



The impact of the Athlete Leadership Training on Special Olympics Athletes

PROJECT REPORT

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Research Organization

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1. Introduction

Special Olympics is a worldwide organization offering sports and sports competition to people with intellectual and development disabilities (IDD). Improving physical activity for the target group is the main pillar of three the organization is constructed upon; the others being education and health. The main mission of the organization is to promote, facilitate and improve inclusion of people with IDD in all layers of society and the corporate world.

On the eve of the 2023 World Summer Games in Berlin, Germany, Special Olympics wants to enhance its main mission by training athletes to become authentic leaders. This should give the athletes a (louder) voice in the organization, their communities, and (potential) workplaces, and by doing so, stimulate all-round inclusion and a higher level of wellbeing.

To that end, Special Olympics developed the Athlete Leadership Training (ALT). This training consists of 2 core and 5 advanced modules (See Figure 1):

- | | |
|---------------------------------------|--------------------------|
| 1. Introduction to Athlete Leadership | 1. Understanding emotion |
| 2. Understanding Leadership | 2. Engaging with others |
| | 3. Managing time |
| | 4. Leading discussions |
| | 5. Unified leadership |

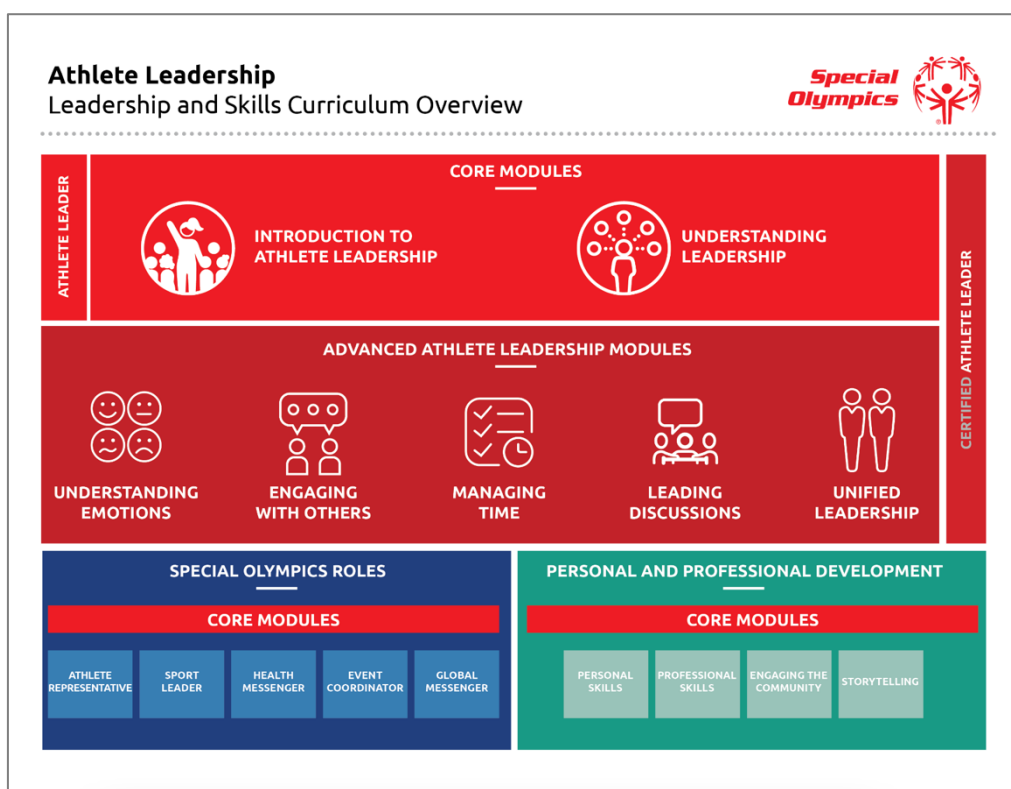


Figure 1: Overview of the Athlete Leadership and Skills curriculum by Special Olympics.

Before introducing the Athlete Leadership Training worldwide, trial trainings were given to Special Olympics athletes in 4 regions: Belgium, Illinois (USA), Singapore and South Africa.

2. Mission of the Research Team

The main mission of the Research Team was to study the impact of the Athlete Leadership Training on the participating athletes. To that end a 6-steps process was started.

STEP 1: Constitution of an inclusive research team

STEP 2: Development of method and tools - comprehensive for people with IDD, for on and offline use and, sustainable to enable continuous data collection.

STEP 3: Enrollment of the respondents.

STEP 4: Data collection before and after the Athlete Leadership Training.

STEP 5: Analysis of the collected data.

STEP 6: Conclusions and recommendations.

3. Hypothesis

In a previous study¹ by Antwerp Management School, researchers identified 'Empowerment' as one of the 6 building blocks of Inclusive Employment. One of the factors of successful employment of people with IDD lies in stimulating the self-reliance of these employees. This not only reflects on professional functioning, but also on other areas of life within the private sphere. These findings, combined with the results of a recent study on a self-advocacy and leadership of people with IDD² and the benefits of supporting the autonomy of individuals with mild intellectual disabilities³ led to the hypothesis that when trained in an accurate way and given the opportunity, people with IDD can take up leadership while experiencing themselves a change in their self-esteem, autonomy, inclusion, ultimately resulting in an improvement of their wellbeing.

4. Methodology

4.1 An inclusive research team

Given the mission and strengthened by previous experiences (Gielens et al., 2016)⁴, (Van Hoofstadt et al., 2017)⁵, (Van Hoofstadt et al., 2020)⁶, the Research Team saw it as an absolute condition to make TAG Leadership an inclusive research project involving people with IDD. A vision driven by:

- a. The conviction that people with IDD have the right to be involved in issues that affect their lives (Bigby et al, 2014)⁷.
- b. The fact that 'Inclusive Research' is research in which people with IDD are involved as more than just subjects or respondents (Walmsley et al., 2001)⁸ and that it adds value when there is a distinctive contribution which only co-researchers with IDD can make, when it highlights the contributions people with IDD make, and when it contributes to better lives for the wider population of people with IDD (Walmsley et al., 2017)⁹.

To this end, A 'Collaborative Group' (Bigby et al., 2014: p. 8)⁴ consisting of a researcher without and a researcher with IDD, and a supervisor, was formed to take on the research design, the coordination of the international project and the local data collection in Belgium and Illinois. The recruitment of the researcher with moderate¹⁰ intellectual disabilities was based on his

performances in a previous research project in which he proved to be an enriching factor and a team player.

In their own words: the story of the researcher with IDD

The researcher with IDD is a textbook example of the continuous struggle against rules, curriculums, underestimation, and prejudices people with IDD must fight. At the same time, the researcher proves that – when given the opportunity, supported, and trained – strength of character, ambition, and skills can turn them into authentic leaders.

‘Because of my issues with reading and writing, I had to attend the lowest level of special education in high school. My requests to take computer lessons were denied. My chances of performing well in an internship were estimated very low and therefore exclusively easy, non-challenging internships were offered to me. According to the school head I did not have the competences to execute real, paid jobs. My education would prepare me for a life in day care centers. Fortunately, one teacher saw my potential and got me an internship at the greenery services of my hometown. It was a great match, and I was offered to stay on as a volunteer after my graduation. Six years later, and although I changed for the more challenging road and traffic services department, I am still volunteering for my hometown.’

Unified sailing: a key turner

‘I had been sailing with my parents since my earliest years when – in 2013 – I was given the opportunity to join the Unified Sailing Team. It was my first contact with Special Olympics. The start of a great story. I won gold medals at the 2015 and 2019 Special Olympics World Games in Unified Sailing and became an athlete-ambassador for Special Olympics Belgium. I represent Special Olympics Belgium at events with sponsors, at gala dinners, meetings with the government, etc. Doing so, the people of Antwerp Management School discovered my social and verbal skills and recruited me as a researcher for a European study project. They asked me again for the TAG Leadership project. And as one thing leads to another, I recently became member of the Board of Special Olympics Belgium.’

Working in an academic environment

‘Of course, I was apprehensive about working at a university. I had known my colleague researcher for some time but how would the highly educated staff look at me? Would I be able to do the job? Everything turned out well. I got two buddies who helped me out whenever my co-researcher or the supervisor were not available to explain things. At times where I could not be of great help for the research team (E.g.: writing reports in English), I got other assignments such as assistance at the school’s reception desk or building stages and installing PA and other technical support for the School’s events. Doing so, I got to know all the co-workers. They know me. I feel accepted and included. I know my vision and opinion counts when doing and discussing research. I am proud to work for Antwerp Management School.’

The researcher with IDD was the compass of the Collaborative Group. Every step of the process was first checked with him. To bypass his reading and writing issues, sharing of information was preferably done by sending/receiving vocal messages and during video calls; the use of smart watches and phones, tablets and laptops smoothening his communication. Given his digital savviness, other, more coordinating, tasks were given matching these skills. For example: organizing Teams meetings, recording, and storing interviews, booking meeting rooms and synchronizing agendas were typical tasks he executed for the Collaborative Group.

In addition to the researcher with IDD, and to increase reliability and validity (Thomas and O’Kane, 2006)¹¹, an ‘Advisory Panel’ (Bigby et al., 2014: p. 5)⁴ of 4 people with mild to moderate intellectual disabilities was created to confirm/challenge the work of the Collaborative Group. The recruitment was done within a large group of people with intellectual disabilities known to the members of the Collaborative Group. The proximity ensured a direct access and an easy follow-up (O’Brien et al., 2014)¹². Their knowledge and expertise as self-advocates sufficed for the tasks and scale of this project.

The Collaborative Group was extended with researchers in South Africa and Singapore to create the Research Team.

4.2 Development of the study model

4.2.a. Choice of theory

Given the wish of Special Olympics to train their athletes to become authentic leaders and – by doing so – give them a voice in the organization, their communities, (potential) workplaces, and become more independent, included individuals with a higher sense of wellbeing, the Collaborative Group choose to base the development of the methodology and tools on the Self-Determination Theory(Ryan & Deci, 2000)¹³.The choice was built on 2 arguments:

1. ‘Self-Determination Theory is an organismic dialectical approach¹⁴. It begins with the assumption that people are active organisms, with evolved tendencies toward growing, mastering ambient challenges, and integrating new experiences into a coherent sense of self. These natural developmental tendencies do not, however, operate automatically, but instead require ongoing social nutriments and supports. The social context can either support or thwart the natural tendencies toward active engagement and psychological growth, or it can catalyze lack of integration, defense, and fulfillment of need-substitutes. Thus, it is the dialectic between the active organism and the social context that is the basis for SDT’s predictions about behavior, experience, and development.’

Contrasting the assumption against people with IDD might come as a challenge since the target group is known for suffering from learned helplessness due to underestimation and over-protection. Learned helplessness¹⁵ can have an impact on one's overall

functioning, including affecting academic achievement, physical health, mental health, and social well-being. But, if application of the Self-Determination Theory on the target group to measure changes would turn out positive, it would be a strong confirmation of the desired impact of the Athlete leadership Training on people with IDD.

2. Deci (2004)¹⁶ stated that people with an intellectual disability should learn in an environment where their need for autonomy is supported so that they can better learn new activities and experience greater wellbeing. We assumed the Athlete Leadership Training would fulfill this condition.

Considering these elements, the Collaborative Group built a study model on the three basic psychological needs which motivate the self to initiate behavior and specify essential nutrients for wellbeing.

