PUBLIC ADMINISTRATION MASTER THESIS

PRESSURE COOKER YOUTH WORK

A POLICY EVALUATION OF PERSONAL DEVELOPMENT POLICY GOALS OF THE MDT MISSIE COMMUNITY SERVICE PROJECT

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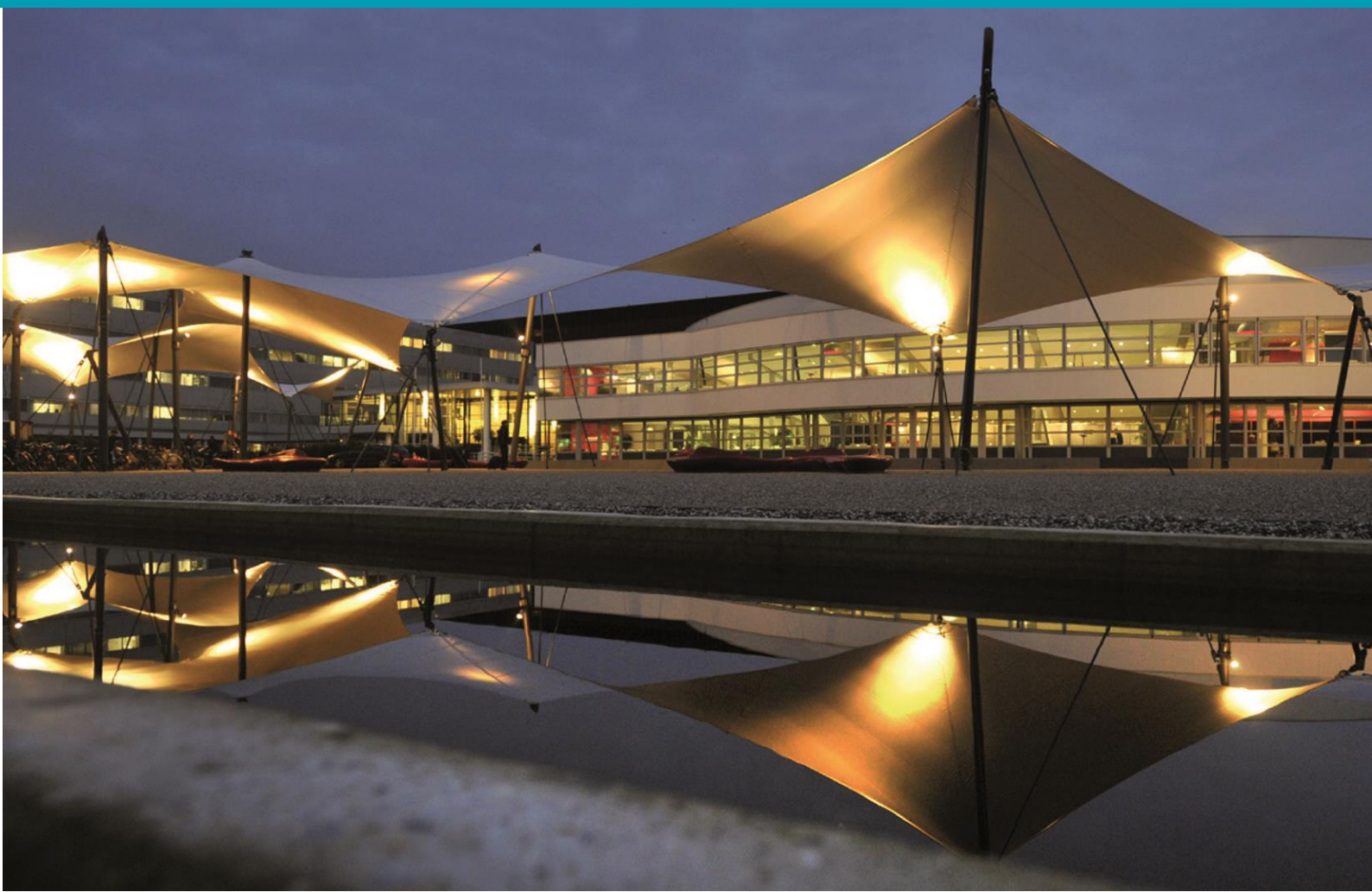

Preface

Dear reader,

Lying in front of you is my master thesis titled ‘Pressure cooker youth work’, in which I have researched the personal development effects of the MDT Missie community service course on its participants, in order to evaluate the course’s personal development policy. I am very glad with the end result and extremely proud to have written a thesis on a course for which I have great admiration. Unfortunately, this thesis also marks the end of my time as a student of the University of Twente, a time at which I reflect with great fondness and dear memories.

The successful completion of this thesis however did involve a challenging process and was not without its hindrances. Not only did Covid-19 for example delay the data collection for this research, but also the data analysis via SPSS was an enormous educational challenge for me. I am lucky to have received the support of dr. Klok in this process. I want to especially thank him for his guidance, not only during this project, but also during my thesis and my internship in the MS&T Bachelor programme. I also want to thank dr. Meershoek for being the second supervisor and for the many joyous courses in the Public Safety specialisation of the master Public Administration.

In addition to the supervisors, I would also like to thank all employees from MDT Missie that contributed to the successful completion of this thesis. From the moment that I introduced the idea for this thesis I received great enthusiasm and support from the organisers of the course which continued throughout this research project. Not only did I receive great help in distributing the surveys, I am also truly grateful for those who gave up their time to participate in interviews. The same can be said for the course participants. I am really thankful for your responses to the surveys and the time you took to complete them.

Lastly, I would like to say thanks to fellow students Madelief Kanbier, Hielke Kleijsen and (now alumni) Thijs Vermeulen. I am thankful for the feedback that you provided for this thesis and especially for the many fun years of friendship and studying with you at the University of Twente.

I hope you enjoy reading this thesis.

Sincerely,

Niels van Dalen

Abstract

This thesis covers a study that is focused on the research question *'To what extent is the MDT Missie community service course effective in achieving the personal development goals for participating youths established in its policy?'*. This question is asked in the context of public policy evaluations, and focuses specifically on an assessment of the policy of the MDT Missie project on personal development of participating youths. MDT Missie is a project in which participants are voluntarily challenged with military experiences and volunteering. A theoretical framework on personal development was constructed and subsequently personal development of the course's participants was tested via the before-and-after design. Data for this analysis was collected via two surveys dispersed to course participants. Additionally interviews were conducted with course instructors and organisers to gain in-depth data. The results of this study indicate that personal development to a limited extent, mainly in the form of increased discipline and goalsetting abilities. These results add to current existing research on the possibilities of youth personal development via community service. By doing so, this research also tests if the MDT Missie policy can be expanded regarding its possibility as mandatory addition to the Dutch education curriculum.

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1. Introduction

In 2017, the freshly inaugurated cabinet Rutte III announced in its government accord plans for a 'maatschappelijke diensttijd' (MDT) or 'community service' project (Rijksoverheid, 2017). In this project, Dutch youths can voluntarily participate in community service together with government agencies and other organisations, with the goals of 1) creating societal impact, 2) developing talent and 3) meeting other youths (ZonMw, 2019). This policy evaluation focused on the possible impact that community service for youths has on the third goal of MDT, the personal development of the participating youths. Specifically, a case study was conducted among Dutch voluntary participants of the MDT Missie project provided by a public-private collaboration between the Dutch Ministry of Defence and the organisations YourCube and TijdVoorActie. MDT Missie is a state funded initiative and is unique as it combines military training with community service. Participants between the ages of 17 and 27 first spend 40 hours on a military base during a so-called 'Impact Bivak' in which participants are physically and mentally challenged, learn military skills and drills and get to know the military (MDT Missie, nd). Subsequently, participants are to conduct their 'Social Mission' in their own environment by conducting self-initiated community service, working on their own personal development goals. According to MDT Missie, the course focuses on three main points, i.e. 'expanding physical and mental boundaries', 'contact and connectivity' and 'societal impact and leadership' (MDT Missie, nd). This thesis aims to discover to what extent the MDT Missie project is successful in achieving this.

1.1 Prior literature

Prior research has displayed that personal development can occur following youth community service. Dworkin et al. (2003) for example researched 'growth experiences' following youth activities, or "experiences that teach you something or expand you in some way, that give new skills, new attitudes, or new ways of interacting with others" (Dworkin et al., 2003, p. 20). This concept encapsulates 'youth community service', or "all activities and programs for youth that are both voluntary and structured" (Dworkin et al., 2003, p. 19). In six different areas personal development among youths can occur. First, youth activities allow for personal reflection and therefore for *identity work* as new things are tried and limits are learned. Second, youths can learn to *develop initiative*, or "the capacity to direct attention and effort over time toward a challenging goal" (Dworkin et al., 2003, p. 21), which includes learning to set goals, to give effort, to manage time and to take personal responsibility. Third, *emotional competencies* can be learned, such as anger and anxiety control, emotion and stress management and constructively using positive emotions. Fourth, new *peer connections and knowledge* may be gathered, as youths meet new peers and experience "loyalty to and intimacy with peers" (Dworkin et al., 2003, p. 23) with increased empathy and understanding. Fifth, *social skills* are also developed as youths are confronted with teamwork, leadership roles and feedback, which all require communication skills. Lastly, *social*

capital is acquired via relationships with community members and adult leaders, which develop as youths learn more about their communities and experience support from its members. This research provides this thesis with a solid framework of expectations for the effects of the MDT Missie course on the personal development of the participating youths.

Kackar-Cam and Schmidt (2014, p. 83) focus specifically on the "process through which participating in a community based service-learning project supported high school students' feelings of autonomy, competence and relatedness". They define 'community based service-learning' as a "service-learning activities organized by community-based organizations (…) not integrated into formal school curricula, and include a reflexive component" (Kackar-Cam and Schmidt, 2014, p. 86), which describes the MDT Missie course accurately. Their elaborate theoretical model can be seen in figure 1 in the appendix. The authors find increases in autonomy, competence and relatedness following the service, with "task-related variations in these feelings" (Kackar-Cam and Schmidt, 2014, p. 83) as social interaction tasks were more influential. There are thus suggestions that community service for youths would be beneficial to their personal development. However, the MDT Missie project is a novel concept in that it approaches community service from a military perspective and therefore current research is insufficient to evaluate the effectiveness of the MDT Missie policy regarding personal development.

1.2. MDT Missie community service approach

The MDT Missie project differs from regular community service projects in that it combines military training with community service in the form of participant initiated volunteering work. The course is part of the national MDT project for youth community service and therefore only allows participants between the ages of 17 to 27. Within the national MDT project, MDT Missie differs in that it is provided multiple times a year by the Dutch ministry of Defence in cooperation with external organisations. The course starts with military training, i.e. the three day Impact Bivak on a Dutch military base. This phase of the course can be regarded as the educational phase in the course, as participants are provided with experiences from which they subsequently need to learn. From day one participants are confronted with military discipline, exercises such as marching, but also team-exercises and other boundary expanding activities. Not every MDT Missie course is equal in content, as there is a rotation between the military bases where the military course is provided and the activities on the program. However, the broad categories of activities described above are always present. Team exercises for example include constructing a tower with minimal materials, navigation exercises, or sportive activities such as scaling obstacle courses. Boundary expanding activities are for example climbing a climbing tower, taking an Ice Bath using the Wim Hof method to overcome the cold, or executing a nightly 'crashmove', i.e. an unexpected nightly expedition on foot. Most activities however involve a mixture of both teamwork and boundary expanding activities at the same time. In between the activities there are coaching sessions during which participants reflect on the activities and what they learned from them, but also on their general life path, goals and struggles. After this 32-hour educational

phase, participants conduct their 'Social Mission', i.e. self-initiated community service working towards goals they set for themselves during the coaching sessions during the Impact Bivak. This is the longest phase of the course, as participants are provided time to find an organisation where they can conduct their 40-hour community service, and as often the 40 hours of work are spread over a longer period of time, depending on the schedule of the volunteering organisation. In their search for an organisation participants are guided by the coaches from the course, not only individually, but also in regular online group sessions with other participants. After most participants have conducted their volunteering work, a last 8-hour military day is organised, i.e. "the reunion'. Participants conduct similar activities as during the initial Impact Bivak, but also spent much time reflecting on their experiences and progression during the entire course. In total, one course takes 80 hours, but is spread over a period of three to six months.

