



# THE UNDERSTANDING OF PROBLEM SOLVING IN KENYA, TANZANIA, AND UGANDA

A Report for the Assessment of Life Skills and Values in East Africa (ALiVE) Project

# PROBLEM SOLVING - KENYA, TANZANIA, AND UGANDA



This report is a product of the Regional Education Learning Initiative (RELI). RELI, through the Values and Life Skills (VaLi) thematic group, aimed to collaborate with local leaders to cocreate and develop contextualized assessments in Kenya, Tanzania, and Uganda. The RELI project, Assessment of Life Skills and Values in East Africa (ALiVE), has three main objectives: (a) develop contextualized, open-source tools for the assessment of life skills and values in the East African context; (b) generate large-scale data on life skills and values across the three countries; and (c) use this data to inform change and build capacities within the VaLi-ALiVE member organizations.

### Prepared by

Mauro Giacomazzi and Christine Nassanga, Luigi Giussani Institute of Higher Education, Kampala (Uganda), David Alelah Otieno, Zizi Afrique, Nairobi (Kenya).

#### Suggested citation

Giacomazzi, M., Nassanga, C., & Otieno, A. C. (2021). The understanding of problem solving in Kenya, Tanzania, and Uganda. A report for the Assessment of Life Skills and Values in East Africa (ALiVE) project.

#### Acknowledgements

RELI and the ALiVE initiative gratefully acknowledge the support provided by Echidna Giving, Imaginable Futures, and Wellspring Philanthropic Fund.

RELI recognizes that the value it provides is in its absolute commitment to quality, independence, and impact. Activities supported by its donors reflect this commitment, and the analysis and recommendations are not determined or influenced by any donation.

RELI is also profoundly indebted to Zizi Afrique, the regional coordinator of the ALiVE initiative, and its implementing partners: the Milele Foundation and GLAMI in Tanzania, and the Luigi Giussani Institute of Higher Education and Uwezo in Uganda.





## CONTENTS

| LI | IST OF | FIGURES                              | 4    |
|----|--------|--------------------------------------|------|
| 1  | BA     | CKGROUND                             | 5    |
| 2  | RE     | SEARCH QUESTIONS AND METHODOLOGY     | 5    |
|    | 2.1    | Research Questions                   | 5    |
|    | 2.2    | Methodology                          | 6    |
| 3  | FIN    | DINGS                                | 7    |
|    | 3.1    | Definition and Process               | 7    |
|    | 3.2    | Subskills                            | 9    |
|    | 3.3    | Dispositions and Values              | . 12 |
|    | 3.4    | Values and Behaviours                | . 14 |
|    | 3.5    | Support Systems and Enabling Factors | . 16 |
|    | 3.6    | Assessment Methods                   | . 18 |
| 4  | СО     | NCLUSIONS                            | . 19 |
| R  | EFERE  | ENCES                                | . 21 |



## LIST OF FIGURES





### 1 BACKGROUND

The Regional Education Learning Initiative (RELI), through the Values and Life Skills (VaLi) thematic group, intends to work with local leaders to cocreate and collaboratively develop contextualized assessments in Kenya, Tanzania, and Uganda. The initiative, Assessment of Life Skills and Values in East Africa (ALiVE), has achieve three objectives: gathering information (and knowledge), building community, and advocacy. These three broad objectives mirror RELI's three pillars: being a hub for knowledge, transforming member organizations, and influencing policy. Over a period of three years (2020–2023), ALiVE will do the following: (a) develop contextualized, open-source tools to assess life skills and values in the East African context; 2) generate large-scale data on life skills and values across the three countries; and 3) use this data to inform changes and build capacities within the VaLi-ALiVE member organizations. These organizations will advocate for the three national education systems to focus on and produce these competencies, inform regional policy throughout the East African Community, and inform global thinking on how to measure life skills and values as *relevant and effective* learning outcomes.

ALIVE will be a context-relevant, summative assessment. The assessment will target adolescents from 13 to 17 years of age, both girls and boys, and both in-school and out-of-school, focusing on three competences and one value: self-awareness, problem solving, collaboration, and respect.

The first phase in developing the contextualized assessment tools was to conduct ethnographic interviews at different sites (rural and urban) in the countries. Conducted in November 2020, the studies targeted three categories of informants: adolescents, parents, and key persons (e.g., teachers, social workers, youth patrons/matrons, religious leaders, etc.). The studies aimed to determine participants' perceptions and understandings of the selected ALiVE competencies.