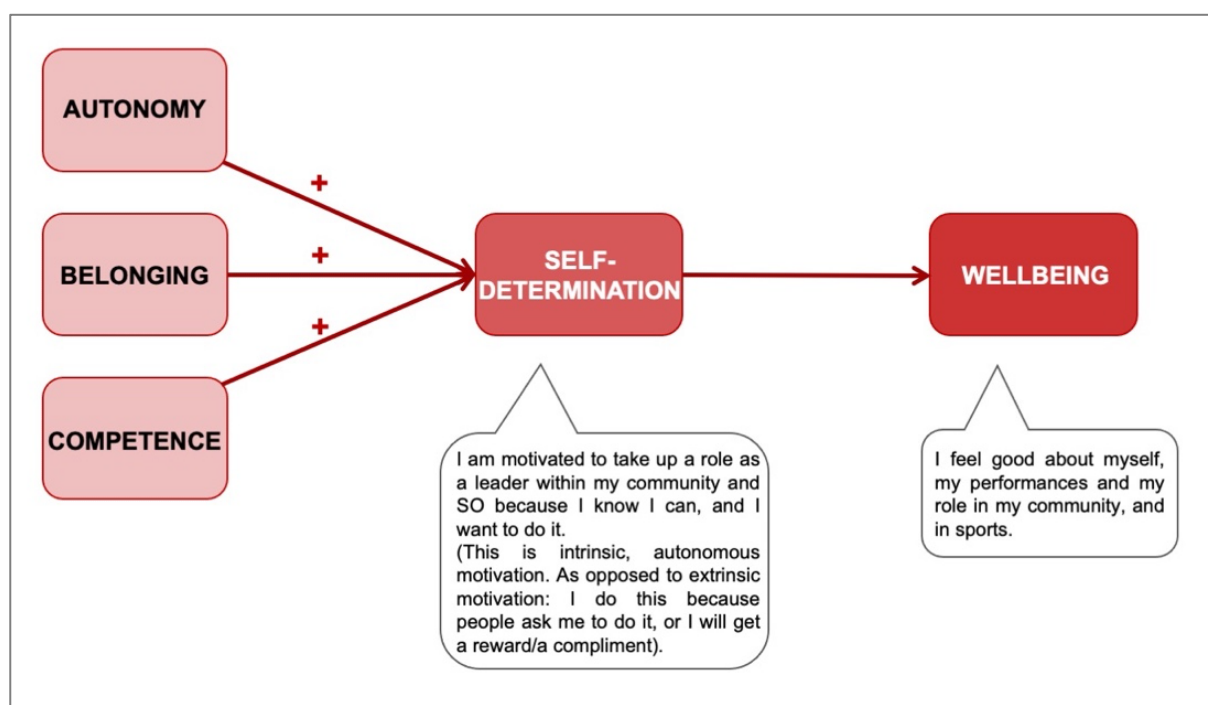


Figure 2: The study model based on Self-Determination Theory.

4.2.b. The road map for data collection

Based on previous experiences in research projects involving people with IDD, the Collaborative Group decided to execute the study model with a panel design combining quantitative and qualitative data collection at 5 points in time (See Figure 3). The combination enabled the Research Team to capture the layering of answers. In this way, during the interviews, the nuances between the 'rigid' valuation (See Figure 5.) of the survey statements and the divergent interpretation of words and expressions surfaced. An example:

In their own words: evaluating capability for leadership

When asked to respond to the statement 'I am capable of being a leader' a respondent reacted with 'In between'. When questioned more detailed about capability of leadership, the respondent said: 'I know I can do it but as I depend on the availability of my mom for transport to and from events where I can play a leading role, I consider myself not capable of being a leader'.

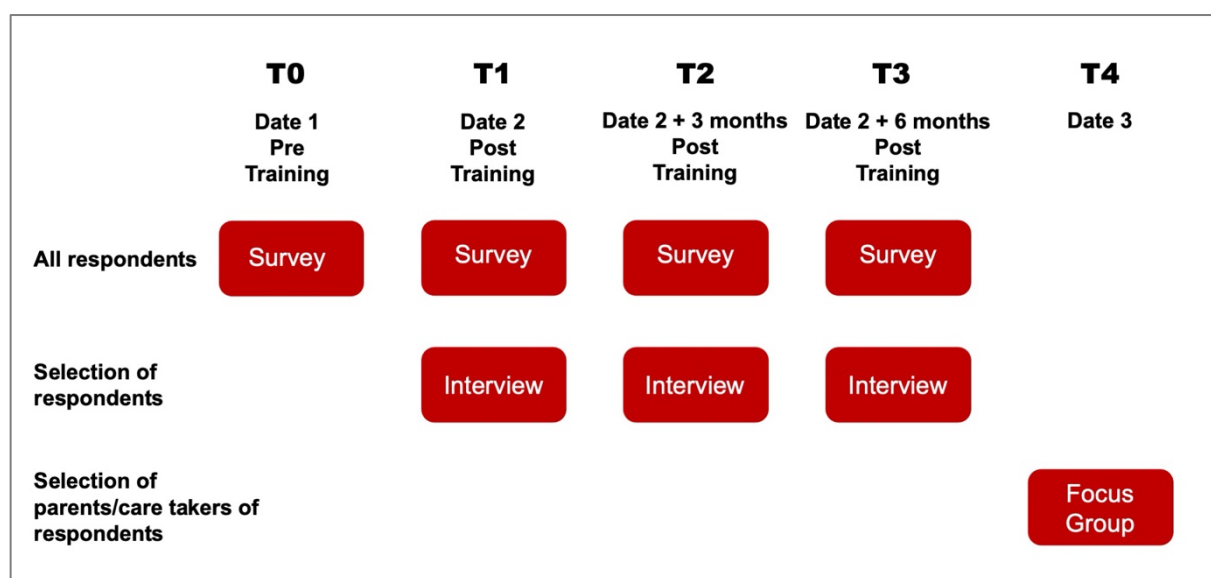


Figure 3: Panel design planning for quantitative and qualitative data collection.

Quantitative data collection was executed by means of a survey (on or offline) at 4 time-points among all respondents and statistically analyzed.

Qualitative data collection was based on a mixed method of:

- Literature review,
- Unstructured, indirect oral, dyadic examination of the developers of the Athlete Leadership Training and Special Olympics staff in the 4 regions,
- In-depth interviews of a maximum of 5 respondents at 3 time-points,
- A Focus Group per region with parents, siblings, caretakers, guardians or other people close to the interviewed respondents after T3 to compare their observations with the self-assessments of the respondents.

4.3 Development of the tools for data collection

4.3.1 Development of the survey for quantitative data collection

The Self-Determination Theory differentiates intrinsic and extrinsic motivation¹³, with respect to the concept of self-determination. The innate psychological needs for Competence, Autonomy, and Relatedness are used as a basis for specifying how ongoing social contexts as well as intervention programs (in this case the Athlete Leadership Training) will affect self-determined motivation and, in turn, learning, adjustment, and life circumstances. Therefore, it was decided to use the validated Intrinsic Motivation Inventory¹⁷: a multidimensional measurement device intended to assess participants' subjective experience related to a target activity in laboratory experiments. It has been used in several experiments related to intrinsic motivation and self-regulation (e.g., Ryan, 1982; Ryan, Mims & Koestner, 1983; Plant & Ryan, 1985; Ryan, Connell, & Plant, 1990; Ryan, Koestner & Deci, 1991; Deci, Eghrari, Patrick, & Leone, 1994).

The instrument assesses participants'

- *Interest/enjoyment*,
- *Perceived Competence*,
- *Effort*,
- *Value/Usefulness*,
- *Pressure/Tension*,
- *Perceived Choice*
- *Relatedness*.

The *Interest/Enjoyment* subscale is considered the self-report measure of intrinsic motivation; thus, although the overall questionnaire is called the Intrinsic Motivation Inventory, it is only this subscale that assesses intrinsic motivation, per se.

The *Perceived Choice* and *Perceived Competence* concepts are theorized to be positive predictors of both self-report and behavioral measures of intrinsic motivation.

Pressure/Tension is theorized to be a negative predictor of intrinsic motivation.

Effort is a separate variable that is relevant to some motivation questions, so it is used if its relevant.

The *Value/Usefulness* subscale is used in internalization studies (e.g., Deci et al, 1994), the idea being that people internalize and become self-regulating with respect to activities that they experience as useful or valuable for themselves.

Finally, the *Relatedness* subscale is used in studies having to do with interpersonal interactions, friendship formation, and so on.

Evaluating the initial 45 items of the Post-Experimental Intrinsic Motivation Inventory, that can be used depending on which items are needed, the researcher with IDD as well as the members of the Advisory Panel, expressed difficulties in understanding the double negations of the reverse scoring items. 45 items also proved to be far too much for them. As a reaction to their feedback, reverse scoring questions were eliminated or turned positive where possible. Considering the focus of this

study and the different, validated, versions of the Intrinsic Motivation Inventory, varying from 9 tot 29 items, the number was reduced to 27 items.
 Subscales were divided as illustrated in Figure 4.

Intrinsic Motivation Inventory		
Initial 45 items		Reduced 27 items
7 statements of which 2 reversed	Interest/Enjoyment	3 statements of which 1 reversed
5 statements of which 2 reversed	Pressure/Tension	1 statement of which 0 reversed
6 statements of which 1 reversed	Perceived competence	6 statements of which 0 reversed
5 statements of which 2 reversed	Effort	2 statements of which 0 reversed
7 statements of which 5 reversed	Perceived choice	3 statements of which 1 reversed
7 statements of which 0 reversed	Value/Usefulness	6 statements of which 0 reversed
8 statements of which 4 reversed	Relatedness	6 statements of which 1 reversed

Figure 4: Reduction of 45 items to 27 and division of subscales.

The statements were written as much as possible following the ‘easy-to-read’ guidelines¹⁸. The used vocabulary as simple as possible. The researcher with IDD identified a total of 11 difficult words in the Survey. To avoid suggestion, bias, interpretation, or explanation by the different regional researchers a Glossary (see Attachments) was developed to be used by all researchers. To make them more easily identifiable, the words were written in red in the online survey.

The scaling of the Post-Experimental Intrinsic Motivation Inventory proposes to indicate how true a statement is to a respondent, going from ‘Not at all true’, over ‘Somewhat true’, to ‘Very true’ with a variation of values from 1 to 7.

1	2	3	4	5	6	7
Not at		Somewhat				Very
all true		true				true

This scaling turned out to be incomprehensible to the researcher with IDD. Upon his advice the scale was simplified as follows:

1	2	3	4	5
I do not		In		I
agree		between		agree

Considering the issues with reading within the target group, it was decided to add extra pictorial representations of the wording for better understanding. In line with the findings of Hall & Hume (2016)¹⁹ the Collaborative Team gathered many different types of smiley faces and created a series of exercises (See Attachments) helping the members of the Advisory Panel evaluate:

1. The easiest-to-read text: all uppercase vs. sentence case
2. Understanding of questionnaire and types of statements (positive vs. negative)
3. Scaling of statements: wording and smiley faces
4. Types of smiley faces

These exercises were executed during the Covid 19-pandemics. Therefore, the panel members were questioned individually or in groups of 2. Either in-person or during video calls.

As a result, the scales were further decreased to 3 values. It was decided that sentence case texts were the easiest to read. The Collaborative Team needed to find smiley faces that fitted better the different choices of smiley faces and the comments made by the Advisory Panel.

Eventually, there was a consensus on the following representation:

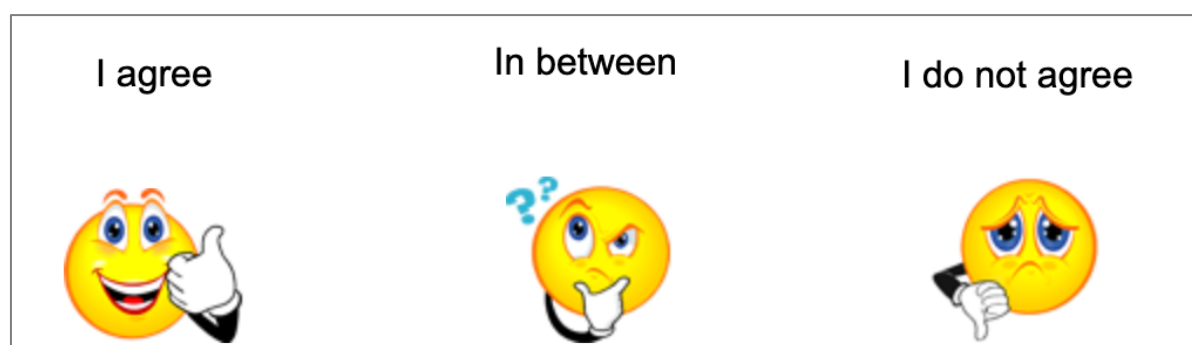


Figure 5: Final representation of scaling.