1.3. Research question

As the MDT Missie project is a novel concept, current research is insufficient to evaluate the effectiveness of the MDT Missie policy regarding personal development. This study therefore attempted to answer the research question *'To what extent is the MDT Missie community service course effective in achieving the personal development goals for participating youths established in its policy?'*. By answering this question the policy basis of MDT Missie could be evaluated and it could be determined to what extent the course could be a good addition to the current Dutch public education systems on the basis of its possible merits for youths' personal development. To answer the research question, it was important to answer the following sub-questions:

- *To what extent are the indicators of personal development already present in the course participating youths?*
- *What methods are employed in the MDT Missie course elements for achieving personal development of participants in line with its goals?*
- *To what extent do the post-test results on the relevant personal development variables differ from the pre-test results on these variables?*
- *What personal development do participants themselves experience following participation in the MDT Missie course?*
- *What differences do course instructors experience in participants pre- and post-participation?*
- *What identified elements of the MDT Missie course are responsible for a possible difference in the pre- and post-test differences?*

1.4. Unit of analysis, variables and setting

In the research question a relationship was expected between two variables. The question tests the degree to which the independent variable 'participation in a MDT Missie community service course' influenced the dependent variable 'the achievement of personal development policy goals for

participating youths'. As the unit of analysis, the MDT Missie course, is difficult to measure, a different unit of observation was needed, i.e. the participating youths. Especially for this study, participants of courses 8 and 9 starting in March 2022. Participants were aged 17 to 27 and participated voluntarily. By observing and comparing the participants on the relevant variables before and after treatment a conclusion could be made about the unit of analysis. In this case the treatment entailed participation in and completion of the MDT Missie course. One would think that the MDT Missie course provided quite an intricate research setting due to the military rule and social influences of community service. Therefore, participants were questioned via the survey method, which could be completed online in their own natural setting. The two Impact Bivaks were conducted in a military setting on two military bases near Arnhem and Steenwijk in the Netherlands. In between the activity-ridden days, participants spent the nights of the Impact Bivak at the bases in military tents. The setting of the following Social Mission differed per participant, as participants conducted their volunteering work at many different social organisations. This study took about eight months, from the distribution of the pre-participation survey on March 8, 2022 to the completion of the last interview on October 19, 2022. The post-participation survey was provided on June 17, 2022 and finally closed in August.

1.5. Scientific and social relevance

This research is scientifically relevant as it added to previous research in various ways. First of all, the MDT Missie concept is a novel community service method, as it combines military education with social community service. Unlike Dworkin et al. (2003), this study was more narrowly focused rather than on general 'youth activities'. Second, although this research also utilised a phenomenological approach in which "the most meaningful reality is what a person perceives it to be" (Dworkin et al., 2003, p. 19) this research focused on before-and-after rather than during-treatment testing as done by Dworkin et al. (2003). This prevents making focus groups susceptible to influencing group dynamics. This research's phenomenological approach was strengthened by also including the perceptions of supervisors. Furthermore, this study added to the work of Kackar-Cam and Schmidt (2014) as the focus was on a different age group of participants, i.e. people aged seventeen to twenty-seven rather than high school aged adolescents.

This research is societally relevant first of all due to its possible implications for further research among MDT projects. When it turns out that personal development of youths increases following participation in the MDT Missie project, it could be interesting to see if this holds for the other MDT projects as well. Furthermore, when personal development increases, in the long term there could also be consequences for the current policy regarding the MDT Missie project. As of right now course participation is voluntary, but if the benefits for youth's personal development turn out to be great, then the government could also decide to make MDT participation mandatory. The course could for example be made a mandatory aspect of the Dutch public high school or post-high school education systems.

2. Theoretical concepts

2.1 Policy sub-goals analysis

In order to conceptualise the core broad topic of 'personal development' in the dependent variable 'personal development policy goals for participating youths' first it needed to be known what components made up this broad goal in MDT Missie's policy. The core of MDT Missie policy originates from the general MDT policy, which subsequently originates from the coalition accord of the cabinet Rutte III. In the coalition accord, the then government established the foundation for MDT community service in order to "enable youth to contribute to the our society" (Rijksoverheid, 2017, p. 10). Subsequently, the policy of the MDT project could first be found in two main documents, i.e. a preliminary notice by subsidy provider ZonMw (ZonMw, 2019) and the letter to the parliament on the progress of the project (Rijksoverheid (a), 2020) with its enclosed overview of MDT's objectives, indicators and target values (Rijksoverheid (b), 2020). These documents provided the basis for all MDT projects, and thus also for MDT Missie. Particularised policy for MDT Missie could subsequently be retrieved from one not publicly available document, i.e. the subsidy request from MDT Missie to provider ZonMw with an action plan (ZonMw, nd).

As the state funds MDT courses completely it has established specific requirements for the MDT courses. Three general goals are established in the general MDT policy, i.e. 1. creating societal impact, 2. developing talent and 3. meeting other youths (ZonMw, 2019). In the developing talent category four sub-goals can be discerned, i.e. 1. personal development, 2. increasing advanced education and labour participation, 3. developing skills via coaching, training and courses and 4. decreasing school drop-out rates and youth unemployment (Rijksoverheid (b), 2020). In regard to personal development, the government especially discerns two main indicators, i.e. self-confidence and resilience (Rijksoverheid (b), 2020). These goals were subsequently also transferred to the MDT Missie project via the subsidy requirements, as its policy states that the project "enables youth to develop new insights on themselves, others and society" (ZonMw, nd, p. 1). The Impact Bivak aims specifically to increase "societal awareness, societal involvement and personal development" and the Defence organisation will "supply participants with military skills, mental and physical challenges and awareness of peace, safety and freedom" (ZonMw, nd, p. 1). Furthermore, on the MDT Missie website, it was indicated that the course focuses on three main points, i.e. 'expanding physical and mental boundaries', 'contact and connectivity', and 'societal impact and leadership' (MDT, nd), which adds leadership and expanding boundaries to the goal of personal development.

Relevant indicators of personal development

In order to effectively research theoretical literature, relevant variables needed to be researched for a good conceptualisation of personal development. In its policy, the Dutch government especially indicated that personal development following MDT participation was exemplified by increased self-confidence and resilience. Furthermore, leadership and expanding physical and mental boundaries was mentioned. Additionally, also communication skills, formulating goals, and planning were mentioned (ZonMw, nd, p. 8). Finally also decisiveness, self-awareness, discipline, and feelings of responsibility are suggested as good indicators (ZonMw, nd, p. 12). In total, ten sub-goals that are indicators of personal development are thus mentioned, i.e. self-confidence, personal resilience, planning abilities, reflective abilities, communication skills, goal-setting abilities, decisiveness, self-awareness, discipline and personal responsibility.

2.2. Conceptualisation

On the basis of an analysis of the MDT policy ten sub-goals or 'indicators' of personal development can be identified (ZonMw, nd). These sub-goals for participants are sometimes quite tied-in, but will be distinguished and elaborated upon now. The interdependence of the sub-goals is illustrated in figure 2 in appendix I. Three main sub-goal categories of personal development can be distinguished, i.e. 'self-confidence', 'goal achievement skills', and 'communication skills'. The other indicators of personal development mentioned above were mentioned in theory often as aspects of these three main categories.

2.2.a. Self-confidence

Self-confidence first of all was conceptualised based on a literature review by White (2009, p. 105) who defined it as "the confidence" and "the belief in one's self and his/her powers and abilities". This concept had three attributes, i.e. "the explicit personal belief that one can achieve an affirmative outcome in a certain situation" (2009, p. 107), 'persistence' or '*resilience'* in actions and '*self-awareness'* and subsequently needed 'self-regulation' or *discipline*, which prevents arousal and anxiety. Three other policy-mentioned indicators of personal development are thus aspects of *self-confidence*.

Resilience

The priorly by White (2009) mentioned concept of *resilience* according to Wright and Masten is "the capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development" (Wright and Masten, 2015, p. 5). The typology by Werner and Smith (1982) distinguished resilient people based on the degree of risk they are vulnerable to and their degree of adaptation to these risks with high risk, high adaptation people being resilient, and others being 'competent low risk', 'vulnerable' due to low adaptation and a 'maladaptive' low risk group.

Self-awareness

Self-awareness involves "becoming the object of one's own attention" in which one "identifies, processes and stores information about the self" and "reflects on the experience of perceiving and processing stimuli" (Morin, 2011, p. 808), which includes a "goal of better self-knowledge and improvement" (Ashley and Reiter-Palmon, 2012, p. 2). Four hypothesised aspects of self-awareness, are 'recognition of standards', 'recognition of one's attributes/abilities', 'introspection and self-reflection', and 'detecting gaps in personal behaviors, traits and goal progress' (Ashley and Reiter-Palmon, 2012).

Reflective abilities

Self-reflection is an aspect of *self-awareness* and is a 'cognitive process' (Rogers, 2001) and a "deliberate and purposeful act" (Loughran, 1996, as cited in Rogers, 2001, p. 41) used to make sense of a phenomenon while also reflecting on implicit personal understandings in this phenomenon. The person subsequently "surfaces, criticizes, restructures and embodies in further action" (Schön, 1983, p. 50) these to improve performance. As a process, reflection contains four phases, 1) problem-identification and desire for a solution, 2) additional information collection, 3) a decision to act and 4) taking action (Rogers, 2001).

2.2.b. Goal-achievement skills

Goalsetting abilities

According to Schippers et al. "goal setting is a key element of self-regulation and behavior change" (2019, p. 1). This follows the five principles of goal-setting theory by Locke and Latham (1990), i.e. one needs goal clarity, a challenging goal, commitment to the goal, feedback and complexity. Eckhoff and Weiss (2020) add that goals should be measurable and quantifiable, and should have a time limit.

Discipline

According to Hagger et al. (2021) and Kuhl (2000) self-discipline is alike self-regulation or self-control, i.e. the "ability to exert control over, suppress or inhibit thoughts, emotions, impulses, urges, temptations" and "to organize and structure long-term goals, recognize and predict costs and consequences of future actions, and monitor and detect shifts in attention and motivation away from goal-directed actions and rectify them" (Hagger et al., 2021, p. 3). Self-discipline differs from self-control in that the emphasis is more on goal-directed actions (Zimmerman and Kitsantas, 2014).

Planning abilities

According to Gangopadhyay et al. (2018, p. 1), "planning is a complex executive function (EF) task that entails evaluation and selection of an appropriate sequence of behaviours that will lead to a desired goal", which includes a "selection of the approach that seems to be the most advantageous"

(Malloy-Diniz et al. 2008, p. 26). Furthermore, planning also mean time-management skills, of which Alvarez Sainz et al. (2019, p. 639) discern seven, i.e. "choice of objectives and sub-objectives; establishment of priorities among the objectives; generation of tasks and subtasks; prioritization between tasks; creation of task lists; task planning; and completion of tasks". Although this contains notions of *goal-setting*, it adds prioritisation as a main aspect to planning. Planning skills thus involve an analysis of all options for an action and select the most advantageous sequence of actions, after which tasks are prioritised to ensure goal achievement.

Decisiveness

In short, decisiveness of individuals can be summarised as "the ability to commit to an option quickly and efficiently" (Amemiya and Redish, 2016, p. 814). Based on Simon's (1955) rational choice theory, a rational decision-maker needs to decide from a selection of alternatives while managing 'deliberation costs', sacrificing decision quality (Macleod and Pingle, 2007). Decisiveness includes an "urgency or desire to reach cognitive closure" (Wichary et al., 2008, p. 47). Decisiveness thus involves speed, a desire for a solution, but also decision-confidence (Wichary et al., 2008) and can also be stated to be a result of *self-confidence*.

Feelings of responsibility

Mergler et al. (2007, p. 7) define the concept as "the ability to regulate one's own thoughts, feelings and behaviour, along with a willingness to hold oneself accountable for the choices made and social and personal outcomes generated". The concept is closely linked to *self-awareness* as it shares some characteristics, but is distinct due to the focus on personal accountability in the concept of personal responsibility. Furthermore, it also utilises a notion of *discipline*, as a notion of self-regulation is incorporated. What distinguishes *feelings of responsibility* from discipline then is especially the willingness to hold oneself accountable for decisions made and subsequent outcomes.

2.2.c. Communication skills

Generally, a distinction is made between verbal communication skills and non-verbal communication skills. Duran's (1992, p. 254) notion of communicative adaptability covers both types, as it combines 'fundamental competences' or the "ability to adapt effectively to the surrounding environment over time" and 'social competences', "identity traits that enhance communicative performance" . Communicative adaptability is then defined as "the ability to perceive socio-interpersonal relationships and adapt one's interaction goals and behaviors accordingly" (Duran, 1992, p. 254) and is measured via the communicative adaptability scale (CAS). The CAS utilises six dimensions, i.e. social experience, social confirmation, social composure, appropriate disclosure, articulation, and wit.

3. Operationalisation

The operationalisation of the ten dimensions of the dependent variable 'personal development' consists of the survey and interview items. For the survey the ten sub-variables of the dependent variable were operationalised as ten scales, each consisting of a varying amount of items based on the conceptualisation above. The items consisted of closed-ended statements, grouped per sub-variable with which the participants can agree on a Likert scale. Although the statements are presented below in English, the Dutch version that was provided to the participants can be found , in appendix III. The post-test survey differs in that additional open-ended questions are added to gauge the experiences of the participants, which can be found in appendix IV. With the instructors and organisers of the course in-depth interviews were conducted with open-ended questions in order to generate as much in-depth data as possible.