The aim of phase 1 of the study is to achieve a **contextualized understanding of** *problemsolving* skills in Kenya, Tanzania, and Uganda in order to determine the best tools for a largescale assessment of *problem solving* in the three countries. Therefore, the main scope of this report is to present a comparative analysis of the findings obtained in the individual country reports in order to identify the commonalities and divergences between the three countries.

### 2 **RESEARCH QUESTIONS AND METHODOLOGY**

### 2.1 Research Questions

The study sought to answer the following questions:

i) What are the **common facets of the definition** of *problem-solving* skills in Kenya, Tanzania, and Uganda?



- ii) What are the **differences** between the definitions of *problem solving* in the three countries?
- iii) What are the most common **subskills** highlighted by adolescents, parents, and key persons, considering gender and location, in the three countries?
- iv) Which subskills are unique to each country?
- v) What are the common **dispositions** and **values** identified by the participants based on their categories (adolescents, parents, key persons), genders, and locations in the three countries?
- vi) Which dispositions, behaviours, and values are unique to each country?
- vii) Which **support systems** and other **factors** that help the adolescents to grow in *problem solving* skills are identified in the three countries?
- viii) What are the common methods identified by the participants of Kenya, Tanzania, and Uganda to **assess** *problem-solving* skills in adolescents?

#### 2.2 Methodology

The comparative method was used to prepare this report, paying special attention to gender analyses in the different codes analysed. Regarding the study design, a qualitative approach and an ethnographic design were used to explore and collect participants' perceptions and understandings of problem solving in Kenya, Tanzania, and Uganda. It was conducted in 5 districts of Kenya (Rongo, Mwea East, Kibra, Narok South, and Tana Delta), 5 of Tanzania (Ilala, Mvomero, Ngorogoro, North-A, and Uyui), and 5 of Uganda (Jinja, Kikuube, Moroto, Kampala, and Oyam), sampled based on their status as rural or urban, their economic activity (pastoralist, core-urban, or agricultural), and their distance from the respective capital cities.

Two villages in each district were randomly sampled. In each sampled village, researchers targeted at least 4 interviews with adolescents (2 of each gender, including those in primary, secondary, vocational training centre, and out of school); 4 interviews with parents (2 of sampled adolescents, and 2 of non-sampled adolescents, including both fathers and mothers); and 4 interviews with key persons (teachers, social workers, and others who consistently work with adolescents, from both genders). This resulted in a target of 24 participants per district for the one-on-one interviews. The total target sample was then approximately 120 participants in each country for the interviews. Given the prevailing challenges, however, the study reached 116 participants in Kenya, 132 participants in Tanzania, and 120 participants in Uganda, for the one-on-one interviews. It should be noted that not all these participants were interviewed on problem solving: only 80 participants in Kenya, 55 participants in Tanzania and 95 in Uganda were interviewed on it.

In addition to the one-on-one interviews, researchers conducted 21 focus group discussions (10 for adolescents and 11 for parents) in Kenya, 20 FGDs (10 for adolescents and 10 for parents) in Tanzania, and 20 FGDs (10 for adolescents and 10 for parents) in Uganda. To constitute the FGDs, 3 participants in each village (adolescents or parents) were selected to join the other 4 who participated in the interviews. FGDs in each village ultimately consisted of 5 to 7 participants.





### 3 **FINDINGS**

### 3.1 Definition and Process

This theme or category concerns the codes and analysis of the definitions of collaboration given by the participants in the three countries.

| Table 1: Frequency and Percentage of the Codes Identified in Defining the Problem-Solving Process in Kenya, |
|---|
| Tanzania, and Uganda  |

| CATEGORY:<br>DEFINITION/PROCESS | KENYA<br>(Participants) |                | TANZANIA<br>(Participants) |       | UGANDA<br>(Participants) |       |
|---------------------------------|-------------------------|----------------|----------------------------|-------|--------------------------|-------|
| CODES                           | FREQ.                   | % <sup>1</sup> | FREQ.                      | %     | FREQ.                    | %     |
| Praying to God                  | 11                      | 13.75          |                            |       |                          |       |
| Facing problems                 | 14                      | 17.50          | 11                         | 20.00 | 45                       | 47.37 |
| Finding solutions               | 70                      | 88.75          | 50                         | 90.91 | 72                       | 75.79 |
| Identifying the problem         | 23                      | 28.75          | 15                         | 27.27 | 20                       | 21.05 |
| Judgment                        |                         |                | 9                          | 16.36 |                          |       |
| Asking for advice               | 19                      | 23.75          | 12                         | 21.82 | 52                       | 54.74 |
| Knowing/Understanding Problem   | 49                      | 61.25          | 21                         | 38.18 | 38                       | 40.00 |
| TOTAL PARTICIPANTS              | 80                      |                | 55                         |       | 95                       |       |

The analysis of the findings on the definition and process of problem solving in the three countries presents some clear similarities and a few differences that are worth highlighting.