Although the members of the Advisory Panel understood rather rapidly the system of the questionnaire and the scaling, the Research Team decided to follow the findings of Hartley & MacLean (2006)²⁰ saying that: 'The inclusion of pretests to identify and eliminate participants who demonstrate inappropriate or contradictory response tendencies appears important for achieving moderate to strong reliability and validity among adolescents and adults with moderate to severe ID'. Therefore, a Test Survey with 4 questions on Special Olympics and the same scaling system was

created. The Test Survey would be done before starting the first Survey (T0) and could be repeated before every other T.

Test Survey, Survey and Glossary were produced in 3 languages: English, Dutch, and French. Because of the needs of the researcher with IDD, most of the initial, creative work was done in Dutch. The final versions of all documents were first translated to English. After validation of the English version, all other language versions were translated and validated by back-translation to English. Test Survey and Survey were then made available in all validated language versions on the Qualtrics platform.

4.3.2 Development of the interviews for qualitative data collection

A set of 43 questions divided over the same 7 subscales (See Page 11 and Figure 4) found in the Survey, constituted the basis for the interviews. They were meant to dive deeper into the answers given in the Survey and detect contradictions or discover more layered, nuanced answers. The creation of this set of questions was done together with the researcher with IDD, in Dutch. The 3 languages versions were validated through back-translations.

All researchers were free to ask more questions if they needed more details and/or clarification of the respondents.

4.3.3 Development of the questionnaire for the Focus Groups

To evaluate the self-assessments by the respondents, the Collaborative Group decided to organize, in every region, Focus Groups with parents or siblings or caretakers of the respondents in the qualitative data collection (interviews). The 2-hour discussion was articulated around 5 subscales, being happiness, skills, stress, choice and relatedness of the respondents, and a basic set of questions for each subscale.

In analogy with the creation of the tools for qualitative and quantitative data collection with the respondents, the questionnaire was created in an inclusive way with the researcher with IDD. First in Dutch. The other language versions were then created by back-translations.

4.3.4 Guidelines

To standardize the modus operandi of researchers in all regions, a set of Guidelines was developed. The 14-page document consisted of an 8-steps plan with instructions to conduct the Test Survey, the Survey, and the Interview. In addition, the document also consisted of the Glossary and the researcher's statement. It was produced in English and Dutch.

A comparable document was developed for and sent to the representatives of the Special Olympics National Programs in the 4 regions. It consisted of instructions to prepare the assessment by the researcher, the consent form to be signed by the respondent and/or their legal representative, and the Glossary. It was produced in 3 languages (English, Dutch, French). We observed little to no

interest in and use of this document by the Special Olympics National Programs representatives and/or trainers.

Both documents were transformed in one video tutorial to simplify use and understanding for the future continuous data collection intended by Special Olympics Inc.

4.4. The Recruitment of respondents

Respondents for the quantitative data collection (Survey) were recruited among the Special Olympics athletes who had been selected in the 4 regions by their National Programs to receive the 2 core modules of the Athlete Leadership Training. The recruitment criteria were the following:

- Special Olympics athlete
- Minimum age: 18
- Basic reading and writing skills
- Not (present or past) engaged in a leading role within Special Olympics
- Member of Special Olympics since approximatively 1 year.

At the request of the Special Olympics National Programs, and before the start of the project, modifications were applied.

- Age lowered to 16
- Athletes with past or ongoing leading roles were allowed to participate. Collected personal data allowed the Research Team to filter these respondents and treat them as a reference group.
- As education for people with IDD in South Africa is poor²¹, resulting in widely spread illiteracy among the target group, we allowed athletes deprived of reading and/or writing skills.
- Due to regional planning of Special Olympics Illinois, the Research Team had to accept respondents who would receive all modules of the Athlete Leadership Training within the timeframe of the data collection.
- Due to regional planning of Special Olympics South Africa, the Research Team had to accept respondents who would receive an event management training within the time frame of the data collection.

All respondents presented mild to moderate forms of IDD²² (DSM-5 classification).

The selection of the respondents in the quantitative data collection (interviews) was based on their availability, their motivation, and their concentration/focus abilities. This information was collected through the discussion the researchers had with each of the respondents before and after T0 and through the engagement the researchers observed during T0. Assuming that earlier experiences in leadership would have an impact on the results, the Research Team chose to exclude the respondents who had played leading roles prior to the start of the project from the interviews.

Before starting, all respondents signed individually and autonomously a consent or had it signed by the legal representative. Athletes and/or their legal representatives who did not wish to sign the consent were not enrolled (n=1).

The parents/caretakers of the interviewed respondents were invited by the researchers to take part in the Focus Group.

No one volunteered in Illinois.

In Belgium 6 parents joined the Focus Group.

In South Africa the Focus Group sessions were highly impacted by load shedding (power cuts - Editor). A total of 5 guardians were eventually interviewed.

In Singapore, parents/caretakers received a small token of SG\$50 (about US\$ 36 – Editor End November 2022) for participating in the Focus Group. Of the 5 athletes, 4 of their parents joined – 2 mothers, 1 father, and both parents. The parent who was not able to join send her apologies as she was dealing with difficult family matter at that point in time.

All participants in de Focus Groups signed a consent before starting.

5. The Results

5.1 Data collection mode

In Illinois and South Africa the Test Survey, all Surveys, and all Interviews were exclusively executed online by means of video calls. In Belgium, Test Survey, Surveys, and Interviews were executed sometimes physically present, sometimes by means of video calls. In Singapore the Test Survey and the first Survey were done online. For all other Surveys and Interviews, a majority was done in person and just a few respondents were assessed and interviewed by means of video call.

The availability of respondents, the geographical distance in between them and the researchers, and the respondent's access to digital resources such as smart phones, laptops, and an internet connection were also determining for the choice of online or in-person contacts.

Depending on the availability of the respondents, the Surveys were done individually, in small groups or classical. Respondents were either alone, accompanied by a parent/caretaker or the trainer of Special Olympics.

Regarding the interviews: in some cases, parents or caretakers were present, in most of the cases the respondents were alone with the researchers.

Depending on the number of respondents during the same survey session, their access to a digital device, their digital savvy, their fine motor skills, and the level of support available, researchers chose to, either:

- let the respondents open their own session on the survey platform and type in their answers themselves,
- look at the researcher's shared screen during the video call, while the researcher typed in the answers for the respondent,
- sit beside the respondents and go through the Survey together while either the researcher or the respondent typed in their answer; when done physically present.

In Belgium and Illinois, the questions were read aloud by the researcher. On request, the statement was repeated aloud and the respondent was given the time to read the statement at their own pace. In Singapore, the researcher asked the respondents to read the statement aloud to ensure that they understood the statement and mitigate the chance that they were giving responses to 'please' the researcher.

In South Africa the statements were read out aloud by the researcher and the respondent was given time to answer at their own pace. Sometimes the statements had to be repeated by the researcher.

Before every Survey, all respondents were informed as stipulated in the Guidelines for researchers. Before starting the T0, all respondents took the Test Survey to familiarize them with the system.

In general, the respondents reacted well on the Survey. Apart from Singapore (see paragraph Difficult wording), only a few cases were observed in which respondents did not understand the statements or found them awkward. E.g., when they do not consider themselves being people with intellectual disabilities or – in the case of South Africa – when the respondents had some difficulties in understanding English.

In one case, a parent found the Survey too long for the respondent. Still, the respondent decided to continue after a break. With the same respondent and for the same reason, it was decided not to take the Interview immediately after T2. Later, the parent did not react anymore to the invitations for the T2 Interview nor the complete T3. In this case, the respondent does not accept her intellectual disability and prefers not to speak about it. When the subject was brought up during the interviews, she started crying. The described break and the promise that the researcher would not bring up the subject anymore, helped the respondent to regain calm and continue.

No significant difference in results was observed comparing online and in-person data collection in Belgium. Still researchers observed a more pleasant in-person contact with the respondent compared to the online sessions. Respondents were more open when they were alone with the researchers during the interviews compared to being in the company of their parents or caretakers.

Difficult wording

The Glossary turned out to be a useful tool to explain difficult words but was less used than expected. On request, all researchers - except for researchers in Singapore - explained difficult words referring to the Glossary (see attachment) if these were the words identified as difficult by the researcher with IDD. In all other cases, the explanation was left to the discretion of the researcher. Singapore reported the need of more explanation in context.

In Singapore, the researcher observed that about 90% of the respondents did not understand the term 'intellectual disabilities'. Some of them asked the researcher to explain the term, whereas for others, the researcher asked them to describe what these words meant to them. Common answers were 'broken legs', 'broken arms', and 'those in wheelchairs'. Only one of them mentioned ADHD. The researcher tried to explain it with 'those in special schools', 'athletes in Special Olympics' and 'those who are slower or have difficulties in learning or in school'. The researcher was not confident that respondents were able to discern the difference between 'People with IDD' and 'People without IDD' in statements.

5.2 Enrollment and participation

A total of 59 respondents were enrolled among the athletes selected by the Special Olympics National Program to participate in the Athlete Leadership Training. 32 of them indicated they are female, 27 indicated being male (Figure 6). One respondent hesitated to choose for the option 'I prefer to describe myself otherwise' but eventually – out of fear his parents would find out – ticked the 'Male' box.

At T0, the regional division was as follows:

- Belgium: 15 respondents of which 8 female and 7 male
- Illinois: 11 respondents of which 8 female and 3 male
- Singapore: 11 respondents of which 6 female and 5 male
- South Africa: 22 respondents of which 10 female and 12 male



Figure 6: Repartition of gender by country per test.

In terms of age, the overall average was 31.5 years at T0. The average age of the respondents increased towards the end of the test moments (Figure 7). This is due to the important dropout of South African respondents after T1 and T2.

Belgium had the oldest group of respondents with the largest age spread (19 - 58) and Singapore the youngest with the smallest age spread (17 - 19) (Figure 8). These results did not come as a surprise, as Special Olympics Belgium indicated that they were experiencing problems to attract new (young) athletes and Special Olympics Singapore asked to lower the minimum age for respondents to 16 because they had a young population of athletes.

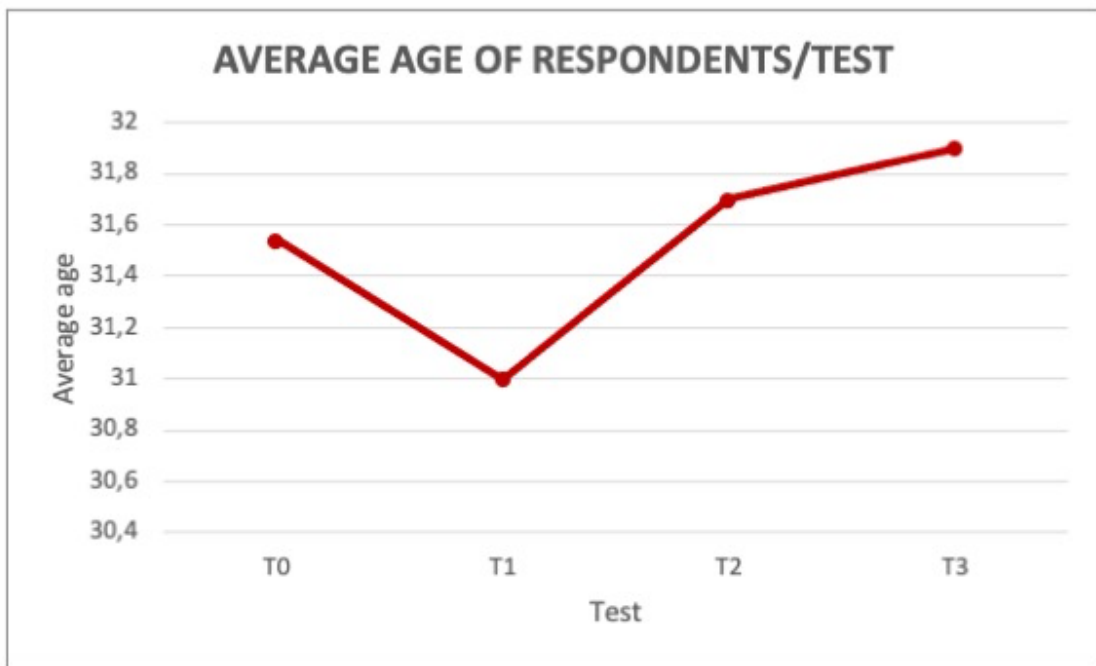


Figure 7: Evolution of average age of respondents.