3.1. Operationalisation I: Survey items

This section will make clear the way in which the sub-variables presented in the conceptualisation were measured. For each dimension of sub-variable, at most one to two items consisting of statements were provided, in order to keep the duration of the survey manageable for the participants. The operationalisation in this section is ordered according to the order in which the variables were presented in the conceptualisation, while the numbering refers to the ordering of the statements in the survey. An overview of this operationalisation and the way it was reflected in the survey can be found in appendix II in table 1.

3.1.a. Goal-achievement skills

Goalsetting abilities were argued to have five principles (1990), i.e. one needs goal *clarity*, a *challenging* goal, *commitment* to the goal, *feedback* and a *complex* goal. Statement 1 measured the general extent to which participants set goals for themselves, as more goal setting was believed to indicate an improved ability to set goals. The subsequent statements 2 to 7 covered the five principles above. Statement 2 measured the clarity of the goal for the participants. Statements 3 and 4 appeared equal, but differed in that 3 focused more on the subjective challenge that the goal provided for the participant, while 4 focused more on the subjective complexity of the goal. Statement 5 measured the participants' commitment to their goal, while statements 6 and 7 measured the extent to which participants' allow themselves to receive feedback. Statement 6 covered the internal feedback that the participants receive, while statement 7 covered the external feedback.

1. How often do you set personal goals for yourself? Think for example of graduating your education, getting your drivers license or a job, etcetera, but also for example goals such as 'getting fit, improving myself in…'
2. I have a clear image of my personal goal(s).

3. My personal goal(s) are challenging for me.
4. My personal goal(s) are difficult to achieve.
5. If needed, I will put in a lot of effort to achieve my personal goal(s).
6. I often reflect on my progress towards achieving my personal goal(s).
7. I often let others provide me with feedback about the achievement of my personal goal(s).

Discipline was conceptualised as a goal-directed action to exert control over and inhibit thoughts, emotions, impulses that hamper progression towards ones goal. Statement 8 measured the participants' general discipline in working towards their goals, while statement 9 asked the same question but reversed. It measured the degree to which participants give in to temptations that impede the achievement of their goals.

8. I work disciplined towards the achievement of my personal goal(s).
9. I easily give in to temptations that impede the achievement of my goal. Think with temptations for example about thoughts, emotions, impulses etcetera.

Planning abilities were conceptualised to contain a few key elements: conducting *analysis* of all options for an action, selecting the *most advantageous* action and *prioritisation* of goal tasks to ensure goal achievement. The first statement on planning, statement 10, measured the subjective judgement of participants' own planning abilities. Statement 11 subsequently measured the participants' ability to prioritise, statement 12 measured the participants' ability to analyse all options and lastly statement 13 measured the participants' ability to select the most advantageous course of action. As opposed to statement 10, statements 11, 12 and 13 were asked in a negative way, again to prevent response set answers.

10. I am very good at planning.
11. I find it difficult to determine in which order of tasks to work towards my personal goal(s).
12. I find it difficult to come up with plans for achieving my personal goal(s).
13. I find it difficult to select the most advantageous plan towards achieving my personal goal(s).

Decisiveness was conceptualised to contain two main elements: *speed* due to a desire for a solution and *decision-confidence*. Statement 14 measured the former element, while statement 15 measured the latter.

14. I find it easy to quickly decide upon the best plan from a range of plans of action.
15. I am generally sure that I made the right decision(s).

Feelings of responsibility were conceptually noted as different from discipline in that responsibility focusses on the willingness to hold oneself accountable for decisions made and subsequent outcomes. Statements 16 and 17 therefore measured the feelings of responsibility of participants by questioning

their reaction to unexpected negative outcomes. However, the statements differed in that statement 16 focussed on the participants' feelings following negative consequences for themselves, while statement 17 focussed on negative consequences for others.

16. I am disappointed in myself when decisions that I take unexpectedly do not turn out well for myself.
17. I get angry with myself when decisions that I take unexpectedly do not turn out well for others.

3.1.b. Self-confidence

The sub-variable *self-confidence* was defined as 'the belief in one's self and his/her powers and abilities' and that 'one can achieve an affirmative outcome in a certain situation'. In order to measure this belief, respondents were provided with two statements, which cover the aspects of self-confidence:

18. I am confident that I will achieve my personal goal(s).
19. I belief that I possess sufficient skills to achieve my personal goal(s).

The other sub-variables of self-confidence, i.e. *self-awareness, discipline* and *resilience* were measured independently however, as these variables were believed to require more extensive measurement than one or two statements.

Resilience was conceptualised as 'the capacity to adapt successfully to disturbances' and complemented by a typology which 'distinguishes resilient people based on the degree of *risk* they are vulnerable to and their degree of *adaptation'*. Risk was measured via statement 22, while adaptation was measured via statements 20, 21 and 23. Statement 20 and 21 appear equivalent but differ in that 20 measured adaptation to *new* situations, while 21 measured adaptation to *unexpected* situations. Furthermore, statement 21 was posed in a negative way, in order to control for response set answers.

20. I can easily adapt to new situations.
21. When confronted with unexpected situations, I find it hard to adapt.
22. I suffer frequently from situations that complicate the achievement of my personal goals.
23. When confronted with the above mentioned situations, I can easily overcome them.

Self-awareness contained four hypothesised aspects: 'recognition of standards', 'recognition of one's attributes/abilities', 'introspection and self-reflection', and 'detecting gaps in personal behaviours, traits and goal progress'. *Recognition of standards* was measured via statements 25 and 26, as 25 made participants reflect on internal standards influencing behaviour and 26 made participants reflect on external standards. Statement 26 was also posed negatively to prevent response set answers. Statement 25 was used together with statement 24 to measure the degree of participants' *introspection and self-reflection*. Statement 27 was used to measure the participants internal *recognition of attributes/abilities*

and statements 28 and 29 measured participants' ability to *detect gaps in personal behaviours, traits and goal process*.

24. The things that I experience influence my own behaviour.
25. I often consciously think about my thoughts and emotions, and about how these influence my behaviour.
26. I do not think that my behaviour is being influenced by the expectations of others.
27. I know clearly which skills I do and which skills I do not possess.
28. I know clearly which positive characteristics I possess.
29. I know clearly which negative characteristics I possess.

Reflective abilities, or self-reflection, was posed as an aspect of the above described variable of *self-awareness*, and is used to make sense of a phenomena and to surface, criticise, restructure for performance improvement. Statements 30, 31 and 32 all measured the frequency in which participants conduct self-reflection, as reflecting more was thought to show improvement of reflective abilities. However, statement 31 differed in that it focused specifically on the frequency in which participants reflected on difficult situations or phenomena and criticised their reaction to those situations. Statement 32 differed in that it focuses on the frequency in which participants reflect on themselves and their abilities for self-improvement, i.e. to improve performance.

30. I often take time in the evening to reflect on and think about the past day.
31. I do not often take the time to reflect and think about difficult situations that I encountered and my reaction to those.
32. I often take the time to think about my own skills and how I could improve or expand these.

3.1.c. Communication skills

Communication skills were conceptualised following the communicative adaptability scale (CAS) with the dimensions: *social experience, social confirmation, social composure, appropriate disclosure*, *articulation*, and *wit*. Statements 33 measured *social experience* by focussing on the participants' general confidence in their conversation skills. *Social confirmation* was subsequently measured by statement 34, which focused on the degree to which participants accept others in a conversation, with a high degree being highly socially conforming. *Social composure* was tested by statement 35, which looked at the participants' composure as conversation leader, specifically their calm and self-assurance. The next statement tested *appropriate disclosure* by questioning participants' knowledge of the degree of formality that is required in a conversation. Statement 37 measured *articulation* by measuring the participants' ability to bring forth their ideas clearly in conversations. Lastly statement 38 measured participants' usage of *wit* in order to solve tense situations, and was framed negatively to control for response set answers.

33. I belief that I am good at conducting conversations.

34. I accept people for who they are in a conversation.
35. I am calm and self-assured when leading a conversation.
36. During conversations I know which level of formality is required.
37. I think that I am able to clearly bring forth my ideas in a conversation.
38. I find it hard to use wit to calm tense conversations.

3.2 Operationalisation II: Additional survey questions for the second survey

The additional questions for the second survey consisted of open-ended questions about the participants' experiences during the course. The questions were divided into two short segments of three to four open-ended questions. The first segment contained questions about the participants' experiences during the military part of the course, the Impact Bivak, while the second contains questions about their community service experiences during their Social Mission. For both sections, three equal questions were asked, with an addition for the second segment questioning participants on what kind of community service work they conducted. The three common questions focussed on what activities they remembered the most, on how they have expanded their personal boundaries and on which skills they developed and how.

3.3. Operationalisation III: Interview questions

In-depth interviews were conducted using open-ended questions in order to generate as much in-depth data as possible. The questions for the interviews can be found in appendix V. The interview was divided in two main parts. In the first section, first three questions were asked about the MDT Missie course and their specific role of participants within it. Questions 4 and 5 subsequently questioned the interview participants on what they think are essential elements of the course and why, in order to shine light on what elements they think are required for achieving personal development. Questions 6 and 7 subsequently covered this ground more specifically, by questioning what methods are used to achieve personal development amongst the course participants and by questioning what the interview participants want to achieve personally amongst the course participants.

The second section was structured along the same lines as the survey questions, i.e. via the ten sub-variables. However, there were no questions included on the various dimensions of each variable, as this would make the interviews to rigidly framed and extensive. Rather, interview participants were only questioned on the variables in general, and were specifically questioned to what degree they experience a difference for the specific variables among the course participants between the first and the last day of the course. Additionally, to provide more in-depth answers, for each sub-variable participants were also questioned on which elements they attribute the possible differences pre- and post-participation amongst the course participants.

4. Methodology

4.1. Strategy and research design

In order to test the degree to which the participants experienced personal development following participation, this research used the before-and-after design, as in this study the dependent variable 'the achievement of personal development policy goals for participating youths' was compared before and after treatment, or participation in the MDT Missie course, with the participants as the units of observation. Surveys were the primary tool for measuring these differences, as these allowed for easy measurement of the large amount of variables for all the participants. Furthermore, this research also included a phenomenological element. Prior work by Dworking et al. (2003) and Kackar-Cam and Schmidt (2014) was added to, by including the experiences of supervisors and their perceptions on personal development among the participants. This phenomenological approach inspired by Dworkin et al.'s (2003) research views social phenomena as "the most meaningful reality" (Dworkin et al., 2003, p. 19) from the individuals' perspective. This approach is the only viable way to assess personal development, as the concept is of internal psychological nature and difficult to observe. Additionally, for the post-test survey open-ended questions about participants' experiences were included, and interviews were conducted with the organisers, military instructors and coaches of the MDT Missie courses. This added to the phenomenological approach, as the different perspectives from the organisers acted as a balance to the participants' views.

4.2. Data collection methods

The main data collection method of this research was a survey, which collected data on items in the form of Likert-scale responses. The Likert scale items measured participants' agreement with statements on a scale of one to five. These Likert-scale items formed ten scales, which were subsequently compared pre- and post-test for all respondents. This approach was used to answer the following sub-questions:

- *To what extent are the indicators of personal development already present in the course participating youths?*
- *To what extent do the post-test results on the relevant personal development variables differ from the pre-test results on these variables?*
- *What methods are employed in the MDT Missie course elements for achieving personal development of participants in line with its goals?*
- *What identified elements of the MDT Missie course are responsible for a possible difference in the pre- and post-test differences?*
- *What differences do course instructors experience in participants pre- and post-participation?*

The first two questions could be answered by analysis of the Likert scale items. In order to answer the rest a different approach was required. The pre-test survey therefore differed from the post-test one, as the latter contained additional open-ended questions to gauge what course elements the participants themselves experienced themselves as influencing their personal growth most. Both surveys were created with Qualtrics and subsequently distributed by course organisers via the Whatsapp groups of the participants of courses 8 and 9.

As a second data collection method, in-depth interviews were conducted with two military instructors, two civilian coaches and two organisers of the course in order to answer the sub-questions:

- *What methods are employed in the MDT Missie course elements for achieving personal development of participants in line with its goals?*
- *What identified elements of the MDT Missie course are responsible for a possible difference in the pre- and post-test differences?*
- *What differences do course instructors experience in participants pre- and post-participation?*

Answering the third sub-question required a phenomenological approach, as the instructors' perspectives matter and therefore interviews were suited best. The same approach was also needed for answering the first and second sub-question above, as the instructors were assumed to be most knowledgeable on the contents of the MDT Missie course and their effects. The interviews with the first organiser was conducted first, on location in Amsterdam on June 23, 2022. Subsequently interviews with a second organiser and a military instructor were conducted on August 17, 2022 again on location. The last three interviews with the second military instructor, the first and the second coach were conducted by phone on October 9, August 30 and October 20, 2022 respectively.