The participants mostly present problem solving as synonymous with finding solutions to challenges or problems. This aspect is the one most frequently mentioned by the participants, and it usually corresponds to a direct translation of *problem solving* in the local languages. Facing a problem as a challenge suggests a willingness to confront it and find a positive solution. Nevertheless, some participants use very strong words to refer to the process of solving a problem, such as *eliminating*, *eradicating*, or *getting rid of* it. The use of these

<sup>&</sup>lt;sup>1</sup> Since the participants may have mentioned more than one code in their definition of problem solving and in the description of the process, the percentages do not add up to 100. This number has been calculated based on the total number of participants in each country.



synonyms may have been influenced by how they look at problems or how the local culture perceives problems. In some cases, it is also possible that the mother tongue expressions used to define problem solving might have fostered the negative understanding of the word *problem*.

In all three countries, a number of quotes refer to problem solving as an act of resolving interpersonal conflicts, helping community members overcome a difficult situation, or preventing others from making regrettable choices. This is particularly relevant among adolescents, who mostly refer to relational problems as some of the greatest challenges they face. Participants also refer to problem solving as the process of helping others resolve challenges, which shows a strong communitarian bond with people in their community.

#### The Problem-Solving Process

Even though the participants appeared to be quite unfamiliar with the process of problem solving itself when defining the term, the analysis of the interviews highlights other important aspects of problem solving. To decide on a viable solution to a challenge, the participants identified the following important steps: identifying the problem, knowing and understanding the problem, asking for advice, evaluating the options and choosing between them, and finding the best solution. Only a few participants mentioned additional elements like praying or worshiping God.

The most unexpected step of the process may have been *asking for advice*. Sharing a problem with others and asking for guidance or help in order to find a solution is considered an important step young people should take. This is linked to the communitarian view of problems and problem solving. Sharing personal problems and asking for advice in an attempt to deal with them is considered very relevant and expected, especially from a young person. This is because participants think young people are too inexperienced to face problems alone, that they lack the skills, and referring to an adult is part of the learning process—but also because the community is responsible for helping others: a challenge facing one person is a challenge facing the whole community.

While *finding solutions* is the most important step mentioned by all the participants across the three countries, *knowing and understanding the problem* is the second most relevant in Kenya and Tanzania. In Uganda, however, the aspect of *facing the problems* is cited as relevant by almost half of the participants. This final step is instead mentioned by around 20% of the participants in Kenya and Tanzania.

Another peculiar finding is the reference to a personal relationship with God. The percentages of the participants citing this aspect vary across the three countries; in Kenya it is mentioned by 13.8% of the participants, but by only 3.6% in Tanzania.

In regard to gender, the men's contribution to the codes that emerged as a process of problem solving is more prominent in Tanzania and Kenya. In Uganda, on the other hand, both men and women participants contribute quite equally; more women mentioned praying to God, judgement, sharing, and finding solutions to problems, while more men mentioned identifying





the problem, knowing or understanding the problem, and facing problems as important steps in the problem-solving process.

| CATEGORY:<br>Definition/Process  | DIFFERENCES  |   |   |  |  |  |
|--|--|---|---|--|--|--|
| SIMILARITIES   | KENYA  | TANZANIA  | UGANDA  |  |  |  |
| Finding solutions,<br>facing the problem, and<br>understanding the<br>problem appeared as<br>the most important<br>aspects in the definition<br>and process of problem<br>solving. In all countries<br>the aspect of sharing<br>problems with others to<br>get their advice<br>emerged as important. | Importance is<br>attributed to<br><i>understanding the</i><br><i>problem</i> . | Importance is<br>attributed to the<br>step of <i>judgment</i> . | Importance is<br>attributed to <i>facing</i><br><i>the problem</i> .<br>Female<br>participants<br>contributed more to<br>such aspects as<br>judgement,<br>sharing, and<br>finding solutions<br>with others. |  |  |  |

Table 2: Similarities and Differences between Kenya, Tanzania, and Uganda in Defining Problem Solving

### 3.2 Subskills

The following table presents a comparison of the frequency of codes of the relevant subskills of problem solving in the three countries.