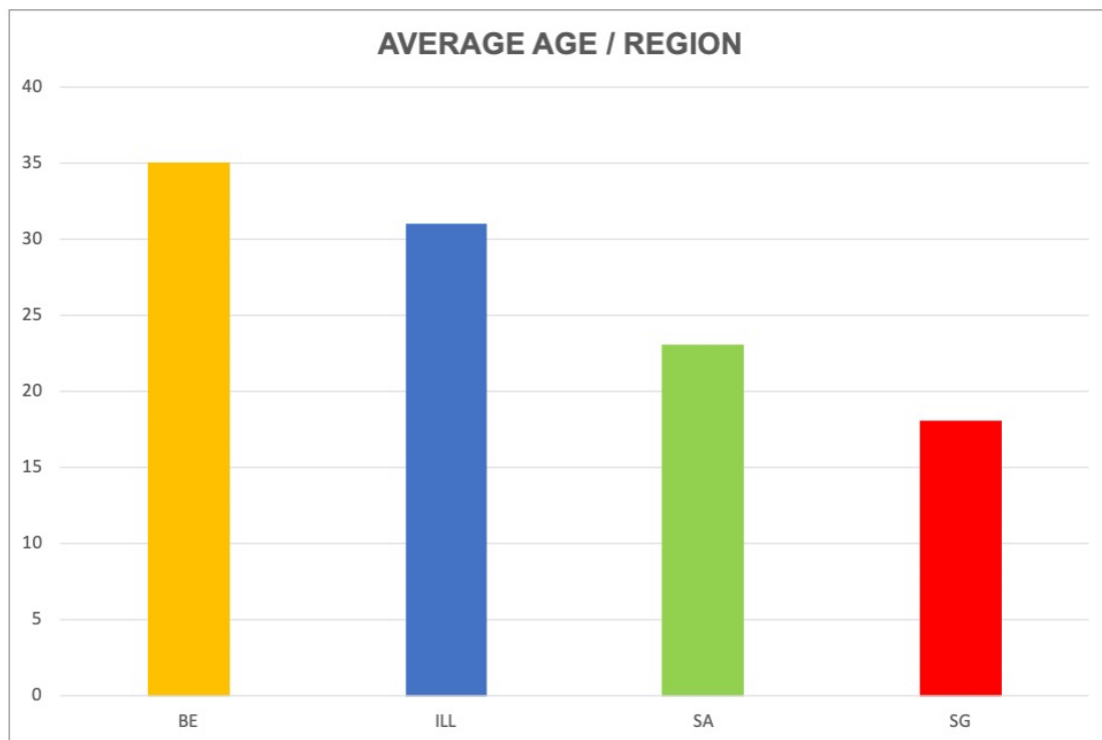


Figure 8: Average age per region.

Researchers observed a dropout of 5 respondents after T0 (Figure 9) mainly caused by a dropout of 4 respondents (of the initial 11) in Illinois and further dropouts at T2 and T3 in Illinois and South Africa. Paragraph 5.3.4 discusses the assumption that dropouts were due to a lack of motivation.

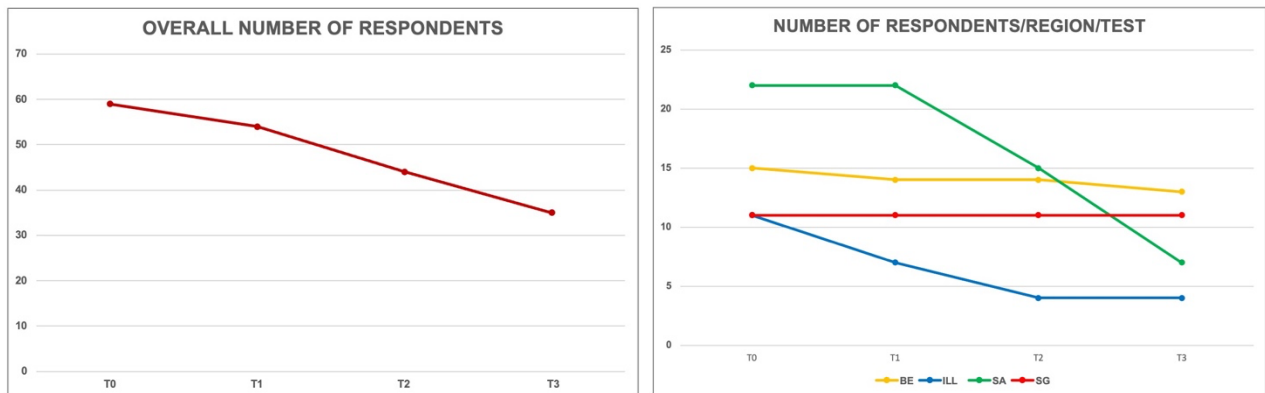


Figure 9: Evolution of the number of respondents.

The fact that this project coincided with the Covid-19 pandemic, and, on and off (severe) lockdowns, complicated this mission and might also have been a reason for dropout. It was not possible to get a better understanding of the causes since the dropped-out respondents did not connect anymore with the researchers.

5.3 Impact analysis

5.3.1 Overall impact

The data showed an increase of the average overall scores by 4.51%, going up from 87.65% at T0 to 92.17% at T3 (Figure 10). Meaning the Athlete Leadership Training had a clearly marked positive effect on all respondents in all regions (See Figure 11) and confirming the hypothesis.

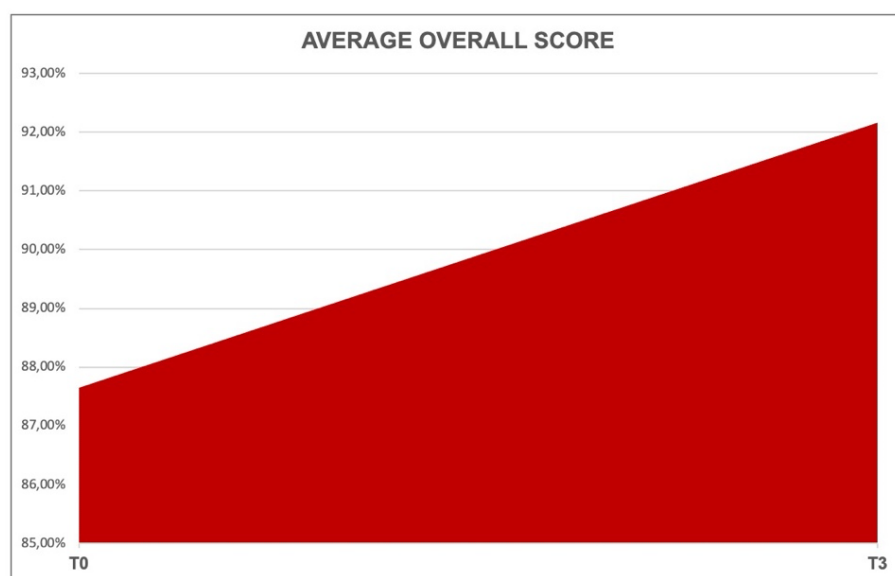


Figure 10: Average overall score evolution in between T0 and T3.

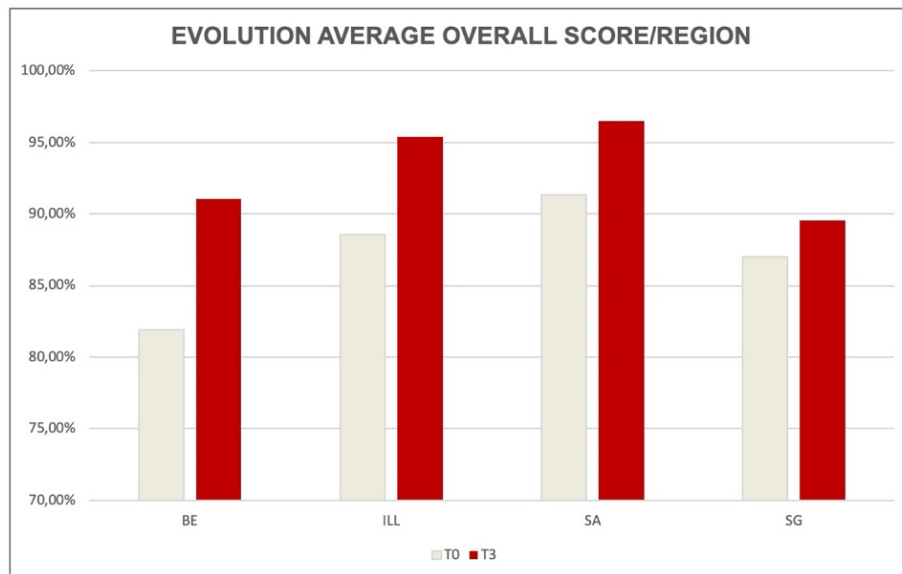


Figure 11: Evolution average overall score/region.

The highest rise in average overall score observed in Belgium could be explained by the fact that, not long before T3, the respondents got the opportunity to apply their training and demonstrate their leadership by playing different roles at the annual Special Olympics National Games. During the T3 interviews, the Belgian respondents expressed their excitement about the given tasks (e.g., making videos, talking to the press, welcoming VIP's, staffing the volunteer's desk...), they shared better understanding of the purpose of the Athlete Leadership Training and they looked forward to working on the next modules of the Training.

In their own words: do not be afraid

'I am a bit stressed about meeting the VIP's, but I'll just go for it. Just do it. I am really looking forward to speaking in public and recording videos.'

In their own words: I am curious about the rest of the modules

'I am looking forward to the other modules. I feel there still is so much to learn and I want to learn.'

The smallest rise of average overall score was observed in Singapore. These respondents did not get any opportunity to show their leadership at any official Special Olympics event. Further reflections on the divergent results in Singapore can be found on Page 37.

The average score in absolute figures per region at T0 are very high (See Figure 12), regardless of the average age of respondents (older athletes in Belgium and Illinois vs. younger athletes in South Africa and Singapore).

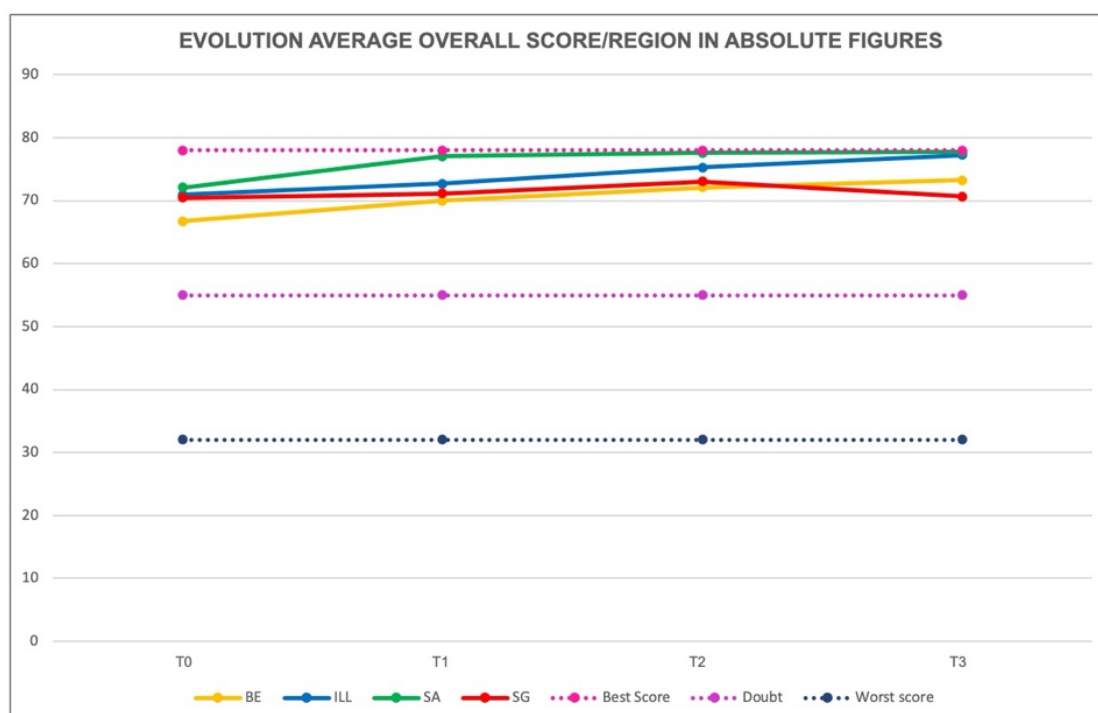


Figure 12: Evolution overall scores/region in absolute figures.