4.3. Sample and sampling

As this research utilised the participating youths of the MDT Missie course as its unit of observation, it followed that the samples also consisted of the participating youths. Specifically, the sample for this research consisted of the participants of MDT Missie course 8 in January 2022 (postponed due to lockdown) and 9 in March 2022, of which the distribution can be seen in table 2 in appendix II. Two courses were studied, in order to increase the sample size and external validity, by conducting a double check. As a single course takes four months, this study used a convenient but purposive sample, but was limited in sample size too due to this time-limit. It was expected that about 60 participants would be yielded for each course, together forming 120 study participants. MDT Missie organisers did however warn of a participant dropout rate, and that therefore the response rate would be around 70 percent, leading to an expected sample of 80 respondents. This was pretty accurate, as the pre-test survey initially yielded a sample of 81 respondents. The second survey initially yielded 27

responses, which was deemed insufficient. Therefore an incentive was provided in the form of five Bol.com gift cards of twenty euros each, which were distributed randomly among the participants that completed the pre- and post-test surveys. This incentive boosted responses on the second survey to 61, leading to a total of 33 respondents that fully completed both surveys. As can be seen in table 4 in appendix II, the amount of responses per questions did decrease slightly with survey progression. In table 3 in appendix II, it can be seen that participants' ages varied from 16 to 27, with most participants aged 17 and 19.

For the interviews with MDT Missie personnel, again purposive and convenient sampling was conducted, as the sample size depends on the availability of a selected-group of people. The aim was to interview two course organisers, two military instructors and two civilian coaches. This small sample size was not problematic, as the in-depth interview method still allowed for the collection of rich data.

4.4. Reliability

As the operationalisation consisted of survey question-lists and an interview question-list which can be easily copied and used in other research, this study is replicable and over-time reliable. Furthermore, the survey consisted of closed-ended questions, thereby preventing possible wrongful interpretation of answers during the coding process, as this is impossible due to survey's simplicity. On the other hand, due to the novel design of the MDT Missie concept which is bound to Dutch military culture, the research itself is not as easily replicable elsewhere, as the unit of analysis likely differs. Furthermore, in order to increase test-retest reliability the research focused on two courses of participants. Additionally, to prevent response set answers some statements were formulated negatively instead of positively. Furthermore, from the survey some items needed to be deleted as they did not contribute to the reliability of the personal development scales.

4.5. Validity

As priorly mentioned, the replicability of this research is limited due to the uniqueness of this research's unit of analysis. The external validity of this research is therefore limited, as the results are bound to the Dutch (military) cultural and societal context and therefore not very generalisable, but on the other hand, the question is to what extent this dependence matters. The internal validity of this research can generally be said to be high, as a pre- and post-test is conducted for two independent courses. However, due to the long time-span of the MDT Missie course, other confounding variables could also have influenced personal development, thereby endangering internal validity. Content validity was of course limited to the theoretical framework on which the operationalisation is based, but can be said to be good as the framework was reflected well in the operationalisation. Furthermore, the operationalisation for the survey contained for the participants easily understandable items, which ensured that the operationalisation measured the right variables and was not misunderstood.

4.6. Data analysis

For the surveys, the ten scales were compared pre- and post-test for all respondents in order to see if there were changes in the scale scores following participation in the MDT Missie course. The scores on the scales formed by the Likert-scale items were compared before and after participation in the course in order to subsequently draw conclusions about the possible improvement in participants' personal development per scale. In order to analyse the responses, IBM's SPSS statistics 27 was used.

4.6.a. Survey data preparation

As the survey was conducted with Qualtrics, some unneeded variables were included such as location and IP address, which were removed for anonymization purposes. Furthermore, in order to inform the winners of the raffle, e-mail addresses were collected, which were subsequently also removed from the datasets. In order to further anonymise, the names of respondents were replaced with numbers. Subsequently, the data files of the two surveys were merged. To the items and variables of the second survey the designation '_v2' was added in order to be able to differentiate them from the first survey variables. Also, all variables were relabelled as can be seen in table 1 in appendix II based on the sub-variable that they measure, and the item number they had assigned in the surveys. Furthermore, the questions asking participants about their age and which course they attended were flawed, as they were not formatted as selectable options, but as open questions. This led to deviating responses, which were reformulated in uniform style. Some participants also skipped all questions regarding their identity, which made their responses completely unidentifiable and therefore had to be removed, as pre- and post-participation comparison was impossible. Lastly, all items measuring the ten scales were recoded, as the Likert-scale order was accidentally reversed in the survey. The questions that were asked in reverse order to control for response set answers therefore needed not to be recoded, as they were accidentally measured in the correct direction. Furthermore, the items where respondents selected "I would rather not say" were recoded as missing values, in order to not influence the means of the Likert-items which formed the scales for the sub-variables.

4.6.b. Survey scales analysis

After the survey data on the items measuring the ten scales was prepared, first the scales were formed. New variables were created for the scales based on the means of the items that measured the scales. This was done for the pre- and post-participation scales, and labelled as for example 'goalsetmean' and 'goalsetmean_v2'. Subsequently, also new variables were created for the difference between the pre- and post-participation scales, labelled as e.g. 'goalsetmeandif'. Subsequently, a reliability analysis was conducted in order to check whether or not the items formed reliable scales together. The reliability of the scales was checked by looking at the Cronbach alpha score. This yielded that the reliability of the scales for the variables 'goalsetting abilities', 'resilience', 'self-

awareness', 'reflective abilities' and 'communicative skills' could be improved, as can be seen in table 4 in appendix III.

For goalsetting abilities the reliability was good (α = 0.700) in the pre-measurement, and mediocre in the post-measurement (α = 0.595). Items [goalset4] and [goalset7] were removed which increased the reliability for the pre- and post-measurement (α = 0.764 and α = 0.733 respectively). For resilience reliability was very low (α = 0.296 and α = 0.167 for both measurements respectively). Item [resil22] was therefore dropped, which increased reliability drastically (α = 0.815 and α = 0.750 respectively). For self-awareness reliability was low with (α = 0.486 and α = 0.532 for both measurements respectively). Three items [selfaw24, selfaw25 and selfaw26] were removed, which increased reliability for the pre-measurement a bit (α = 0.614) and for the post-measurement tremendously (α = 0.809). For reflective abilities the pre-measurement reliability was high (α = 0.732) and the post-measurement reliability was low (α = 0.582). Item 32 was removed as it correlated the least with the other items, creating a two-item scale. Reliability was tested via Spearman's Rho which resulted in still mediocre correlation between the items (r_s = 0.533 and r_s = 0.390). For communication skills reliability was quite okay for the pre- and post-measurement (α = 0.738 and α = 0.649). Still improvement was possible by removing items 34 and 38, which generally increased reliability (α = 0.717 and α = 0.782 for both measurements respectively). No improvement was needed for planning abilities, which had a high reliability (α = 0.785 and α = 0.757 for the pre- and post-measurements respectively). In short, items 4, 7, 22, 24, 25, 26, 32, 34 and 38 were thus removed. Subsequently, new scales were calculated based on the new means of the items, as can be seen in table 5 in appendix II.

Some scales however consisted of only two items, which thereby required a different method for reliability testing. For these scales, i.e. the variables 'discipline', 'decisiveness', 'feelings of responsibility', 'self-confidence', the reliability was checked by looking at the correlation of the items via Spearman's Rho. For all four scales, the correlation was moderate. For discipline correlation was moderately low (r_s = 0.429 and r_s = 0.409 for both measurements respectively). For feelings of responsibility the correlation was moderately low for the pre-measurement (r_s = 0.478) and moderately high for the post-measurement (r_s = 0.644). For self-confidence the correlation was moderate for both the pre- and post-measurements (r_s = 0.442 and r_s = 0.517 respectively). The decision was made to not remove any items, as these scales already consisted of only two items. The only exception was decisiveness, as its items had such low correlation in both the pre- and post-measurements (r_s = 0.310 and r_s = 0.352 respectively) that the item with the highest face validity [dec14] was solely used for measuring the variable 'decisiveness' and [dec15] was thus dropped.

After all scales were recoded based on the reliability tests, two analyses were conducted, i.e. the non-parametric Wilcoxon Signed Rank test and a paired samples t-test based on a 95% Confidence Interval. The t-test was the preferred analysis method, but not all conditions for a t-test were fulfilled

per scale. Not only is the sample size not ideal (n = 39 at its lowest, see table 4 appendix II), but as can be seen in figures 3 to 12 in appendix I, only the differences between the pre- and post-measurements for discipline and decisiveness were normally distributed, the rest was not. Therefore also a Wilcoxon Signed Rank test, and thus a parametric and non-parametric test were both executed as a robustness check. The Wilcoxon Signed Rank test tests whether the median of differences between the pre-participation and the post-participation scales equals 0 or if it significantly deviates, which indicates significant change between pre- and post-participation measurements.

4.6.c. Interview analysis

The analysis of the interviews consisted of transcribing, coding and comparing the answers per variable and respondent. Transcription was first automated via Amberscript and subsequently corrected manually. Coding entailed that all responses in the transcript were first ordered per respondent and the dimension of the dependent variable, that was measured, and subsequently summarised via a 'label'. Subsequently the answers were placed in tables 6 and 7 in appendix II. This allowed for easy comparison, in order to discern the similarities and dissimilarities between answers.

4.6.d. Survey open-ended questions analysis

The analysis of the seven open-ended survey questions consisted of a similar approach as for the interviews. Responses to the questions were coded and compared per question. Coding in this case entailed that all responses in the SPSS dataset were first extracted into a Word document, and subsequently summarised via a 'label'. These labels were subsequently categorized in tables 8 to 14 in appendix II. Next, the labels were given a count, which showed what labels and which categories were mentioned most. Some participants' responses contained multiple labels, and were thus placed in multiple categories. In total this meant that sometimes the total of counted labels was larger than the amount of respondents.

4.7. Ethical Issues

This research was approved by the Ethics Committee BMS (reference number 220060). However, three possible issues could be discerned regarding ethics. First of all, the researcher was exposed to personal information of course participants, and therefore a confidentiality agreement was signed between the researcher and the organisation with regard to this issue. Furthermore, unfortunately some participants were unexpectedly aged 16 and 17, which meant that permission forms were required from parents. However, as the participants already agreed to all terms of participation for the MDT Missie course, this is not seen as problematic. Lastly, in order to boost responses to the surveys, a financial incentive was provided in the form of a raffle of five €20 gift cards for Bol.com. These gift cards were financed by the researcher himself and were only provided once responses remained low and an incentive was definitely necessary.

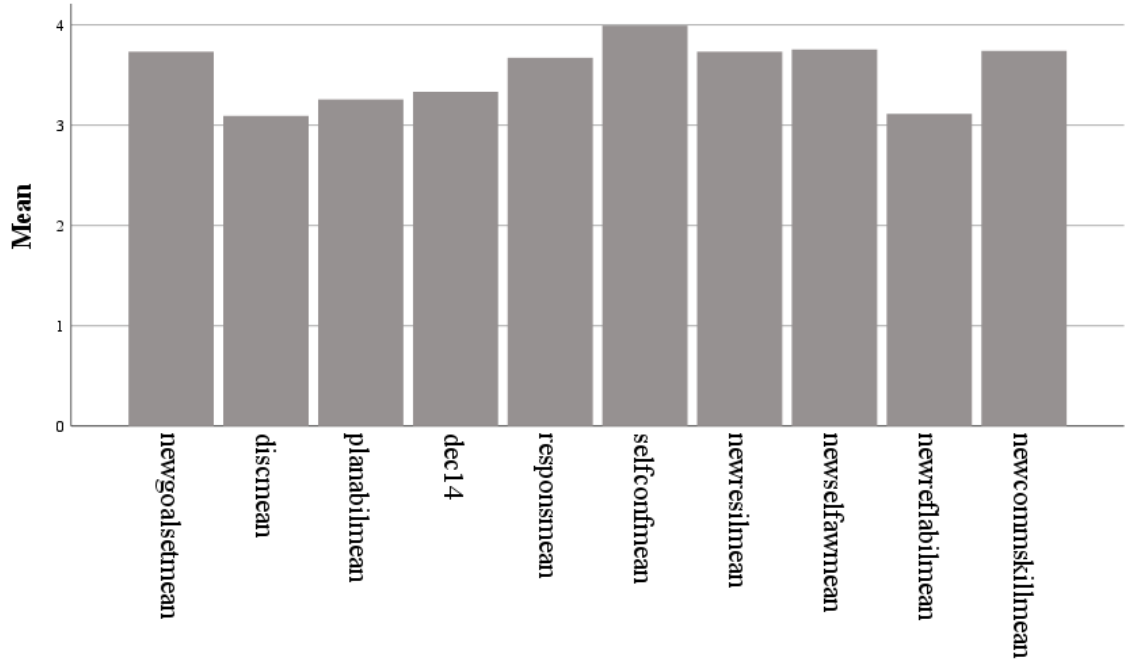
5. Results

5.1. Extent of personal development present pre-participation

In order to answer the question '*To what extent are the indicators of personal development already present in the course participating youths?'* the means for the scales of the pre-measurement were compared, which can be seen in figure 13 below and table 4 in appendix II. Interestingly, all scales had means between the values 3 and 4, which meant that participants on average score medium to high on all personal development indicators. The scales for the variables 'Goalsetting abilities' ($\bar{x} \approx 3.7$), 'feelings of responsibility' ($\bar{x} \approx 3.7$), 'self-confidence' ($\bar{x} \approx 4.0$), 'resilience' ($\bar{x} \approx 3.7$), 'self-awareness' ($\bar{x} \approx 3.7$) and 'communication skills' ($\bar{x} \approx 3.7$) were on average all rated relatively high by the participants. The scales for the variables 'discipline' ($\bar{x} \approx 3.1$), 'planning abilities' ($\bar{x} \approx 3.3$), 'decisiveness' ($\bar{x} \approx 3.3$) and 'reflective abilities' ($\bar{x} \approx 3.1$) were on the other hand rated more medium rather than high. The indicators of personal development goalsetting abilities, feelings of responsibility, self-confidence, resilience, self-awareness and communication skills were thus already more present in participants before treatment rather than the indicators discipline, planning abilities, decisiveness and reflective abilities. As can be seen in table 6 in appendix II part of this is confirmed by the interviews with the course instructors, as military instructor 1 stated that planning abilities need improvement.