In this study problem solving was investigated at the household level. The problems the participants mentioned as the most frequent challenges in their lives relate mostly to family problems (money and education of children) and relationship problems (conflicts in the community and among peers, for adolescents). Consequently, the kind of subskills highlighted by Kenyans, Tanzanians, and Ugandans go beyond the mere process skills that describe the cognitive steps a person takes to solve a problem, but they include all the skills that help a person deal with life's daily challenges.





Table 3: Frequency and Percentage of the Codes Identified as Subskills of Problem Solving in Kenya, Tanzania, and Uganda

| CATEGORY:<br>SUBSKILLS | CODES                         | KENYA<br>(Participants) |       | TANZANIA<br>(Participants) |       | UGANDA<br>(Participants) |       |
|------------------------|-------------------------------|-------------------------|-------|----------------------------|-------|--------------------------|-------|
|                        |                               | FREQ.                   | %     | FREQ.                      | %     | FREQ.                    | %     |
| Social Skills          | Communication<br>(expressive) | 17                      | 21.25 | 6                          | 10.91 | 13                       | 13.68 |
|                        | Communication<br>(receptive)  | 43                      | 53.75 | 6                          | 10.91 | 34                       | 35.79 |
|                        | Cooperation/Collab<br>oration | 8                       | 10.00 | 15                         | 27.27 |                          |       |
|                        | Guidance/Counselli<br>ng      | 34                      | 42.50 | 24                         | 43.64 | 60                       | 63.16 |
|                        | Leadership                    | 10                      | 12.50 |                            |       |                          |       |
|                        | Relationship skills           | 52                      | 65.00 | 21                         | 38.18 | 52                       | 54.74 |
| Self-Skills            | Self-confidence               | 17                      | 21.25 | 14                         | 25.45 | 20                       | 21.05 |
| Self-<br>Management    | Planning                      |                         |       |                            |       | 11                       | 11.58 |
| TOTAL PARTICIPANTS     |                               | 80                      |       | 55                         |       | 95                       |       |

The participants mentioned several subskills as key to being a good problem solver. Based on the table, it appears that the most relevant codes are those referring to relationships: *relationship skills, cooperation and collaboration, guidance and counselling, communication, leadership,* and *empathy.* 

It is quite apparent that the participants consider self-perception closely related to the perception of the community they live in; problems seem not to simply affect the individual but the whole community, family, or a group of friends with whom individuals share their lives. Thus, *relationship skills* are crucial and are linked to young people's abilities to mediate a





conflict or help people reconcile with friends in case of a dispute. This subskill is quite relevant in all three countries, though it is mentioned by over 50% of the participants in Kenya and Uganda but by less than 40% in the Tanzanian context.

Relatedly, the participants emphasize the importance of cooperation; people add value, and their contributions can definitely be important for solving others' problems. This aspect is quite relevant in Tanzania, but much less in Kenya and Uganda.

Given this prominence of relationship skills and the need for young people to advise or be ready to take advice when they need help with a difficult situation, young people should have good communication skills and be receptive to other people's suggestions. The participants from all three countries consider receptive communication skills important, though receptive skills are mentioned as key by more than 50% of the Kenyans but only around 10% of the Tanzanians.

Linked to this, another relevant subskill mentioned by more than 40% of the participants is *guidance and counselling*. A good problem solver is called to help the community, and to do so they should be able to guide and advise friends or relatives on the matter at hand. A problem solver needs to be a good listener and ought to show empathy (though this aspect is mentioned by only a few participants). Guiding others requires a certain capacity for openness and attentiveness to their needs while respecting their point of view.

In addition, more men in Kenya and Tanzania contributed to the codes relating to social skills, unlike in Uganda where women find social skills very relevant.

Another area of interest is related to self-identity. Only a minority of participants in the three countries mention that these skills are key to nurturing an independent problem solver; they mostly refer to self-confidence as being an important skill, while a few others (less than 10%) in Kenya and Tanzania refer to self-awareness. On the whole, these skills were deemed significant by the key informant participants. It is paramount to note that the concepts that self-awareness skills encompass are quite complex: even more so for people who use mostly local languages and who were interviewed in *Kiswahili* or other local languages. The fact that local languages sometimes do not even have a direct translation of these skills is also significant and points to a communitarian conception of the self, as opposed to the individualist view in Western cultures.