The fact that both the respondents of Illinois and South Africa came close to the best possible average score at T3 might be the result of the extra training they got. Besides the 2 core modules, the Illinois respondents had been trained in 3 out of 5 Advanced Athlete Leadership modules (See [Figure 1](#)) at T3 and that 3 out of the 4 remaining respondents had taken the opportunity to attend and speak at the National Congress. As for the high scores of the South African respondents, they got an extra event management training, confirming them in their role of leader.

The assumption that respondents with more training score better than the ones who exclusively took the 2 core modules, is confirmed by the comparison between respondents who had taken up leading roles prior to the start of the Athlete Leadership Training and the novices. Overall, the first group (previously leaders) scored higher at both T0 and T1 than the newbies (not leaders) (See Figure 13).

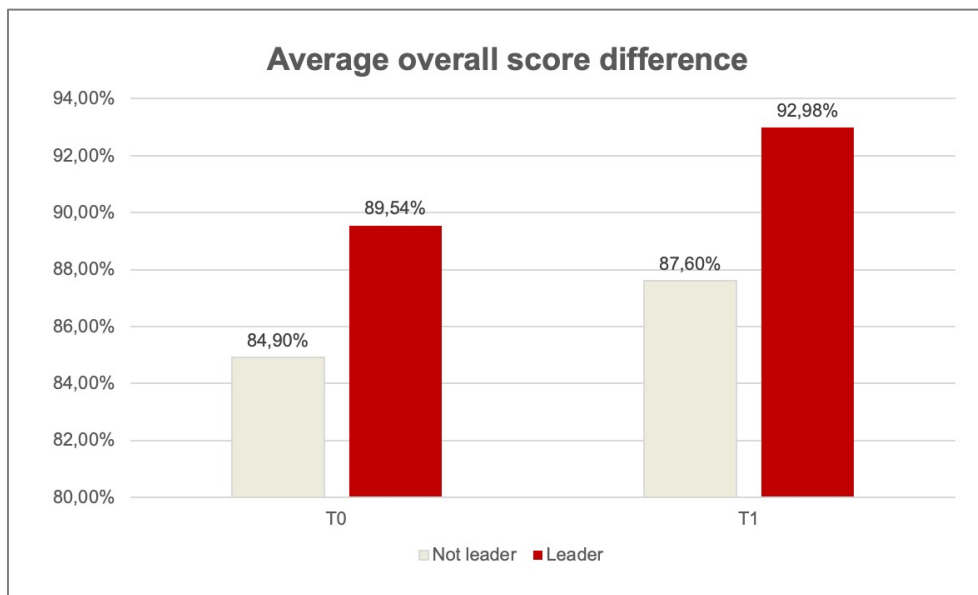


Figure 13: Overall score difference between previous leaders and newbies.

Nevertheless, the researchers want to challenge the (immediate) effect of the Advanced Athlete Leadership modules. Having observed the drop from 7 to 4 respondents in Illinois at T2, with hardly any reaction of the respondents on repeated calls to participate in the Survey and Interviews, one could ask how much the respondents have learned from the 'Engaging with others' and 'Managing Time' modules.

In South Africa as well, the researcher was confronted with a significant dropout in between T1 and T2 (7 respondents) and again in between T2 and T3 (8 respondents) (See [Figure 9](#)). The pandemic and load shedding (power cuts in South Africa - Editor) were certainly playing a role here, as was the fact that respondents did not get the opportunity to apply what they learned at an official event. But dropouts could also be caused by an overload of activities. This would be confirmed by the complaint of an Illinois respondent:

In their own words: it is too much

'It is difficult to keep on participating (in the TAG Leadership project – Editor's note). I work, I must practice for sports, I am being trained to become a coach, there's the Leadership Training and then there are these Surveys and Interviews. It is too much. I am tired.'

The Research Team compared the 'Pressure' experienced by the respondents who stayed on board and went on to T2 and the respondents abandoning the study project after T1.

In general, the respondents who left the project felt less 'Pressure' than their colleagues who stayed on (See Figure 14). Possible explanations are:

- A higher level of autonomy of the dropouts.
- Dropouts were not feeling any obligation towards Special Olympics to continue

- Dropouts did not have any sort of (extrinsic) motivation to go on.

Further investigation of the possible explanations is needed.

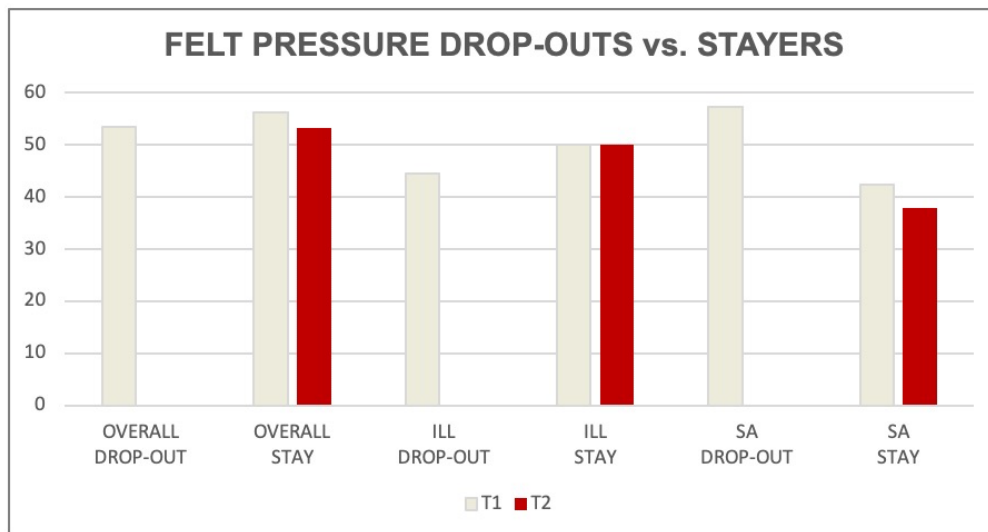


Figure 14: Pressure felt by dropouts vs. staying respondents.

The analysis also showed that 'Pressure' decreased for the respondents who went on to do T2. So, the Research Team concluded that it is not 'Pressure' that made respondents drop out

5.3.2 Autonomy

Referring to the study model (See [Figure 2](#)), the Research Team analyzed the scoring evolution in the subscales 'Perceived Choice' and 'Effort' to determine the impact on the 'Autonomy' of the respondents; being the first psychological need of the Self-Determination Theory.

5.3.2.a Perceived Choice

Overall, and in 3 out of 4 regions, an improvement of (their own) 'Choice' by the respondents was seen (See Figure 15). The biggest increase was observed in Belgium (+11.72%), followed by Illinois (+10.32%). Researchers believe that this is due to the opportunities the respondents had to show themselves as leaders at official events close to T3 (National Games in Belgium and National Congress Illinois). Belgian respondents testified that they had a choice of tasks and missions they could execute at the annual National Games.

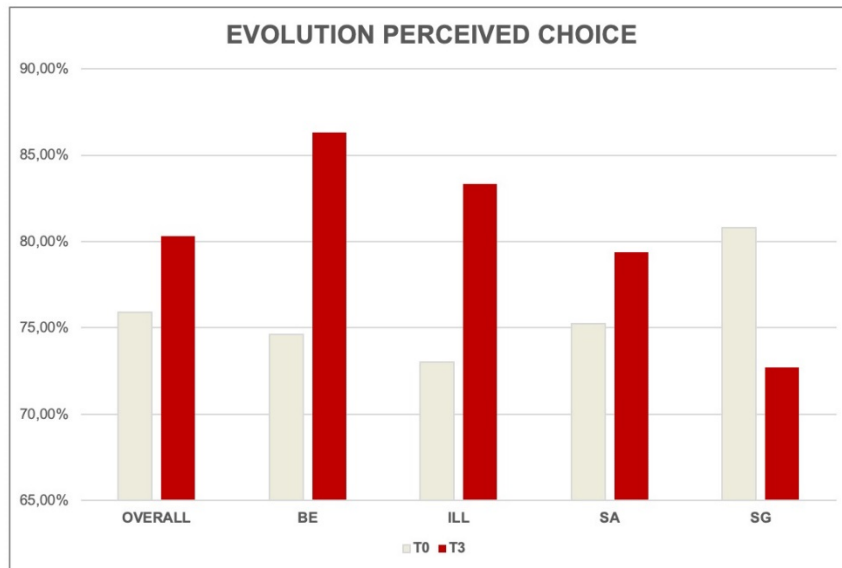


Figure 15: Evolution of 'Perceived Choice'.

5.3.2.b Effort

Overall, respondents did not feel that the Athlete Leadership Training was asking for high efforts and there was little evolution in the scores (See Figure 16). From this point of view, the term 'Ease' would be a better definition than the negatively loaded 'Effort'. Figures 16 and 17 need to be read in this way: the higher the score, the less 'Effort' was reported by the respondents. In terms of results, a slight increase of 'Effort' is seen overall and in 3 regions. (See Figure 16)

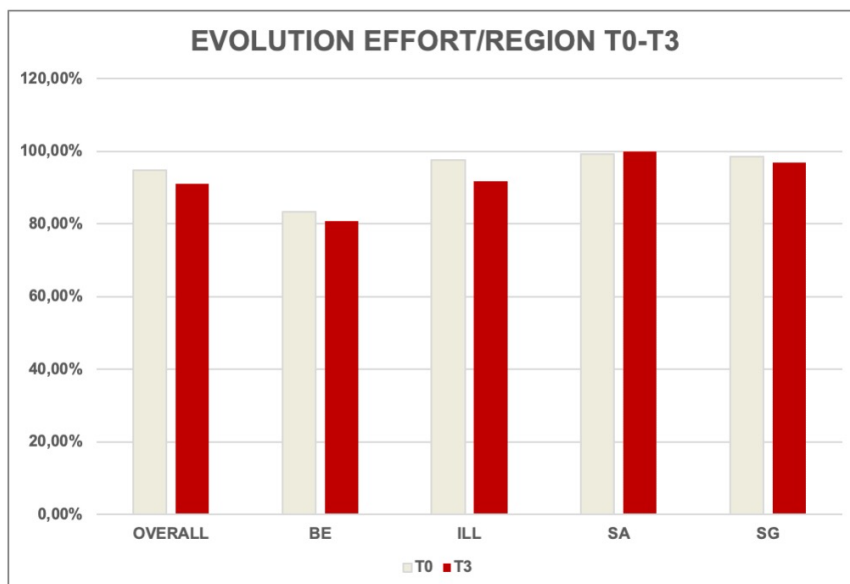


Figure 16: Evolution of 'Effort' T0 vs. T3.

Zooming in on the subtle changes of the course, 2 'pathways' appeared (See Figure 17):

- North-West: both in Belgium and Illinois data showed an increase of the experienced 'Effort' at T1 and T3. (Decreasing line is increasing Effort)

- South-East: both in South Africa and Singapore data showed a status quo/minor decrease at T1, an increase at T2 and a decrease at T3.