Figure 13

Simple bar chart of the means of the pre-measurement scales



5.2. Course methods for personal development

Answers to the question '*What methods are employed in the MDT Missie course elements for achieving personal development of participants in line with its goals?'* were found by directly questioning the respondents on what course elements they deemed important and what methods they employed for personal development of participants, of which the results can be seen in table 7 in appendix II.

5.2.a. Important course elements

Course organiser 1 summarized the MDT Missie course as focussing on the theme "finding the best version of yourself", to which coach 1 added that the course is a form of 'pressure cooker youth work'. All interviewees added that the combination between military aspects and coaching is important for this theme. Coaches 1 and 2 both summarized this combination as learning by action followed by reflection. Course organiser 2, military instructors 1 and 2 and coach 1 stated that in this action component the inclusion of boundary expanding activities is important. Interestingly, the course organisers also stated that the selection process for participants is an important element, as it is the phase where unmotivated participants are filtered out pre-participation in the course.

5.2.b. Personal development methods

Within the above mentioned action and reflection elements various methods for boosting personal development could be discerned. Military instructor 1 noted that within the action element, the military skills, drills and rules are important, but this strictness decreases each day in order to allow for personal growth and is done for example by using humour. Organiser 1 and 2, military instructor 1 and coach 1 emphasized the importance of the boundary expanding activities in the action element, e.g. activities as an ice bath, a climbing tower, nightly expeditions on foot etcetera. These boundary expanding activities bring people out of their comfort zones, in which they are confronted with difficulties which participants need to overcome. In the subsequent coaching, organiser 1 and coach 2 added that the reflection on these actions is important in order to learn from them and thus develop personally. Coach 1 stated that for the coaching to be successful a safe and open setting is required and provided, although organiser 2 also contributed that the coaching is done via 'tough love'. Lastly, organiser 1 also emphasized that the setting of a goal by the participant at the start is important, so that it can be worked on during the course.

5.3. Change in personal development dimensions

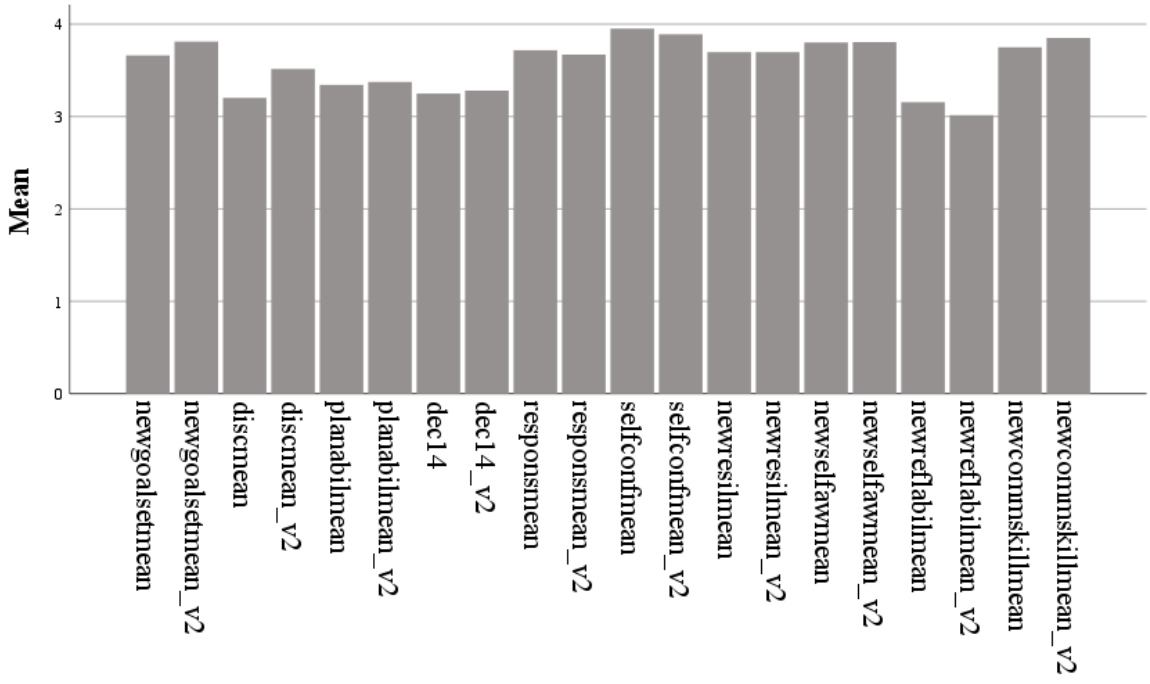
In order to actually test the personal development of participants and answer the question '*to what extent do the post-test results on the relevant personal development variables differ from the pre-test results on these variables'* a parametric and a non-parametric analysis were conducted as robustness

check. The complete results can be found in tables 76 to 87 in appendix VII. This section also covers the answer to '*What differences do course instructors experience in participants pre- and post-participation?'* based on table 6 from appendix II, as the data from both perspectives can be easily compared this way.

Looking at the first variable 'goalsetting abilities' from the t-test it can be concluded that there was a significant improvement (t = -2.978, p = 0.005), but the effect size is negatively small (Cohen's d = -0.490). A negative effect would seem weird for improvement, but the t-test subtracted the post-participation scales from the pre-participation scales, which thus resulted in negative effect sizes where there should be positive ones. For the Wilcoxon Signed Rank test, again there was a significant improvement for goalsetting abilities (standardised W = 2.612, p = 0.009). Furthermore, the improvement can also be seen in figure 14 below in which the pre- and post-participation scale means are compared. All interviewees also expected the goalsetting abilities of participants to improve. However, organiser 1 and coach 1 expected this improvement to vary per participant. Coach 2 specifically only expected about 55 to 60% percent of the participants to improve. For 'discipline' there can also be concluded that there was a significant improvement post-treatment based on the t-test (t = -3.039, p = 0.005) with a negative medium effect size (Cohen's d = -0.514). The same conclusion on significance can be made based on the Wilcoxon Signed Rank test (standardised W = 2,801, p = 0.005). All interviewees also expected improvement, but military instructor 1 and coach 1 did question the longevity of the improvement, and expected the improvement to fade with time.

Figure 14

Simple bar chart of scale means pre-participation and post-participation



‘Planning abilities’ on the other hand did not improve significantly, both for the t-test (t = 0.000, p = 1.000) with no effect (Cohen’s d = -0.000) and for the non-parametric test (standardised W = 0,473, p = 0.636). A small increase in the mean can be noticed in figure 14 though. Of the interviewees four out of six only commented on the planning abilities of the participants, but all four did expect improvement following participation. For ‘decisiveness’ there was also no significant improvement via the parametric (t = -0.723, p = 0.475) with a negligible effect size (Cohen’s d = 0.122) and via the non-parametric test (standardised W = 0.728, p = 0.467). Five out of six interviewees did expect decisiveness to improve, but military instructor 2 thought improvement is unclear, as it varies per participant. Coach 1 added that the improvement varies per participant, while coach 2 added that the longevity of the improvement is uncertain. ‘Feelings of responsibility’ also had no significant improvement via the parametric test (t = 0.000, p = 1.000) with no effect (Cohen’s d = 0.000) and via the non-parametric test as well (standardised W = 0.178 , p = 0.858). All interviewees again expected the variable to improve, but coach 1 added that improvement varies per participant and organiser 2 questioned the longevity of the improvement. Participants’ ‘self-confidence’ also did not significantly increase, based on the parametric test (t = 0.892, p = 0.379) with a negligible effect size (Cohen’s d = 0.151) and based on the non-parametric test (standardised W = -0.670 , p = 0.503). All interviewees on the contrary expected the self-confidence to improve, but coach 2 again questioned the longevity of the improvement. The ‘resilience’ also had no significant improvement with the t-test (t = -0.094, p = 0.926) with almost no effect (Cohen’s d = -0.016) and with the non-parametric test (standardised W = 0.158, p = 0.874). Again all interviewees expected resilience to improve, but military instructor 2 thought it varies per participant. Furthermore, both organiser 2 and coach 2 questioned the longevity of the improvement. Coach 2 thought that short-term improvement could also be conditioning of the participants.

For ‘self-awareness’ there was again no significant improvement via the t-test (t = -0.183, p = 0.856) with negligible effect size (Cohen’s d = -0.032) and via the non-parametric test as well (standardised W = 0.131, p = 0.896). All interviewees expected the self-awareness to improve, but coach 2 again questioned the longevity of improvement and military instructor 2 and coach 1 expected improvement to vary per participant. The ‘reflective abilities’ of the participants also did not improve significantly (t = 0.695, p = 0.492) with a negligible effect size (Cohen’s d = 0.121) and also not non-parametrically (standardised W = -0.450, p = 0.653). Figure 14 above even shows a decrease in the scale mean pre- and post-participation. Five out of six interviewees expected improvement of reflective abilities, while military instructor 1 deemed the change unclear, but added that the course at least introduces the participants to reflecting. Lastly, the ‘communication skills’ of the participants barely did not improve significantly based on the t-test (t = -1.739, p = 0.092) with a small effect size (Cohen’s d = 0.303) and based on the Wilcoxon Signed Rank test (standardised W = 1.576, p = 0.115). However, looking at figure 14 above, it can be noticed that the scale mean did increase somewhat. Furthermore, f our out of six interviewees expected improvement of communication skills, while organiser 2 and

military instructor 1 experienced no clear improvement. Military instructor 2 and organiser 1 added that possible improvement varies per participant.

5.4. Participants' experienced personal development

As an additional check the question '*what personal development do participants themselves experience following participation in the MDT Missie course?'* will be covered here based on tables 10 and 14 in appendix II, to highlight differences and similarities between participants' own experienced personal development, and the other results. It must be noted that most participants were not very elaborate in their answers to the survey, and therefore elaboration on and explanation of the responses of the participants is difficult.

During the Impact Bivak, participants claimed to have developed various skills. The most mentioned skills fall withing the categories of teamwork (11 mentions), self-expression (8) and resilience (10). The skills learned within the category teamwork skills not only contained generally 'being better at working in a team' (7), but also more specifically motivating others (2), listening to others' input (2) etcetera. Self-expression was learned in the form of e.g. talking about one's emotions and boundaries, daring to come forth and asking for help, but mostly in the form of 'leadership skills' (4). Resilience was most often mentioned in the form of physical and mental perseverance during difficult situations (9). Participants thus experienced to persevere better under dire circumstances. Other mentioned improvements were more self-confidence (6), more discipline, and more self-control (3) over emotions (2). During their Social Mission by far the most mentioned skills developed were communication skills (14) such as e.g. listening to others (2), conversation techniques (2) (unspecified), starting conversations (4), teaching (2) and coaching (2). Increased leadership skills (5), self-confidence (3) and resilience (4) have also been mentioned, with resilience especially in the form of handling unexpected (2) and hectical (1) situations.

5.5. Course elements responsible for personal development

The question 'w*hat identified elements of the MDT Missie course are responsible for a possible difference in the pre- and post-test differences?'* could be answered by looking at the estimated causes of development by the interviewees in table 6 in appendix II and by looking at participants' memorable and boundary expanding activities summarized in tables 8, 9, 12 and 13 in appendix II.