Only 3% of the participants mentioned *goal setting* as a relevant skill that a young person should possess to successfully deal with life's challenges, while 11% of Ugandan participants cited *planning* skills.

Notably, the codes of skills related to self-awareness, such as *self-confidence* and *self-control*, emerged mostly from women in Tanzania, unlike in Kenya where the same codes emerged from more men than women. And in Uganda both men and women contributed equally. It is interesting to note that in all countries, codes relating to self-management skills, such as *planning* and *goal setting*, emerged largely from men.





Table 4: Similarities and Differences between Kenya, Tanzania, and Uganda in Identifying Problem-Solving Subskills

| CATEGORY:<br>Subskills  | DIFFERENCES   |          |        |  |  |  |
|---|---|----------|--------|--|--|--|
| SIMILARITIES  | KENYA   | TANZANIA | UGANDA |  |  |  |
| In all three countries,<br>the key subskills for<br>problem solving revolve<br>around <i>relationship</i><br><i>skills, communication</i><br>( <i>receptive and</i><br><i>expressive</i> ), and<br><i>guidance and</i><br><i>counselling</i> .<br>The subskills related to<br><i>self-awareness</i> and<br><i>management</i> were<br>mentioned by only a<br>few participants. | Leadership skills<br>are also associated<br>with good problem<br>solvers. |          |        |  |  |  |

### 3.3 Dispositions and Values

Dispositions can be defined as a person's inherent qualities of mind and character that influence human behaviours. They are certain aspects of a person's character that help to enhance and nurture a skill like problem solving. The following table presents the frequency and percentage of dispositions as they emerged from the participants in the three countries.



Table 5: Frequency and Percentage of the Codes Identified as Dispositions of Problem Solving in Kenya, Tanzania, and Uganda

| CATEGORY:<br>DISPOSITIONS              | KENYA<br>(Participants) |       | TANZANIA<br>(Participants) |       | UGANDA<br>(Participants) |       |
|--|-------------------------|-------|----------------------------|-------|--------------------------|-------|
| CODES                                  | Freq.                   | %     | Freq.                      | %     | Freq.                    | %     |
| Kindness/Friendliness                  | 24                      | 30.00 | 6                          | 10.91 | 34                       | 35.79 |
| Patience/Time                          | 16                      | 20.00 |                            |       | 16                       | 16.84 |
| Positive Attitude                      |                         |       |                            |       | 12                       | 12.63 |
| Responsibility                         | 10                      | 12.50 | 8                          | 14.55 | 11                       | 11.58 |
| Willingness to work hard               |                         |       | 14                         | 25.45 | 34                       | 35.79 |
| Willingness to be<br>corrected/advised | 16                      | 20.00 | 11                         | 20.00 | 34                       | 35.79 |
| TOTAL PARTICIPANTS                     | 80                      |       | 55                         |       | 95                       |       |

The dispositions that emerge most frequently from the interviews are *willingness to work hard*, *willingness to be corrected or to receive advice*, *being responsible*, *being friendly and kind*, *passion*, and *patience*.

The participants (mostly in Tanzania and Uganda) mentioned the *willingness to work hard* as an important disposition that helps young people solve problems. According to them, a person's ability to solve any challenge is dependent on their commitment and dedication.

The participants also mentioned being *kind and friendly* as one of the traits of problem solvers. They explained *kindness* as a way of making a person facing a problem feel at home. Society, especially in Kenya and Uganda, calls on adolescents with problem-solving skills to help their peers, and this requires good relationship skills and a willingness to be open to others, to cooperate in a friendly and amicable way, to care for others, and to be ready to forgive.



The disposition of *responsibility* also emerged, which implies that good problem solvers have the ability to meet difficult challenges head-on and make the right decisions.

*Willingness to be corrected or advised* is another characteristic found in good problem solvers. The journey of problem solving is never walked alone. Some participants openly mention that to solve personal or family problems, it is necessary to listen to the advice of adults who are more experienced or mates who have stronger abilities in terms of dealing with challenges.

Problem solvers take the *time* necessary to study the problem carefully before they rush to regrettable conclusions. This aspect was mentioned by about 20% of Kenyans and Ugandans and about 7% of Tanzanians.

The disaggregation of data by category shows that parents deem it especially important for their children to be responsible and hardworking. They consider this a strong sign of being ready to face life's challenges. The key persons, on the other hand, highlighted the importance of adolescents being open to the advice and corrections of those most experienced.