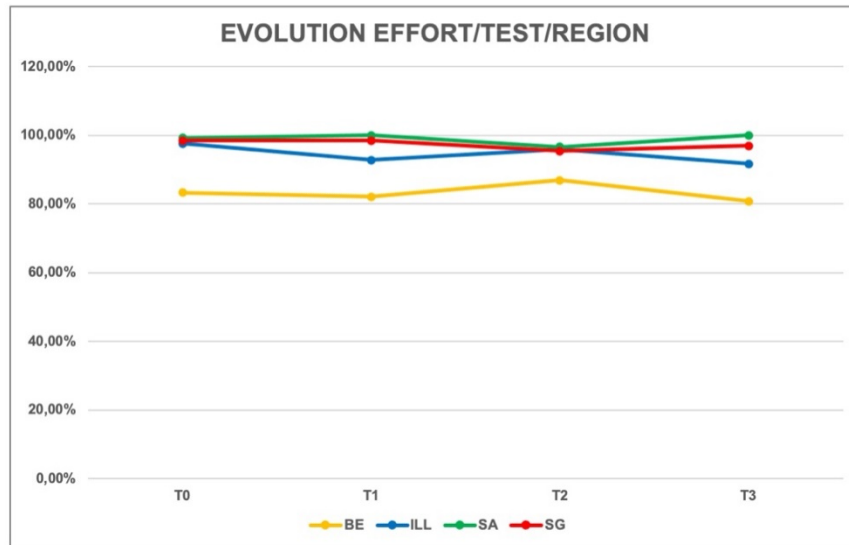


Figure 17: Evolution of Effort needed to execute the Athlete Leadership Training.

When it comes to the North-West pathway, most of the respondents in both regions declared after T1 that there was a lot to learn. Respondents who were previously leaders added having underestimated the Training hereby confirming the observations of the researcher with IDD after testing the first module of the Athlete Leadership Training. He addressed the first module of the Training with the idea that it would be ‘a walk in the park’ but discovered that there was still a lot he did not know about Special Olympics.

The increase of ‘Effort’ at T3 was most probably far less initiated by the curriculum than it was by the physical and mental effort to take up a leading role at different events (National Games in Belgium and National Congress in Illinois): traveling, taking off from work to attend, high expectations, apply the Training, etc. turned out to be obstacles.

In their own words: work is more important

‘My Mom did not allow me to attend the Athlete’s Congress. She told me my work is more important. I rely on her for transport, and she has very little time because she works hard.’

In their own words: it takes a lot to get there

‘I have my own car, so I was able to go to Chicago for the Congress, but it is a long drive and petrol is expensive. I would not be able to do this regularly. There is a whole state of Illinois but most of the opportunities are in Chicago. That should be addressed. It would be more convenient for me to take up a leading role in another city, in another State, because it is closer to where I live.’

5.3.3 Belonging

The collected data in subscales 'Relatedness' and 'Value/Usefulness' were used to measure the impact of the Athlete Leadership Training on the second psychological need: 'Belonging'.

In the 'Relatedness'-subscale were measured:

- Relations with Special Olympics as an organization,
- Interpersonal relations with people from Special Olympics (athletes, staff, coaches, volunteers), and people without IDD known to the respondents,
- Interpersonal relations with people without IDD unknown to the respondents.

The 'Usefulness' subscale was included to probe for the degree to which the respondents think they can be of added value to advocacy for inclusion of people with IDD.

5.3.3.a 'Relatedness'

The overall results show a rather high score at T0 and an improvement of 0.03% at T3 (See Figure 18). Analysis per region at T0 and T3 showed increases in Belgium (+3.21%) and South Africa (+3.64%) and loss of 'Relatedness' in Illinois (-2.78%) and Singapore (-1.52%).

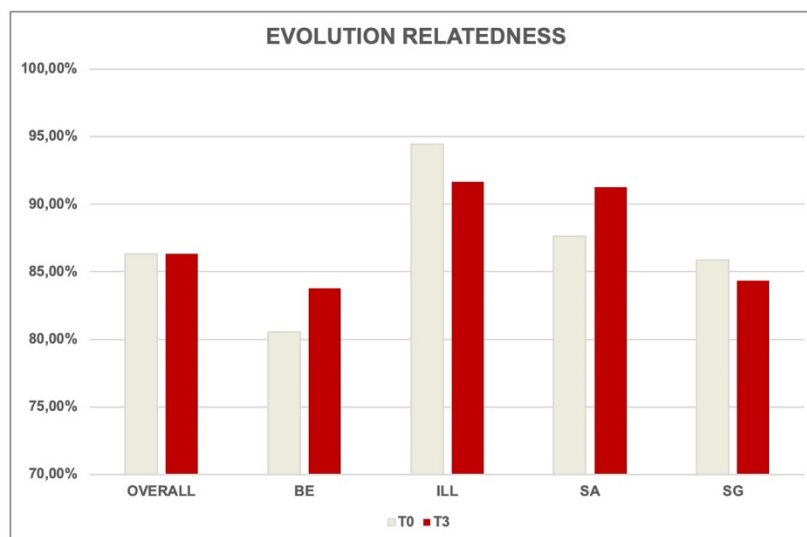


Figure 18: Evolution of Relatedness T0-T3.

5.3.3.b 'Usefulness'

The overall results showed a very high starting score at T0, and a decrease by 1.53% of 'Usefulness' at T3. Regional details showed gains in Belgium (+2.63%) and Illinois (+4.96%) and losses in South Africa (-4.29%) and Singapore (-1.01%).

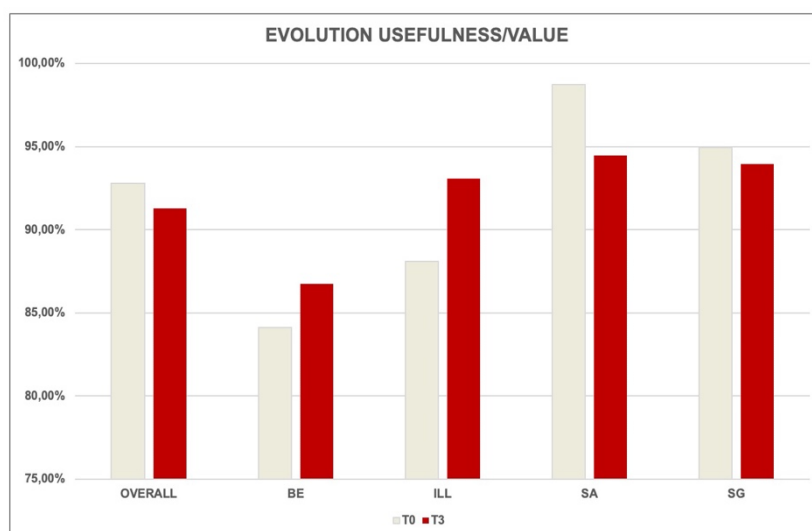


Figure 19: Evolution of Usefulness/Value T0-T3.

Considering both scales, researchers explained the positive impact in

- Belgium: by the fact that respondents attended the annual National Games not only as athletes but also as leaders giving them a clear role in the organization and the chance to apply what they learned during the Training. The role was officialized with a dedicated sweater mentioning their title. At the National Games they were able to interact with many persons without IDD and advocate for inclusion. They felt included and useful.
- Illinois: by the leader role 3 out of 4 of the respondents could play at the National Congress but also by the personal and individual initiative of 1 of the 4 respondents arranging for a radio interview and other advocacy opportunities and therewith weighing on the results in Illinois.

When it comes to 'Relatedness', it needs to be emphasized that most of the Illinois respondents came across as quite independent, well integrated people having jobs in the regular economy or going to college, playing (unified) sports in clubs with mixed members (with and without IDD). Hence, the very high score at T0. The loss in 'Relatedness' might be due to a less frequent contact with Special Olympics staff towards the end of the curriculum.

The double negative result in Singapore could be explained by the fact that respondents did not understand the words 'intellectual disabilities', did not consider themselves to be people with IDD

and could not discern people with and without IDD. In this context it seems difficult for respondents to evaluate their relationship with people without IDD, their inclusion in their community and/or to feel as an added value when it comes to advocating for inclusion of people with IDD.

The loss of 'Usefulness' measured in the respondents in South Africa might be explained by the lack of opportunities to apply the Training at official events while the improved 'relatedness' is the result of continuity. The respondents grew to know and trust the staff member of Special Olympics South Africa and the researcher. They felt confident and safe with them. Respondents knew that something was happening in their lives that was adding value. They felt part of a team.

5.3.4 Competence

The subscale 'Perceived Competence' was used to measure the impact of the Training on the third psychological need in the study model: Competence. Analyzing the overall data, an unambiguous result appeared: the 'Perceived Competence' increased by 4.77%, with the biggest rise observed in Belgium (11.87%) and the smallest in Singapore (3.3%) (See Figure 20).

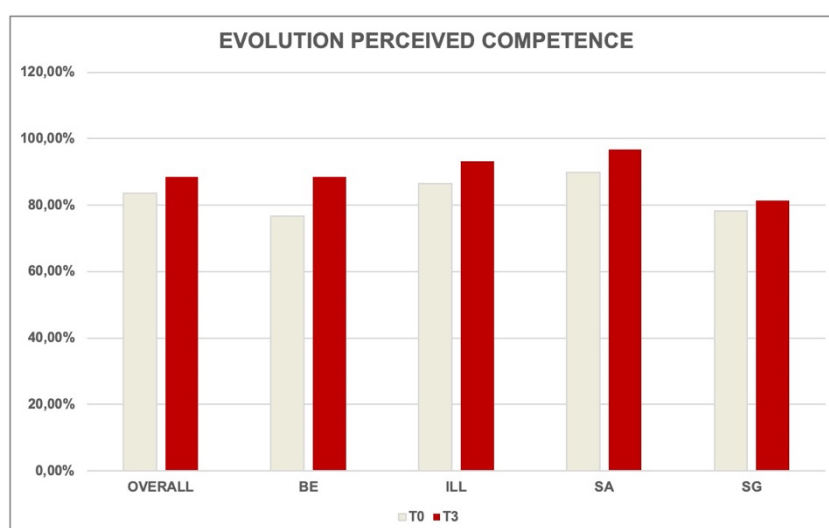


Figure 20: Evolution of Perceived Competence T0-T3.

Zooming in on all 4 test moments in the different regions, revealed slight variations (See Figure 21).

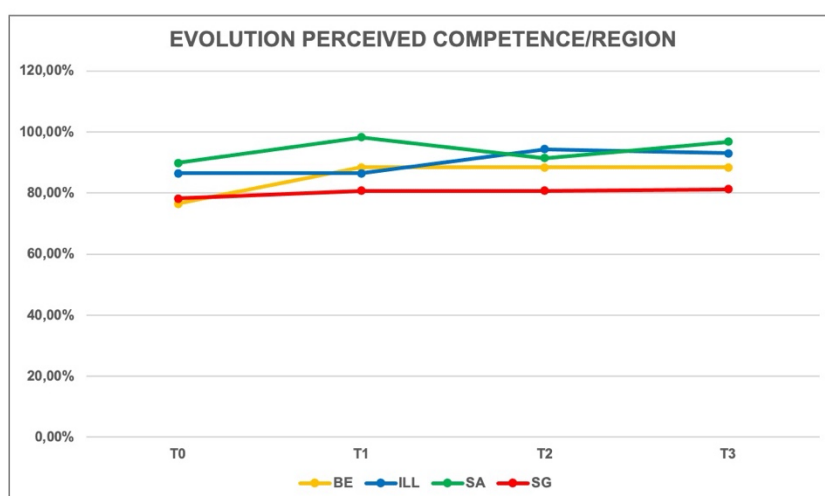


Figure 21: Evolution Perceived Competence/test/region.

The status quo at T1 and the rise at T2 in Illinois could be explained by the fact that the respondents were in an ongoing curriculum. They did testify that they had learned a lot but there was more to come.

The dip at T2 in South Africa could be explained by the fact that 3 months had gone by since the Training, that the Covid-19 pandemic had kept the respondents rather isolated with no opportunity to apply what they had learned at an event. At that moment the Training was a thing of the past. Belgium respondents marked a negligible decrease (0.03%) at T3 compared to T1 and T2, meaning that the 'Perceived Competence' did not change with the tasks and missions given at the annual National Games.

