0.916	0.569	0.403	0.512	0.910	0.032	0.806	0.363

Appendix 10.8. Financial variables

	Total income	National PPI	Tithes and giving
Total income	1.00	0.25	0.03
		0.00	0.67
National PPI	0.25	1.00	-0.07
	0.00		0.26
Tithes and giving	0.03	-0.07	1.00
	0.67	0.26	

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