Generally, both men and women contribute equally to the codes that emerged as dispositions of problem solving. It is interesting to note, however, that in all three countries being kind and friendly is particularly important to most women, while patience/time is equally important to most men.

| CATEGORY:<br>Dispositions   | DIFFERENCES |          |  |  |  |
|---|-------------|----------|--|--|--|
| SIMILARITIES  | KENYA       | TANZANIA | UGANDA   |  |  |
| Being responsible, kind,<br>and friendly are<br>considered important<br>dispositions.<br>The willingness to be<br>corrected and receive<br>the advice of others is<br>also crucial. |             |          | The importance of<br>having a <i>positive</i><br><i>attitude</i> and<br><i>willingness to work</i><br><i>hard</i> are more<br>prominent<br>dispositions in the<br>Ugandan context. |  |  |

Table 6: Similarities and Differences between Kenya, Tanzania, and Uganda in Identifying Problem-Solving Dispositions

#### 3.4 Values and Behaviours

Values are highly relevant in the context of this study. Participants often elaborate on how problem solvers are asked to serve their communities and respect the foundational values of





their society. Consequently, young people are expected to show behaviour that is respectful toward the other members and their traditions.

Table 7: Frequency and Percentage of the Codes Identified as Dispositions of Problem Solving in Kenya, Tanzania, and Uganda

| CATEGORY: VALUES AND<br>BEHAVIOURS | KENYA<br>(Participants) |       | TANZANIA<br>(Participants) |       | UGANDA<br>(Participants) |       |
|------------------------------------|-------------------------|-------|----------------------------|-------|--------------------------|-------|
| CODES                              | Freq.                   | %     | Freq.                      | %     | Freq.                    | %     |
| Confidentiality                    | 8                       | 10.00 |                            |       |                          |       |
| Humility                           | 8                       | 10.00 |                            |       |                          |       |
| Love                               | 10                      | 12.50 |                            |       |                          |       |
| Respect                            | 21                      | 26.25 | 15                         | 27.27 | 28                       | 29.47 |
| Trust/Honesty/Truth                | 12                      | 15.00 |                            |       |                          |       |
| Wisdom                             |                         |       | 6                          | 10.91 |                          |       |
| Discipline                         | 10                      | 12.50 |                            |       | 12                       | 12.63 |
| Obedience                          |                         |       | 6                          | 10.91 |                          |       |
| TOTAL PARTICIPANTS                 | 80                      |       | 55                         |       | 95                       |       |

Participants from various categories agree on the importance of respect for both the young and the elderly. From the participants' perspective, a problem solver is a wise person who cares for the community and loves the people in it, thus creating unity.

*Confidentiality* was also cited by the Kenyan and Ugandan participants as important for problem solving. Given the strong emphasis the participants placed on the fact that a good





problem solver helps the community deal with challenges and proposes viable solutions, a person who cannot be discreet incurs challenges with the community members and is not trusted by them. Issues of *trust* emerged as a value in Kenya. Specifically, participants referred to the fact that good problem solvers must be trustworthy, that is, they do not go around spreading what has been shared with them.

*Love and humility* were also identified (mostly by parents in Kenya and Uganda) as another important trait of problem solvers. They understood love as taking good care of someone. A caring or a loving person would find solutions to problems especially if there is a conflict between different parties.

Participants were also asked to mention the behaviours that characterise young people with problem solving skills. According to the participants, showing respect and being obedient, being exemplary, and paying attention to dress code or appearance are important behaviours. Good problem solvers are also understanding, open to others, and willing to do voluntary work.

Values are predominantly mentioned by the parents who appreciate love, respect, and wisdom as important values that the problem solver should exhibit. Furthermore, the contribution of men to the codes that emerged as behaviours and values is largely seen in Tanzania and Kenya, while in Uganda more women mentioned these codes. For instance, respect is mostly identified by men in both Tanzania and Kenya, while in Uganda respect is mostly cited by women.

| CATEGORY: Values and Behaviours   | DIFFERENCES  |          |  |  |  |  |  |
|---|--|----------|--|--|--|--|--|
| SIMILARITIES  | KENYA  | TANZANIA | UGANDA   |  |  |  |  |
| Participants mainly<br>refer to <i>respect</i> as<br>crucial for an<br>adolescent to be a<br>good problem solver.<br>This aspect is linked to<br><i>discipline</i> and<br><i>obedience</i> as relevant<br>behaviours for young<br>people. | Major reference is<br>made to aspects<br>like <i>confidentiality</i> ,<br><i>humility</i> , and <i>trust</i> . |          | Women<br>underscore the<br>aspect of humility. |  |  |  |  |

Table 8: Similarities and Differences between Kenya, Tanzania, and Uganda in Identifying Problem-Solving Values and Behaviours

### 3.5 Support Systems and Enabling Factors

The participants were asked to elaborate on the systemic aspects that may impact how adolescents acquire problem-solving skills. The social environment has a relevant impact on





the development of each person and for this reason it was considered important to understand the most significant aspects for the growth of young people.