South African respondents marked a 5.34% increase at T3 compared to T2. This could be the effect of the extra event management training.

Results in Singapore show a positive difference of 2.53% between T0 and T1 and a second rise of 0.51% between T2 and T3.

Results of respondents who were considered leaders of Special Olympics prior to the Training compared to the newbies showed positive effects on 'Perceived Competence' in both groups (See Figure 22).

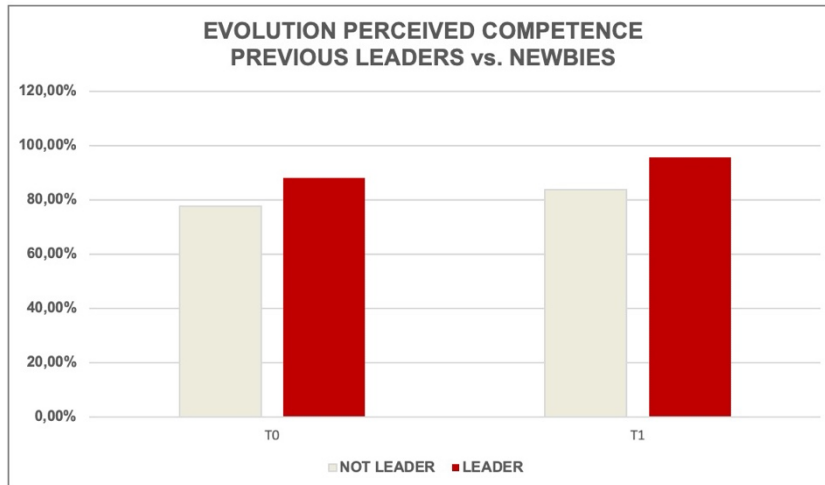


Figure 22: Perceived Competence evolution in previously leaders and newbies.

5.3.4 Enjoyment

As the Interest/Enjoyment subscale is the one assessing intrinsic motivation and thus loading directly on the scale of Self-Determination/Motivation, the Research Team decided to analyze this subscale separately from the ones loading on the 3 basic psychological needs.

Comparing the first (T0) and the last (T3) data collection, the overall results are unambiguous: the respondents enjoyed themselves (See Figure 23) with a significant increase by 12.87% in Belgium and a status quo (at 100% of enjoyment) in South Africa.

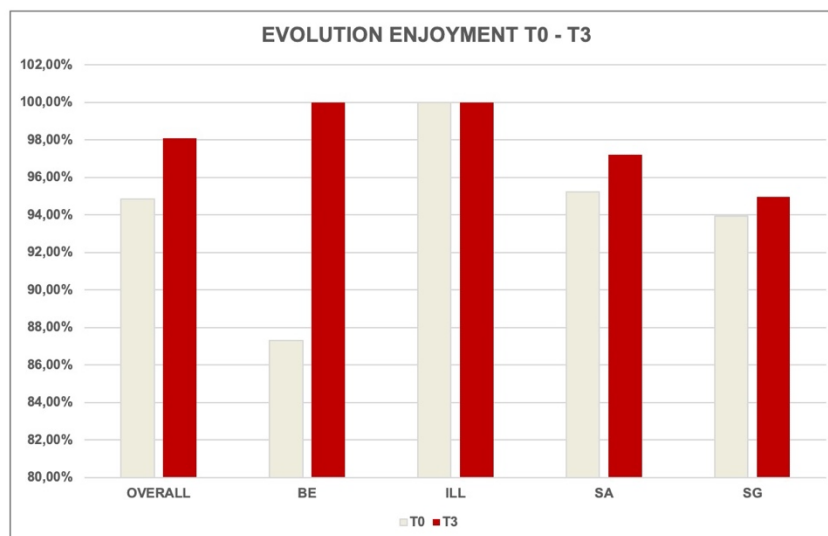


Figure 23: Evolution Enjoyment/region T0-T3.

The Belgian results did not come as a surprise as respondents were very enthusiastic about taking up leader roles at the annual National Games. It boosted their motivation, but researchers questioned the intrinsically nature of it, since respondents were treated to an exclusive visit to the location of the National Games some weeks before the start, received a dedicated sweater and

toured VIP's around the playing fields during the National Games. These events could be considered as a sort of reward that generated extrinsic motivation and therefore biased the results.

The results of Illinois and South Africa equally surprised as both regions were marked with significant dropouts after T1 (3 in Illinois and 7 in South Africa). Therefore, the Research Team compared the degrees of enjoyment of the respondents who left the project after T1 with the ones who stayed on for T2 (See Figure 24). Overall, the dropouts enjoyed themselves a little less (-0.65%) at T1 compared to the respondents who stayed. The overall decrease in 'Enjoyment' at T2 can be explained by the absence of activity in all regions except for Illinois where the curriculum continued with the advanced modules. This explained the increase of 'Enjoyment' of Illinois respondents at T2 and the decrease of 'Enjoyment' in South Africa at T2. The 100% 'Enjoyment' of Illinois respondents dropping out after T1 remained difficult to explain. The one conclusion we could draw is that it is not a lack of 'Enjoyment' and thus intrinsic motivation that made the respondents abandon.

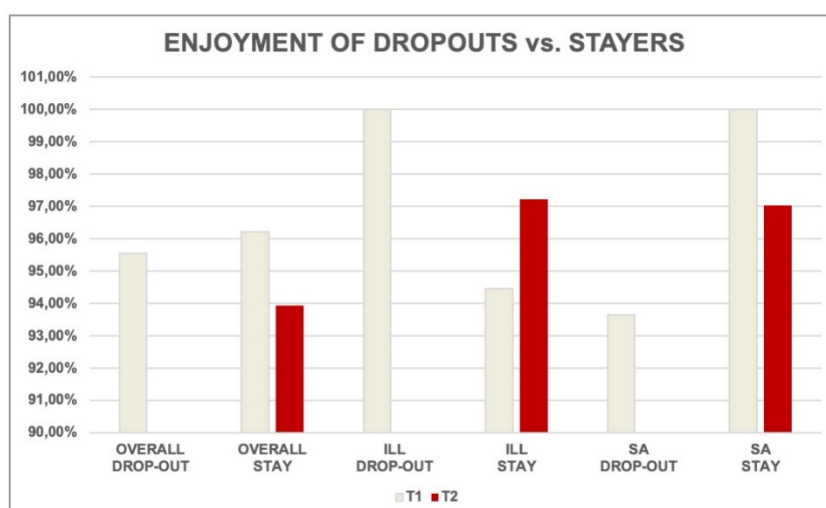


Figure 24: Enjoyment scores of dropouts vs. stayers T1-T2.

Moreover, researchers noted enthusiastic, clearly motivated comments. In South Africa, athletes met learning new things with much vigor and positivity.

In their own words: Excitement

'I love learning new things, as I said, I am a very independent person, so the more things I learn that I can do by myself, I think it's a lot better" (Respondent 1). "That's good, I love it, I love to learn new stuff, I learn to be there, to help other people to learn new stuff because it's good. ...How to talk to other people and to help the other people out there (Respondent 3) and "Interested, I feel excited because it might be for the good and ja, it's very exciting to learn new things" (Respondent 4).

One athlete testified that this made her feel different than before the Training.

In their own words: More confidence

"I think I'm not shy anymore and then I've been a little bit confident. I've gained a little bit of confidence".

5.4 General observations

5.4.a High ambitions

Researchers observed high ambitions within the respondents. In Belgium, Illinois and South Africa, most of them expressed the hope that the Athlete Leadership Training would lead to becoming a 'Global Messenger'. In Belgium and Illinois researchers were asked by respondents where and how frequently they would be traveling, if they would be representing their country at the World Games, meet with VIP's, etc. The high hopes led directly to deception.

In their own words: 'I am going to have to fight'

'I was really looking forward to speaking in front of all athletes at the Congress but because of the Covid-19 pandemic we stayed in smaller groups. I was disappointed that my voice could not be heard in the big hall.'

'I found out that in my area there are at least 7 other Global Messengers. So, I said: 'I am really going to have to fight because I want that jacket. (The jacket that Global Messengers get – Editor) My goal is that jacket.'

On the other hand, the Research Team observed that respondents were sometimes very confused about the meaning of the word leader and what the role of a leader is. For example: it was observed that respondents were not aware that an athlete-ambassador is a leader or has a leading role. Others thought it only meant being a coach.

Leadership issues around the Training was also discussed.

In their own words: different kinds of leaders

Respondent 1: 'I like to lead from the back, so I like to see what people are doing and then I will help them out to make their game better, that is how I prefer to lead because I'm not very good with planning and that, so if there are plans in place then I can just make a little bit of changes, that's how I lead normally'. Respondent 2: 'I am a leader because I'm able to make people understand'. Respondent 4: 'For me it's to...well it depends on what kind of leader you are and the organization but like special Olympics leader, you work together to make Special Olympics better and make it well known and actually help, ja, just around the country'.

When presented with the idea that they could do great jobs in taking up leadership, talk about inclusion of people with intellectual disabilities, at a more local level, they found this less interesting. This is even more true for the respondents having had a leader role prior to starting the Athlete Leadership Training.

5.4.b Impact on sports performances

Because of lockdowns during the Covid-19 pandemic many respondents were refrained from practicing and playing sports for several months. Therefore, their general shape decreased. Once they could go back, their sports performances were – logically – worse than before. It was impossible within the time frame of this study to observe measured positive changes of the Athlete Leadership Training on their sports performances. But some of them did report improved performances:

In their own words: I am more active

'I am more motivated and participate actively. I no longer hang on the side of the pool.'

In their own words: I qualified for the World Games

'I participated for the first time in Unified Sailing at the National Games. It was my first sailing competition ever. I won a bronze medal and qualified for the World Games!'

5.4.c Parental control

When parents/caretakers were present, the Belgian researchers observed a tendency of respondents turning to these people for answers herewith confirming learned helplessness. In the same situation, the Belgian researchers also observed parents/caretakers wanting to answer for the respondents. In both cases, the researchers asked to refrain from helping or asking for help. In Belgium, both cases were observed throughout the whole study project; from T0 to T3. As a result, the researchers questioned the impact of the two core modules of the Athlete Leadership Training on the respondents in terms of gained autonomy, competence, and real leadership.

5.4.d Difficulties Special Olympics National Programs

Researchers observed a certain form of resistance coming from the Special Olympics National Programs in the 4 regions towards the research project. Staffs reported issues with the timing of the start of the project, understaffing, finding, and training trainers, difficulties in communication with the respondents, interference with other regional plans, etc.

Researchers also observed a critical attitude from the Special Olympics National Program toward the content of the Athlete Leadership Training. Adaptations took time and slowed down the start of the impact study.

Where several trainers were deployed, researchers observed – through reactions of respondents – that trainers explained/interpreted content differently or were themselves not enough trained to teach/explain certain parts of the curriculum creating uncertainty among respondents.

6. Conclusions

6.1 Impact of the Athlete Leadership Training on respondents

Referring to the study model, the Research Team concluded that the Athlete Leadership Training has proven impact on the respondents.

With a demonstrated important increase of 'Perceived Choice' and a low sense of 'Effort' needed (and thus a low need of help from others), the basic psychological need 'Autonomy' loaded clearly positive on Self-Determination.

With a small decrease of 'Usefulness' and a negligible increase of 'Relatedness', the basic psychological need 'Belonging' loaded slightly negatively on Self-Determination.

With a clear overall increase of 'Perceived Competence', the third basic psychological need 'Competence' loaded positive on Self-Determination.

With a clear increase of 'Enjoyment' this subscale loads positively and directly on the Self-Determination.

Therefore, the Research Team concluded that the Athlete Leadership Training has a high impact on Self-Determination, Intrinsic Motivation and thus the Wellbeing of the respondents.