5.5.a. Course instructor estimates

For the expected improvement in goalsetting abilities, military instructor 2, and coaches 1 and 2 expected this to be due to the clear vision that participants develop during the group coaching sessions, while organiser 1 and coach 2 also note the influence of challenging course elements that help

participants with finding their true selves. Military instructor 1 pointed to removal of distractions as the main cause of improvement, i.e. for example the absence of mobile phones, as it enables clear thinking and focus on goals. For the improvement in discipline, all interviewees deemed the military culture, rules and enforcement of these rules the main cause of the improvement. Military instructor 1 and both coaches did also note the influence of the participants experiencing the benefits of discipline and military instructor 2 noted that it also increases due to coaching. For change in planning abilities military culture, rules and enforcement of these rules were again deemed as main cause by three interviewees, while coach 1 expected this to be mainly due to the planning required for the Social Mission. For decisiveness the most mentioned cause was that participants get to know oneself and their abilities via coaching, which would give them more confidence to be decisive. Organiser 1 and both coaches added that the responsibility and time pressure during Impact Bivak exercises also contributes to improvement, while military instructor 1 specified that increased motivation due to team spirit is a cause. Feelings of responsibility are also mainly expected to develop by Impact Bivak elements. The buddy system in which one participant is always responsible for another was most often mentioned as cause. Military instructor 2 thought having increased awareness of own and others' actions was also a cause, while other interviewees also deemed knowing team roles, team spirit and leadership roles as causes. For self-confidence, all interviewees deemed the coaching sessions in a safe space with open communication and support from peers as the main cause of improvement, as participants learn more about themselves and their abilities. Coach 2 added that boundary expanding activities also contribute. For resilience organiser 2 and both military instructors deemed the coaching to be the main cause of improvement, while organiser 1 and coach 1 on the other hand saw boundary expanding activities as the main cause. Self-awareness was expected to improve due to the coaching as participants get to know themselves and their abilities, especially as according to coach 1 the coaching focuses on discovering participants' impact, passions and talent. The same can be said for reflective abilities, which was expected to develop mainly by the coaching. Communication skills on the other hand were expected to develop mainly because of the military culture and rules in which foul communication is not appreciated and clear communication is necessary and enforced. Leaderships roles were also expected to contribute.

5.5.b. Participant experiences

During the Impact Bivak, the activities that impressed participants most were the boundary expanding military activities, with as most often mentioned the ice bath experience using the Wim Hof breathing method (19 mentions) and the crash move (12), an unexpected nightly move on foot. Other memorable military activities were the obstacle course (7) and e.g. marching (3), navigating (3), etcetera. Other mentions were sportive activities (4), followed by social activities (7) such as the coaching sessions (2), teamwork activities (2) or volunteering (2) . Looking at the boundary expanding experiences during the Impact Bivak, three categories of experiences were most mentioned, i.e. the experience of exceeding one's own expectations (18), feeling more resilient (13) and experiencing

teamwork challenges (11). Feeling more resilient was experienced most often in persevering difficult situations (9) and overcoming unexpected ones (2), but also overcoming one's own fears (2). Teamwork challenges consisted of various experiences, such as helping others (2), but also understanding others better (2) and opening up to others emotionally (2).

During the Social Mission participants conducted various volunteering activities, as can be seen in table 11. The memorable activities for participants during the Social Mission were interestingly almost all social experiences. The most mentioned memorable activities were for example conversations (7 mentions), having positive work experiences (4), teaching (3) and giving attention to others (5). The most mentioned boundary expanding experiences during these activities was interaction with others (13), e.g. interacting with language barriers (3), or conversating with strangers (4). Another often mentioned experience was on the personal level, i.e. exceeding one's own expectations (6), or having one's mindset changed following experiences (3). It must also be mentioned that some participants did not experience any boundary expanding activities during their Social Mission (6).

6. Conclusion and discussion

This study added to priorly discussed research by i.a. Dworkin et al. (2003) and Kackar-Cam and Schmidt (2014) by studying a novel military-volunteering concept via the before-and-after design. It was this study's aim to answer the research question *'to what extent is the MDT Missie community service course effective in achieving the personal development goals for participating youths established in its policy?'*. Strictly it can be concluded that only to a small extent did personal development occur, as only goalsetting abilities and discipline improved based on the statistical analysis. However, there are great indications that the theoretical basis for the executed analysis is insufficient, and that the personal development is greater than the current analysis suggests. The course instructors, organisers, coaches and participants all experienced personal development in the participants, especially in terms of resilience, self-confidence and communication skills. The MDT Missie community service course is thus probably more effective at achieving its personal development goals for participating youths than can be concluded now.

Looking at the results, it can be noticed that participants were already quite well developed on all the tested aspects of personal development. However, this was tested phenomenologically, so it can be the case that participants rated themselves higher pre-participation as they did not know yet how much they could possibly improve. Subsequently, it is interesting to see the different results between the three methods applied to test the participants on their personal development. The statistical analysis based on the theoretical framework yielded that the participants only improved in terms of goalsetting abilities and discipline. The course instructors, organisers and coaches on the other hand almost all expected improvement on all personal development indicators of the theoretical framework. As they only see the participants during the course, it is important to question, if this is a matter of conditioning or actual improvement they notice, just as coach 2 did. Interestingly only few participants mentioned to have developed in discipline, contrary to the analysis. Furthermore, many participants mentioned improvement in resilience, self-confidence and related aspects such as leadership and self-expression, also contrary to the survey analysis. This could indicate that the action and reflection elements, or military exercises and coaching, nevertheless may have contributed to personal development of participants. Especially as participants indicated that the coaching sessions and boundary expanding activities impacted them. Both instructors and participants also mention an increase in communication skills. Especially following the Social Mission this change is noticeable, as participants' most mentioned memorable activities and boundary expanding activities all involved conversating and social interactions. This improvement is only to a low degree reflected in the statistical analysis however, as communication skills improved based on the difference in means, but not significantly.

This partial mismatch in outcomes between the open-ended data that was collected, and the analysis based on ten indicators of personal development suggests that the theoretical basis of the latter analysis was insufficient. This could also already be concluded based on the number of items that needed to be deleted in order to generate reliable scales. For resilience for example, item 22 had to be deleted, which measured the exposure to risk. The theoretical framework argued that people are more resilient if they are exposed to more risk and have more capacity to adapt to the risk. This was however a wrong train of thought, as one does not per se need to experience a high volume of struggles in order to handle difficult situations resiliently. Furthermore, all participants are youths and probably generally have not encountered many struggles in life. Some scales also had low reliability due to only existing out of two items, which could have negatively influenced the analysis outcomes for all these scales. Furthermore, the items questioning the age and the course that the participants attended were only added in the second survey, and participants' gender was not questioned at all. The duration of the research was also insufficient as participants for the post-measurement were questioned directly after the Reunion. An additional measurement after three months to half a year after the reunion would be interesting to test the longevity of changes in participants.

6.1. Recommendations for future research

Based on the identified issues above, further research is thus definitely necessary on the MDT Missie course. First of all, this study should be repeated in order to check if the theoretical framework which appears flawed actually leads to the same results (i.e. only significant improvement on goalsetting abilities and discipline) or if repetition yields results indicating improvement on more indicators of personal development. If the same results are achieved, then MDT Missie's policy needs to be adapted in order to significantly influence other areas of personal development as well. Furthermore, perhaps assistance from researchers from the field of psychology could also be useful in establishing a theoretical framework, due to the psychological nature of the policy-goals that need to be assessed. Additionally, a longer time-span for the study would also be beneficial in order to check for the longevity of possible effects on personal development. Another interesting idea would be to check with the current theoretical framework and methodology if the same results can be achieved with regular MDT community service courses as opposed to this military community service course.

6.2. Policy recommendations

Improvements could thus definitely be made in further research. However, on the basis of the results of this study at least some conclusions can me made about the personal development of youths participating in the novel MDT Missie military community service concept. Of the ten policy sub-goals of the personal development policy goal discerned from the government's policy, it can be concluded that the current policy is successful in significantly improving two sub-goals, i.e.

participants goalsetting abilities and discipline. Furthermore, looking at the in 2.1. mentioned focus points of the MDT Missie organisation, i.e. ‘expanding physical and mental boundaries’, ‘contact and connectivity’, and ‘societal impact and leadership’, it can be concluded that there are indications that the course is successful in improving participants on these focus points. Physical and mental boundaries are expanded in many different ways, e.g. via the boundary expanding military activities, or the social interactions during the Social Mission. During the latter, ‘contact and connectivity’ is also probably achieved, as participants’ most memorable activities were the conversations and social interactions with others, which they claimed also led to increased communication skills. Societal impact and leadership however are a not achieved that greatly. Although leadership skills were mentioned by some participants to have increased, this was only for a few. Personal leadership in one’s life perhaps developed in the form of setting goals for one’s life, but leadership was not often mentioned to improve in this study. Therefore, perhaps more specific policy goals should be included on leadership in group roles, if the organisation wants to maintain that focus in its course. Policy goals for societal impact could also be expanded, as the 40-hour Social Mission is more a taster of community service rather than a full commitment to it. Therefore, perhaps policy goals could be included on how to maintain the activity of participants in volunteering work in society. In general it can be said however that the policy basis of MDT Missie is solid, as participants and interviewees mentioned improvement on almost all sub-goals of personal development, although this was not definitely confirmed to significantly improve by this research’s analysis.

Lastly, when interviewees were questioned about possible mandatory courses of MDT Missie none were enthusiastic, as personal motivation of participants is essential in achieving outcomes (Table 7 appendix II). Interviewees expect motivation to be lower in mandatory courses, thereby complicating achievement of participants’ and the organisation’s goals. Based on all results, this does suggest that the MDT Missie course would not make a good mandatory component in the Dutch public education system. Therefore it needs to be researched further in what form MDT Missie could grow as a concept on a voluntary basis, as a mandatory course would thus not work. Luckily, the organisation itself also recognises this need, and is therefore now busy with expanding its operations. For next year, 2023, already eight courses have been planned. In his interview, coach 1 stated “if one does not know to which port one is sailing, no wind is favourable”. It appears MDT Missie knows to which port it is sailing.

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8. Appendices

8.1 Appendix I: Figures

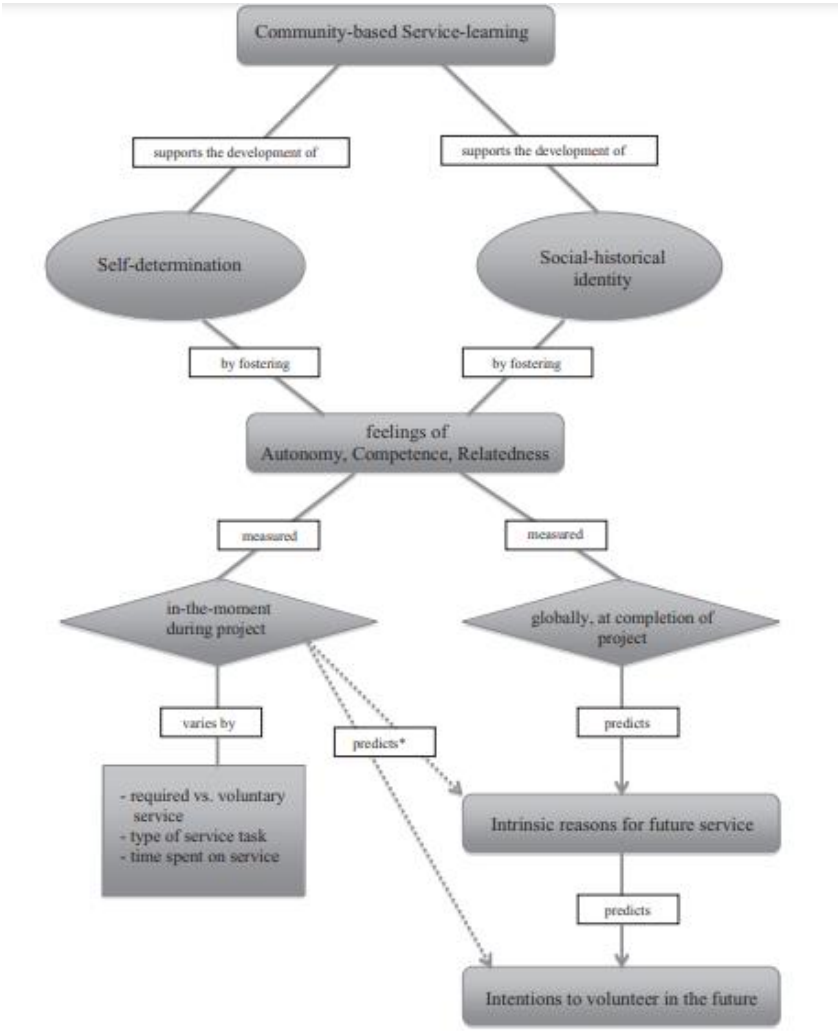

Figure 1: *Conceptual model of the study by Kackcar-Cam and Schmidt* (2014)