Table 9: Frequency and Percentage of the Codes Identified as Support Systems of Problem Solving in Kenya, Tanzania, and Uganda

| CATEGORY: SUPPORT<br>SYSTEMS        | KENYA TANZANIA<br>(Participants) (Participants) |       |       |       |       |       |
|-------------------------------------|---|-------|-------|-------|-------|-------|
| CODES                               | Freq.   | %     | Freq. | %     | Freq. | %     |
| Community/Developmental<br>Partners | 8   | 10.00 | 17    | 30.91 | 38    | 40.00 |
| Family                              | 44  | 55.00 | 34    | 61.82 | 63    | 66.32 |
| Friendship/peers                    | 17  | 21.25 | 11    | 20.00 | 22    | 23.16 |
| Place of Worship                    | 14  | 17.50 |       |       |       |       |
| School/training                     | 35  | 43.75 | 37    | 67.27 | 69    | 72.63 |
| TOTAL PARTICIPANTS                  | 80  |       | 55    |       | 95    |       |

The findings reveal that adolescents depend on *schools* for support, since most of their time is spent in various learning institutions. This was also echoed by parents and educators who acknowledged the role schools play in ensuring learners gain knowledge on life skills.

The participants also mentioned the *family* as a key support system for adolescents to develop problem-solving skills. The development of relationship skills starting from the family setting supports adolescents as they mature. Indeed, it was mentioned that the family prepares young people for future challenges. A common aspect that emerged in the three countries is the fact that adults often refer to family and school as two crucial environments for the growth of young people, and it is considered important to foster a collaborative relationship between the two.

The aspect of *community or developmental partners* as one of the support systems was also mentioned by the participants. Organizations within the community have helped greatly in





terms of providing the young people with education on various issues regarding life skills. This aspect was quite relevant in Tanzania and Uganda, but it was cited by only 10% of Kenyan participants.

The participants, especially Kenyans (17%), elaborated that even *places of worship* have a responsibility to involve the young people in solving the problems of the community. This can help nurture problem-solving skills in young people.

*Peers or friendship* were just as frequently mentioned as helping young people. The findings suggested that the adolescents feel comfortable discussing various issues when they are in their usual groups.

### 3.6 Assessment Methods

Participants were asked to suggest possible ways of assessing the adolescents' problemsolving skills.

Table 10: Frequency and Percentage of the Codes Identified as Assessment Methods of Problem Solving in Kenya, Tanzania, and Uganda

| CATEGORY: METHODS OF<br>ASSESSMENT | KENYA<br>(Participants) |       | TANZANIA<br>(Participants) |       | UGANDA<br>(Participants) |       |
|------------------------------------|-------------------------|-------|----------------------------|-------|--------------------------|-------|
| CODES                              | Freq.                   | %     | Freq.                      | %     | Freq.                    | %     |
| Interviews                         | 14                      | 17.50 |                            |       |                          |       |
| Observation                        | 18                      | 22.50 | 25                         | 45.45 | 31                       | 32.63 |
| Task Performance                   | 31                      | 38.75 | 12                         | 21.82 | 32                       | 33.68 |
| TOTAL PARTICIPANTS                 | 80                      |       | 55                         |       | 95                       |       |

In the three countries, observation and task performance emerged as the most suggested strategies to assess the skill of problem solving in young people. They were mentioned by both men and women participants from all the categories.

The participants understand *observation* as watching the actions and behaviours of the adolescents; a person who is a problem solver shares with others, helps others, is patient, and seeks forgiveness from those offended.





The participants suggested several ways *task performance* can be used to test the skill of problem solving. They understand task performance as giving someone an activity and observing how well that person performs it. Giving someone a responsibility is considered a useful way of understanding whether a young person can face challenges and cope with problems. Other participants suggested giving someone instructions and observing their attitude could also be helpful.