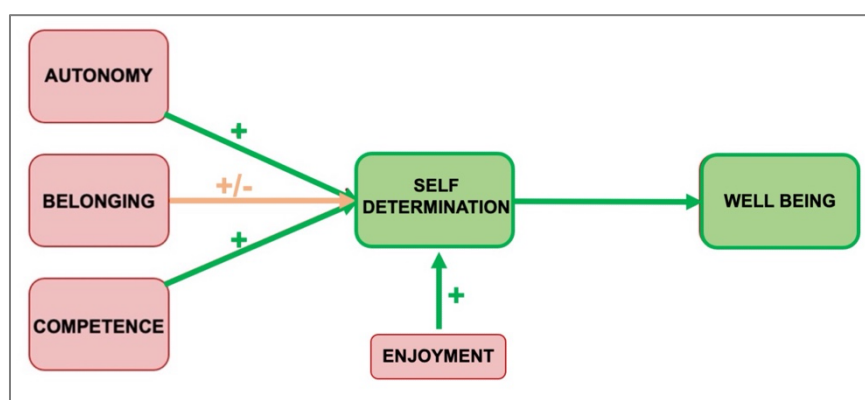


Figure 25: The assumptions of the study model fulfilled.

The hypothesis could be confirmed and was strengthened by the testimonials of respondents and the Focus Groups in Belgium, South Africa, and Singapore.

Asked for feedback in South Africa, all respondents gave very favorable comments.

In their own words: we learned a lot

Respondent 1: 'Yes. I learned a lot about being a leader. I learned a lot about the people I was there with, and I also learned a lot about Special Olympics as an organization'. Respondent 3: 'That was an awesome weekend, because I learned a lot including learning about myself'. Respondent 4: 'So from day one when we went to the lodge, it started off like...I wasn't really sure if it was going to turn out good or if anyone was going to notice if I was there, I was just...it started off where I was like shy and I didn't know what was happening but then like three or two days after then we started talking and working together and getting to know each other better, and ja, it just...it helped me

learn a bit, although I can't really remember but it helped me learn about intellectual disabilities and what Special Olympics does and what we could do to make people think, to make people know and actually know about us and ja, and it made me feel good that I was a leader of Special Olympics, athlete leader, and ja'.

In South Africa there was a consensus about the improvement in the respondents due to the Athlete Leadership Training. One guardian summarized the general sentiment as follows: 'Yes we have seen a lot of changes, towards her being a normal person, she likes...she's a normal person right now, she acts normal, she sits with people, she's more active, ja, that's what I can say, she's no more the stressed type of person who sits alone, doesn't talk, she talks now, so there is a huge change, this program really changed her. It's helped her'.

In Belgium the participants in the Focus Group were unanimous about the fact that their children had become happier since the Athlete Leadership Training and that they were all looking forward to the rest of the curriculum.

Parent 1: 'My son was very anxious about the Training. He was afraid to start, and I had to push him, as well as the coach during the Training. But now, he is very much looking forward to the rest of the curriculum.'

Parent 2: 'Our daughter is happier. She was happy something good happened after the Corona year. Having a mission at the National Games gave her a real boost. We have observed that she is in less need for help and confirmation for example when has homework for school.'

Parent 3: 'My son has become more 'social'. he talks more fluently and dares to address people. Something he did not do in the past.'

However, important regional differences were observed. Zooming in on the extremes, the Belgium results showed increases on every subscale and a high overall impact. Researchers believed this is because the respondents were intensively accompanied at the start of the Training, and they got clear tasks towards the end of the study project. During the writing of this report, researchers were informed that respondents were given leading roles such as Health Messenger.

The divergent results in Singapore might be prompted by the fact that:

- The respondents were the youngest of all regions (average overall age 31.5 yrs. vs 18 yrs. in Singapore – See Figures 7 and 8).
- Respondents did not understand the expression 'intellectual disabilities' and that they could not identify themselves as people with intellectual disabilities.
- The last T was performed by another, to the respondents unknown, researcher. This may point out limitations of the research. At the same time, it is a fact that people with IDD need

to feel in a safe place to respond at their best. An 'unfamiliar' researcher might have influenced responses.

- Culture, traditions, or taboo could prevent respondents from owning their situation of disability. Some parents affirmed athletes by telling them that they are not 'disabled' and they are just as capable as other athletes. It is a way for parents to boost their confidence by not acknowledging their disability so that they will not have self-esteem issues. In this case, one can ask how they can become leaders and advocate for inclusion of people with intellectual disability.

All these elements deserve more and deeper study and observation to explain the Singapore results.

6.2 Impact of the approach of the Athlete Leadership Training

The Research Team observed that the Special Olympics National Programs in the 4 regions were not fully prepared to launch the Athlete Leadership Training nor participate in the study project. It was difficult for them to start things up on a short notice, adjust their annual plan to the needs of the study project, find trainers, train trainers, etc. The consequences of the Covid-19 pandemic only added to the obstacles. It was the cause of confusion with SONP staff, trainer, and participants.

The Research Team also observed that the National Programs are not necessarily agreeing with the vision and trainings developed by Special Olympics International and prefer their own leadership programs.

The participants in the Athlete Leadership Training detect the critical attitude of the SONP's (and the trainers) towards the content. This influences their own attitude towards the Athlete Leadership Training with a possible loss of motivation and/or interest at the start of/during the Athlete Leadership Training.

The Research Team wonders if the National Programs in Belgium, South Africa and Singapore will continue with the advanced modules of the Athlete Leadership Training. For example, in Belgium, 5 months after T3 and 11 months after completion of the 2 core modules, no action was taken to start teaching the advanced modules.

Given these observations, the Research Teams concludes that the Athlete Leadership Training will only have the highest impact on the athletes, enabling them to grow and become authentic leaders advocating for the Organization as well as their peers, when Special Olympics Inc. and National Programs carefully strategize and plan the roll out of the Athlete Leadership Training.

7. Recommendations

1. A better, more structured introduction of the Athlete Leadership Training and framing of the goals and benefits for both the SONP's as the individual athletes will get the SONP's on board. Whereas the SONP's now prefer to focus on their own programs. There is a need of greater awareness on the purpose of the Athlete Leadership Training aiming for inclusion that goes beyond the Organization.
2. SOI might want to set up guidance of the SONP's to work out a strategy and a timeline to roll out the Athlete Leadership Training. This can include the creation of sustainable, and perhaps better adapted local, roles for future leaders and planning events where these roles can be played. This would be done prior to starting the curriculum.
3. Regarding these roles, it is recommended to emphasize more on every possible leading role athletes can play and the value every leading role has, to avoid disappointment when participants do not become 'Global Messenger'. There is a need of defining every role: 'What does a Health Messenger?', 'What does the member of the Youth Board?', 'What does a member of the Board of Directors?' Intrinsic motivation and sustainable leadership by happy leaders, will only be obtained if the leaders want to play a leading role they understand at any level (with family and friends, in school, in communities up to global events).
4. The Research Team encourages developers of the Athlete Leadership Training and SONP's to work together on regional adaptations of the Athlete Leadership Training to overcome cultural barriers while staying as close as possible to the Athlete Leadership Training to end up with the same type of leadership and message all over the world.
5. The Research Team advises Special Olympics Inc. to organize more training for trainers and accompany the SONP's when preparing the start of the Athlete Leadership Training. This way all trainers will be able to give the same training in the same way. Trainers who do not understand the curriculum or parts of it, create uncertainty among the participating athletes. There is an absolute need for qualitative, professional, validated translations to preserve the accuracy of the content of every module in any language. It is confusing when athletes get documents in which parts are still in a language they do not speak/understand.
6. Information and content for the athletes needs to be checked and validated by athletes in every language. The Research Team recommends writing the courses as much as possible in 'Easy-to-Read' and use pictograms, emoji's, and other visuals to overcome reading issues and illiteracy.

7. It is important to select athletes who are ready for the Athlete Leadership Training. For example: if a candidate is in denial when it comes to their intellectual disabilities, the Research Teams believes that the Training will not have the best possible impact on this candidate and the candidate will not become the desired authentic leader. In such case, it would be better to give this type of candidate another training first, helping them to own their disabilities. For example, by creating awareness on their skills and talents, before starting the Athlete Leadership Training. If candidates are illiterate or have linguistic problems, they should only start their Athlete Leadership Training when the curriculum is fully adapted to their needs.
8. As only the Illinois respondents took the complete curriculum, the Research Team recommends a follow-up with the other countries to keep track of the evolution and measure the sustainability of the things learned.

Attachments

Glossary of difficult words

If the athlete asks for an explanation of the words marked in red in the Survey, please use, exclusively, these definitions, synonyms and examples.

(1) Statement: a declaration, a proposition, an opinion, a comment

(2) Performance: the execution of an action, an accomplishment, a fulfillment

(3) Ethnicity: nationality, race, belonging to a group

(4) Capable: able, fit, good, you can do something,

(5) Leader: a person who guides others.

A person who is in charge. A person who takes responsibilities.

Examples of what a leader of Special Olympics can do:

Give speeches about Special Olympics

Be an ambassador to Special Olympics

Enroll volunteers

Have a place in the board of Special Olympics

Be an assistant coach or a trainer

(6) Interesting: engaging, stimulating, amusing, attractive

(7) Goal: something you look forward to, something you focus on, something you are aiming at, something you want to achieve.

(8) Distant: far off, away

(9) Independent: when you do not depend on something or someone. When you need no help to do something.

Example:

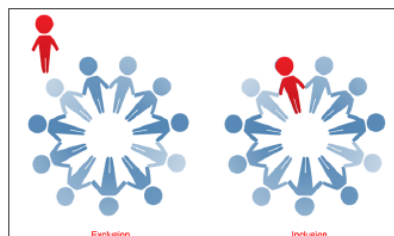
When you go out sailing with a sailing boat you depend on the wind. If there is no wind, you cannot sail. When you go out with a motorboat, you depend on the gas in the tank. Without gas the motorboat cannot run but you are independent of the wind.

(10) Inclusion:

being part of a group,

being accepted in a group

(11) Community: a group, a neighborhood, a center, a church, an organization



Exercise 1: Which text is the easiest to read?

1

I am a Special Olympics athlete.

I like to play sports.

When I play sports, I don't think of anything else.

I feel good with Special Olympics.

2

I AM A SPECIAL OLYMPICS ATHLETE.

I LIKE TO PLAY SPORTS.





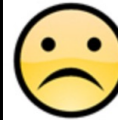
WHEN I PLAY SPORTS, I DON'T THINK OF ANYTHING ELSE.

I FEEL GOOD WITH SPECIAL OLYMPICS.






**Exercise 2: How do the following statements make you feel?
Indicate the smiley face that best illustrates your feeling.**

I completely agree	I agree	I don't know	I disagree	I completely disagree
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I like to play sports with Special Olympics.



When playing sports, I get very tired.

				
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I am lazy.

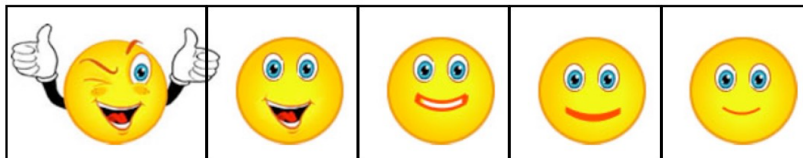
				
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Playing sports is annoying.

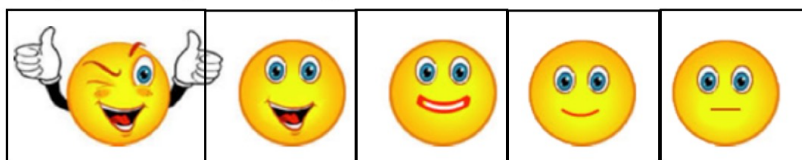
				
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I completely agree	I agree	I don't know	I disagree	I completely disagree
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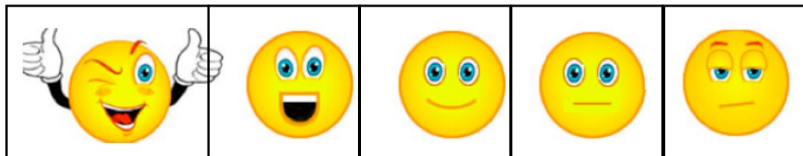
Snacking is healthy.



My coach gives me good advice.



I think it's important to participate in the National Games.



You don't make friends at Special Olympics.



Exercise 3: Choose the smiley faces you can best answer with.



Endnotes

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