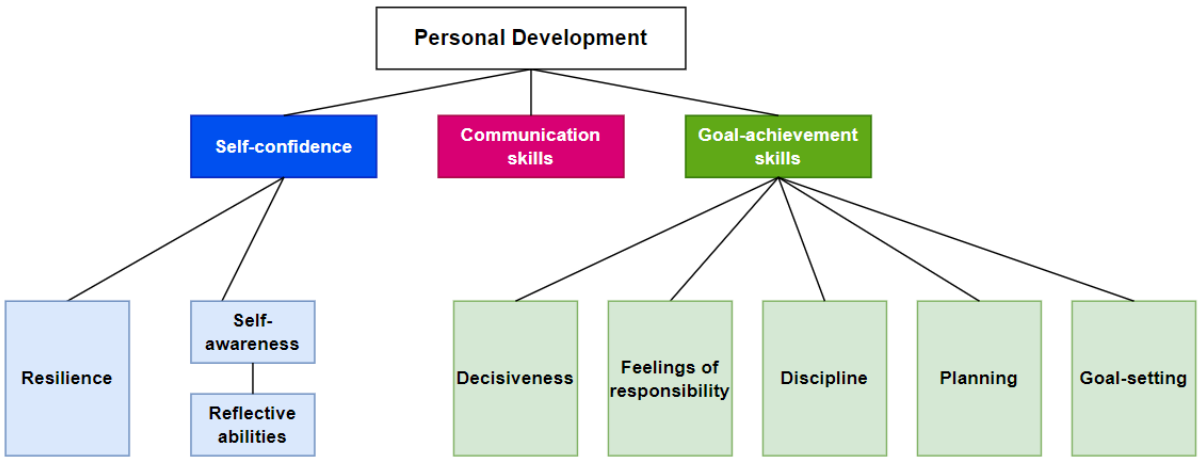

Figure 2: *Conceptual model of the sub-goals of the personal development goal*

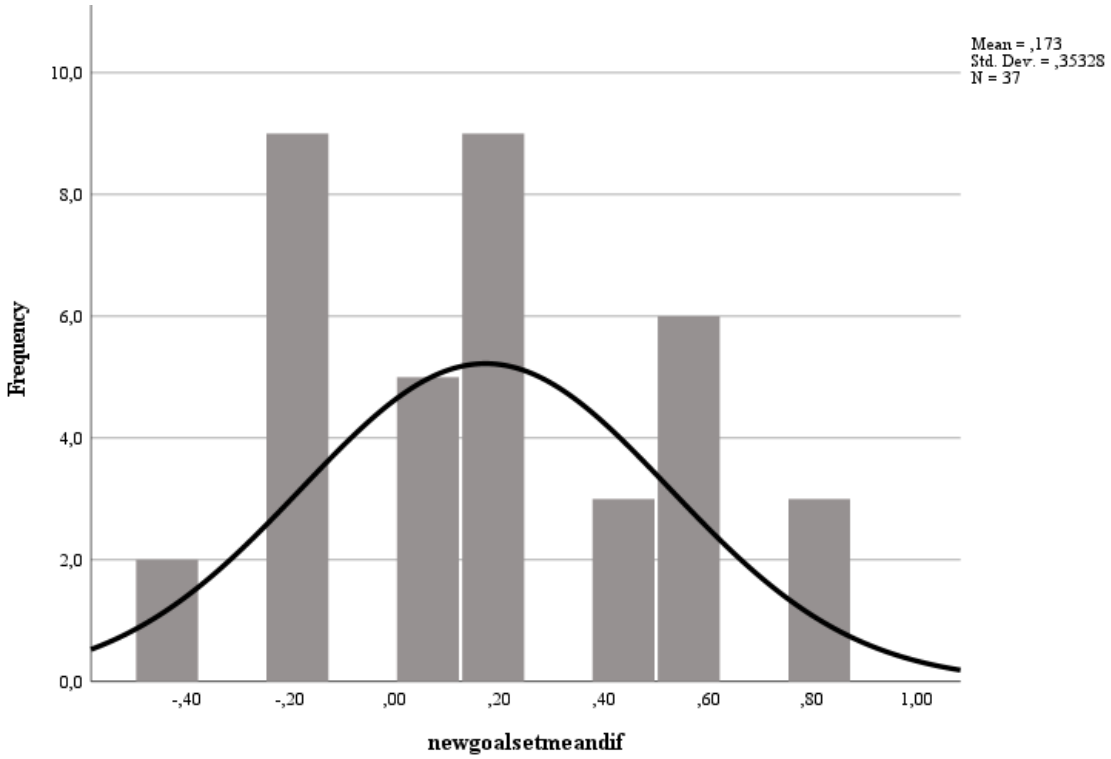

Figure 3: *Histogram with normal curve for differences between pre- and post-treatment goalsetting abilities scales*

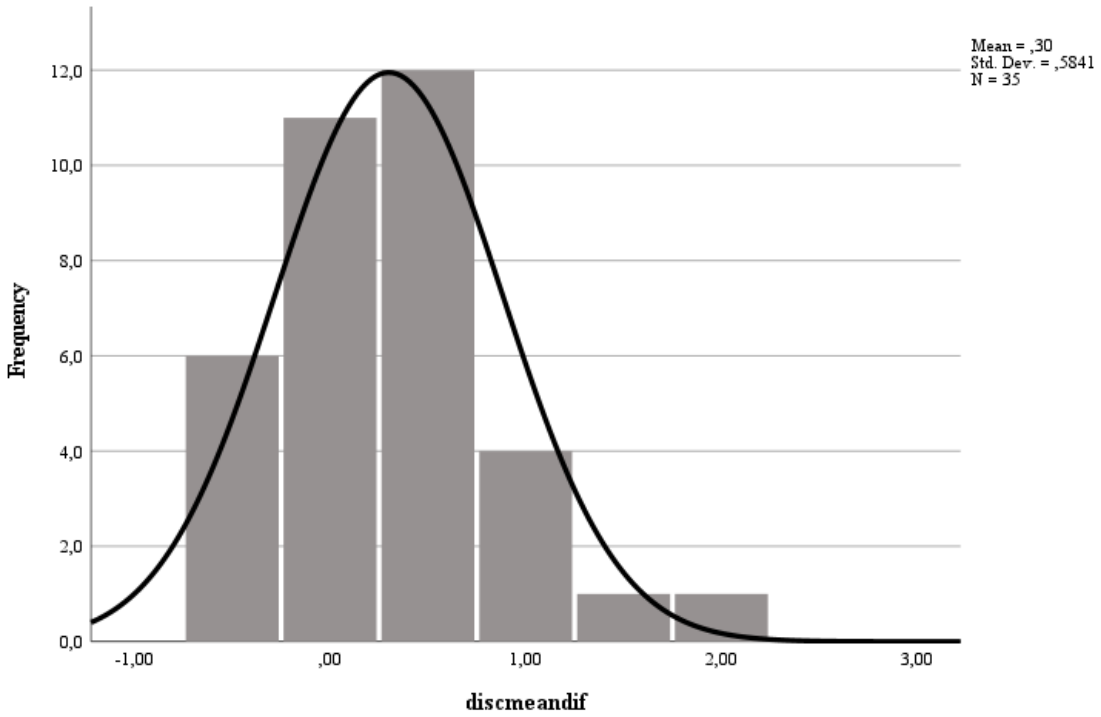

Figure 4: *Histogram with normal curve for differences between pre- and post-treatment discipline scales*

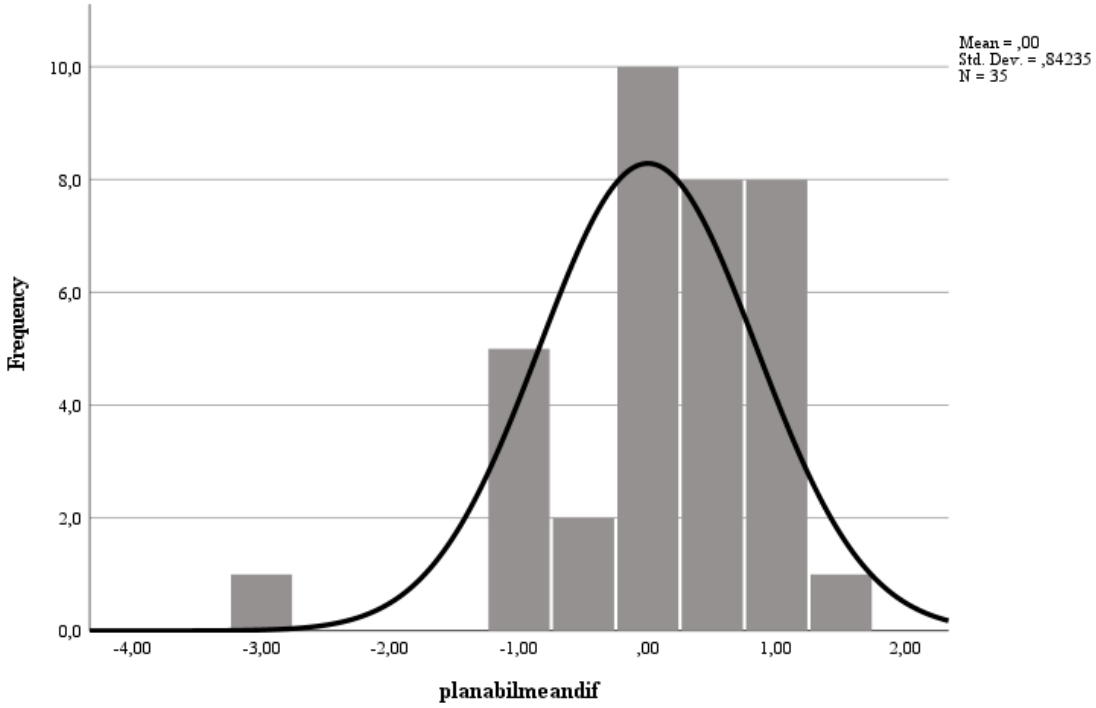

Figure 5: *Histogram with normal curve for differences between pre- and post-treatment planning abilities scales*

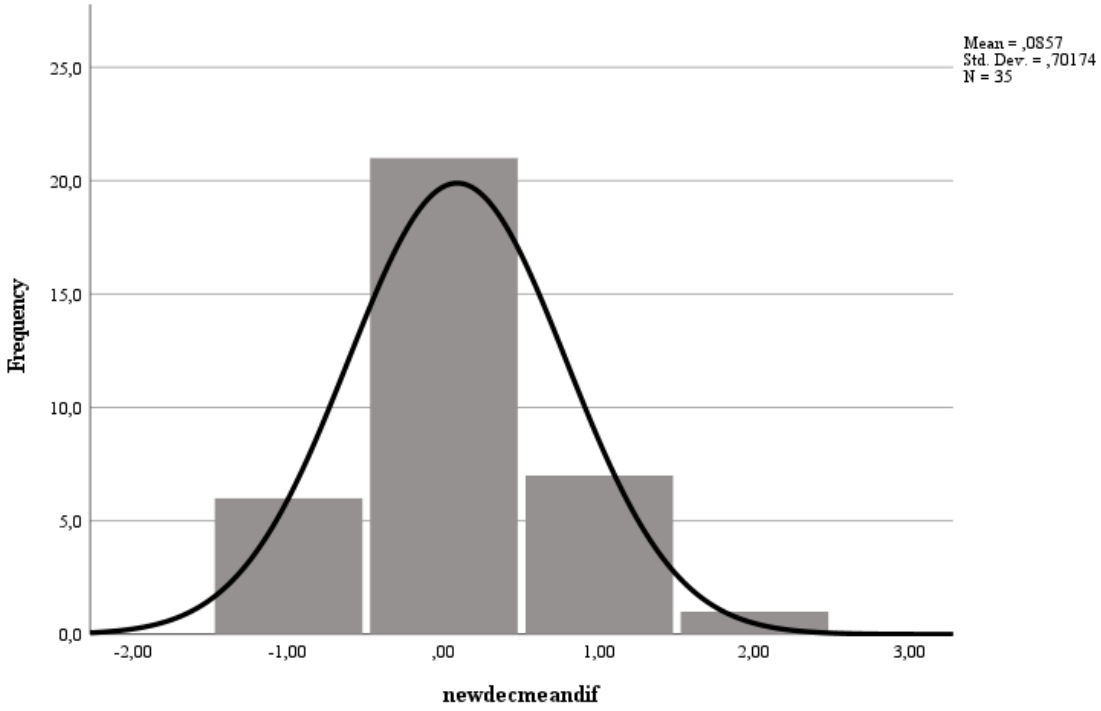

Figure 6: *Histogram with normal curve for differences between pre- and post-treatment decisiveness scales*