In Kenya, asking questions or conducting *interviews* was considered another useful way of knowing how the adolescents think and how they tackle problems. The findings revealed that through interviews can be used to measure or test the skills. Asking questions on life challenges to observe the level of response is very important to the participants. Some mentioned that one can test the skill by narrating a scenario and asking a person what they would do to solve resolve such a matter.

### 4 CONCLUSIONS

The comparison of the findings of the contextualization studies on problem solving skills in the three countries reveals major similarities and only minor differences. What emerges from the interviews is that finding of solutions to a problem or challenge is the final step of a structured process. Though sometimes implicit, participants in the three countries believe the steps of problem solving are identification of the problem, understanding the causes and consequences of the problem, asking for advice and views from community members on the problem, evaluating the possible solutions, and adopting the most suitable solution. Subskills, dispositions, and values linked to problem solving are apparently influenced by the understanding of the self as being part of a community.

The review of the literature on problem solving skills reveals a conceptualisation of this skill as a process that involves very specific steps when dealing with challenges. This might include the identification and exploration of the problem for further understanding, the definition and correct representation of the problem, exploring the viable alternatives and planning for a solution, eventually implementing the solution, and monitoring the effects of what was implemented (Bransford & Stein, 1993; Care & Kim, 2020). Some of these steps were not highlighted by the participants of this study. Tanzanians did not elaborate much on the aspect of identifying and choosing the best solution, nor did they mention the need to monitor the impact of the chosen solution.

On the other hand, the communitarian view of the self emerges clearly from the analysis of the sources. The literature reviewed concentrates mostly on the cognitive aspects of the competency; it does not report aspects like asking for advice when faced with a challenge and helping community members solve their problems, while the local conceptualisation focuses heavily on these aspects. This peculiar aspect could be interpreted as a way of delegating one's responsibilities to others, but this would be a misrepresentation of what instead is a key cultural aspect of the East African societies. In this context, the personal identity is more communitarian than individualistic.





Moreover, the interviews suggest a lifestyle that is extremely intertwined with the community of belonging, be it the school for young people, or the family or clan for adult participants. This aspect is recurs frequently in the data analysed, and it constitutes one of the most unique aspects of the analysis on the contextualised meaning of problem-solving skills in East Africa. From this perspective, it is interesting to see how problem solving is viewed as a skill that aims at solving interpersonal conflicts and building unity in the community.

The strong sense of community belonging, which is typical of most African cultures, permeates the local conceptualisation of problem solving. Specifically, in defining this skill, participants suggest that good problem solvers are ready to ask for advice and are receptive to the suggestions of the most experienced in the community. At the same time, a good problem solver shows proficient guidance skills and great relationship and communication skills. It is noticeable that most of the quotes related to the skills that enhance the ability of youth to solve problems are related to the social aspects of a person's life.

Most of the literature reviewed elaborates extensively on the skills that are necessary to navigate through the process of problem solving, but it is extremely uncommon to find articles that clarify the factors that influence the success of the problem-solving process. The cognitive factors mostly include thinking and reasoning skills and the ability to make predictions. The affective factors are related to self-confidence and willingness to approach the problem as well as patience or perseverance (Sağir, 2011). The Tanzanian participants also consider these elements crucial, although they place great attention on adaptation to communal life and on socialisation skills. Some researchers also highlight these attributes (Altun, 2003; Sağir, 2011): a problem solver is "compassionate, generous, persevering, benevolent, altruistic and sympathetic, thus demonstrating (the value of altruism). [The problem solver shows] attitudes like being kind, empathic, respectful, honest, trusting and keeping promises (the value of human dignity)" (Altun, 2003, p. 580). Similarly, the findings of this study show that the problem solver should be responsible for his actions and respectful of the community values and traditions.





### REFERENCES

- Altun, I. (2003). The perceived problem solving ability and values of student nurses and midwives. *Nurse Education Today*, *23*(8), 575–584.
- Bransford, J. D., & Stein, B. S. (1993). *The IDEAL problem solver* (2nd ed.). W. H. Freeman and Company.
- Care, E., & Kim, H. (2020, January 21). Optimizing assessment for all: Framework for understanding project goals and scope. *The Brookings Institution*. https://www.brookings.edu/research/optimizing-assessment-for-all-framework-forunderstanding-project-goals-and-scope/
- Sağir, S. U. (2011). Research on problem solving skills of teacher candidate. *Education Sciences*, *6*(4), 2482–2494.