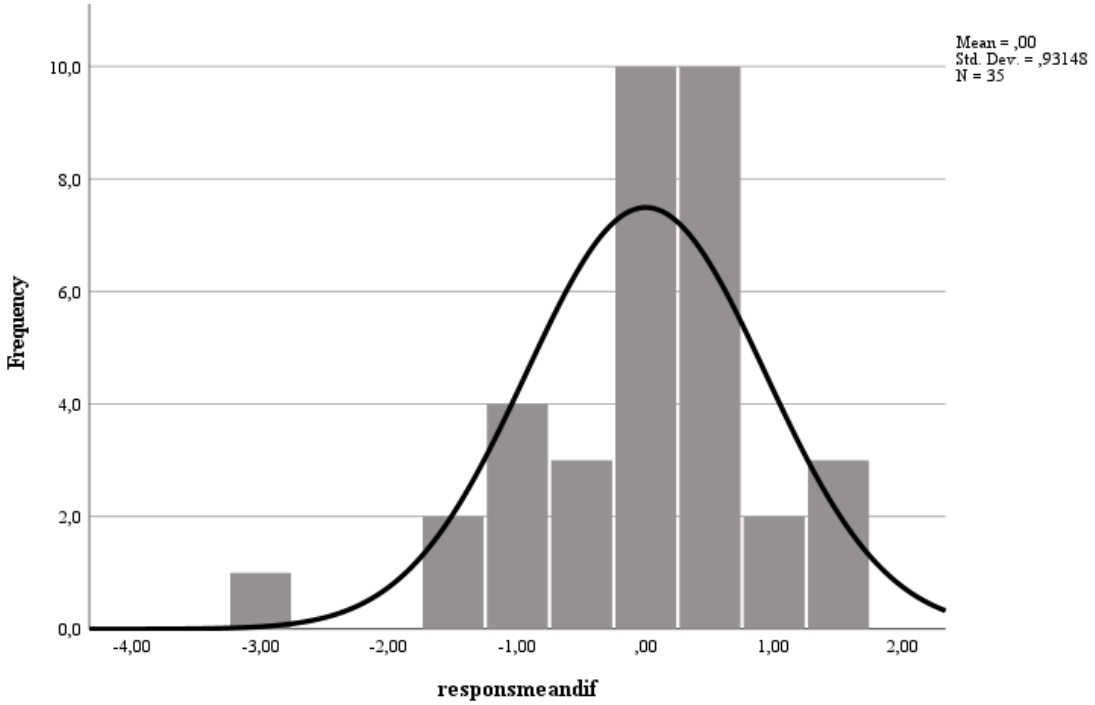

Figure 7: *Histogram with normal curve for differences between pre- and post-treatment feelings of responsibility scales*

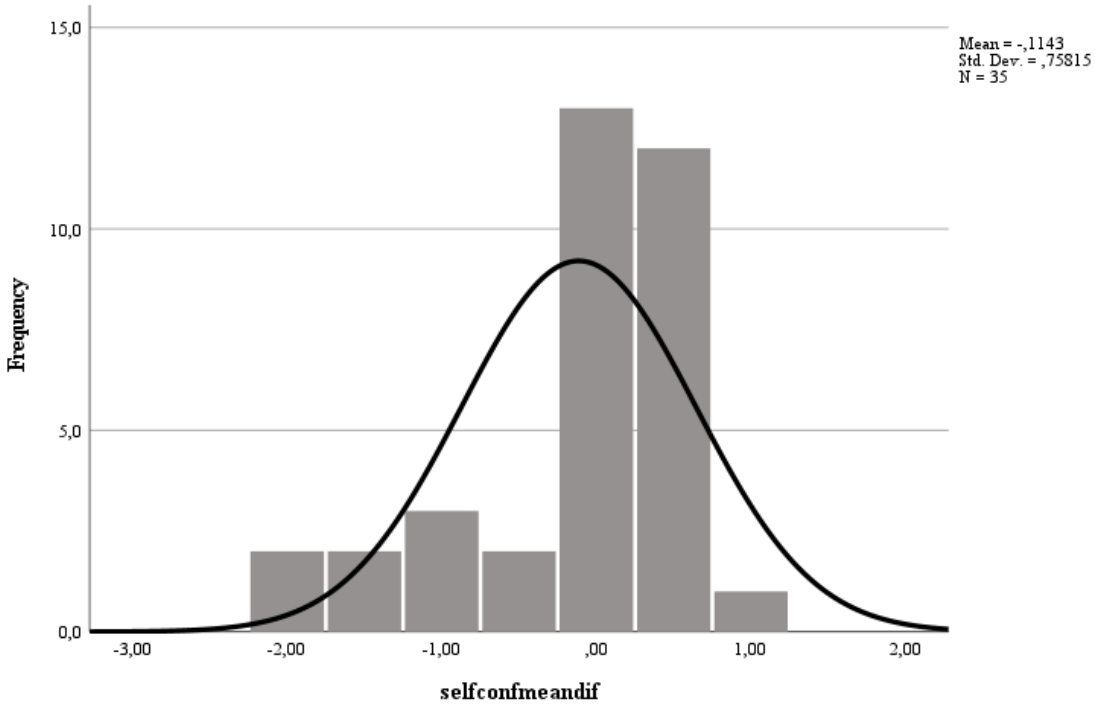

Figure 8: *Histogram with normal curve for differences between pre- and post-treatment self-confidence scales*

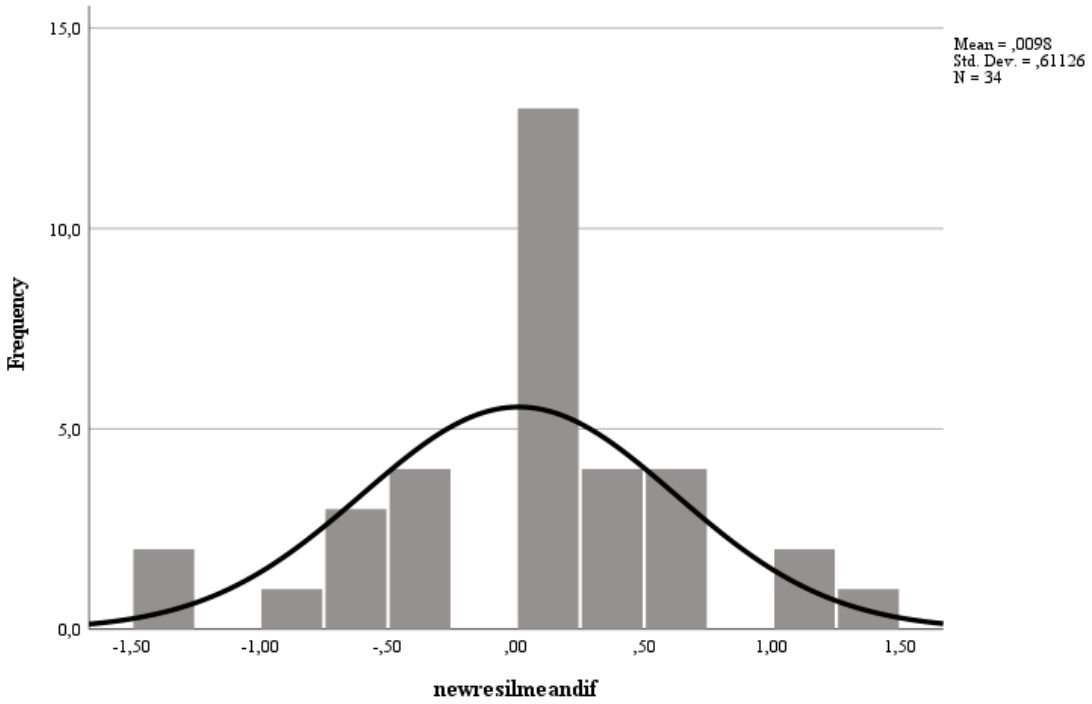

Figure 9: *Histogram with normal curve for differences between pre- and post-treatment resilience scales*

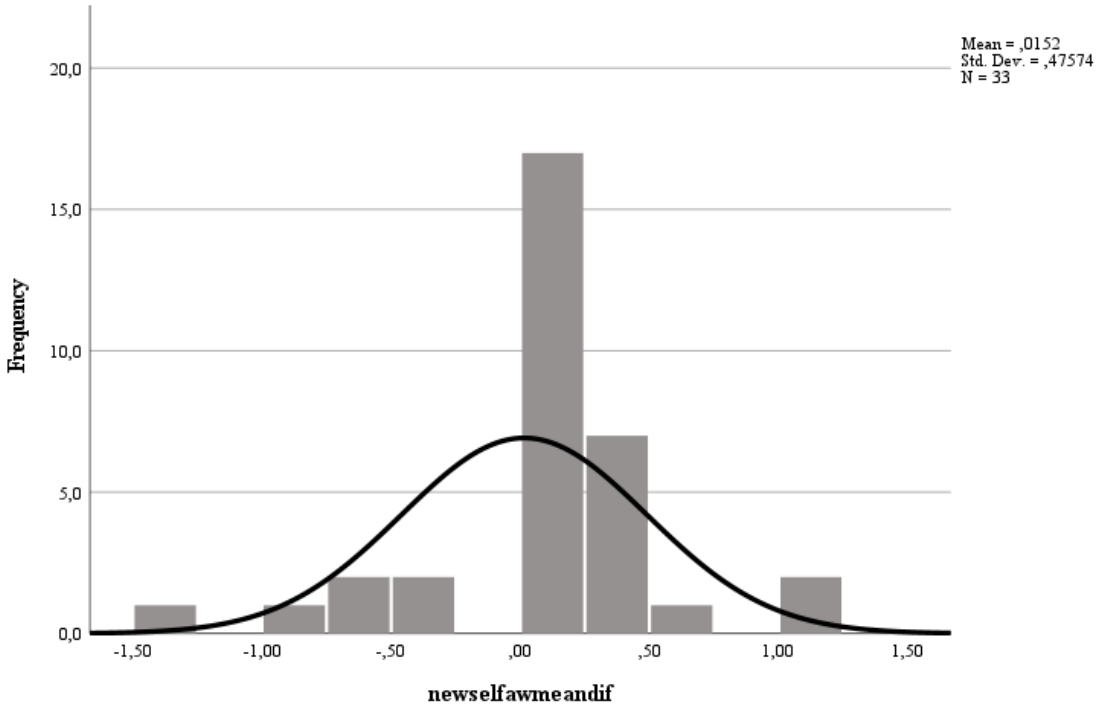

Figure 10: *Histogram with normal curve for differences between pre- and post-treatment self-awareness scales*

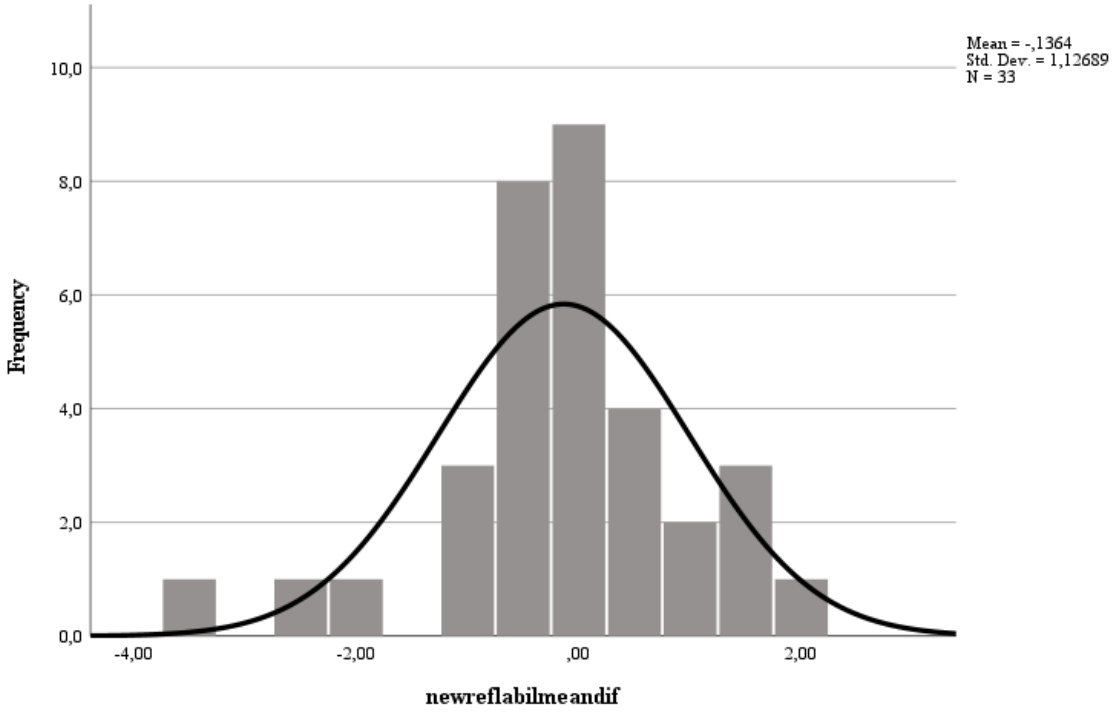

Figure 11: *Histogram with normal curve for differences between pre- and post-treatment reflective abilities scales*

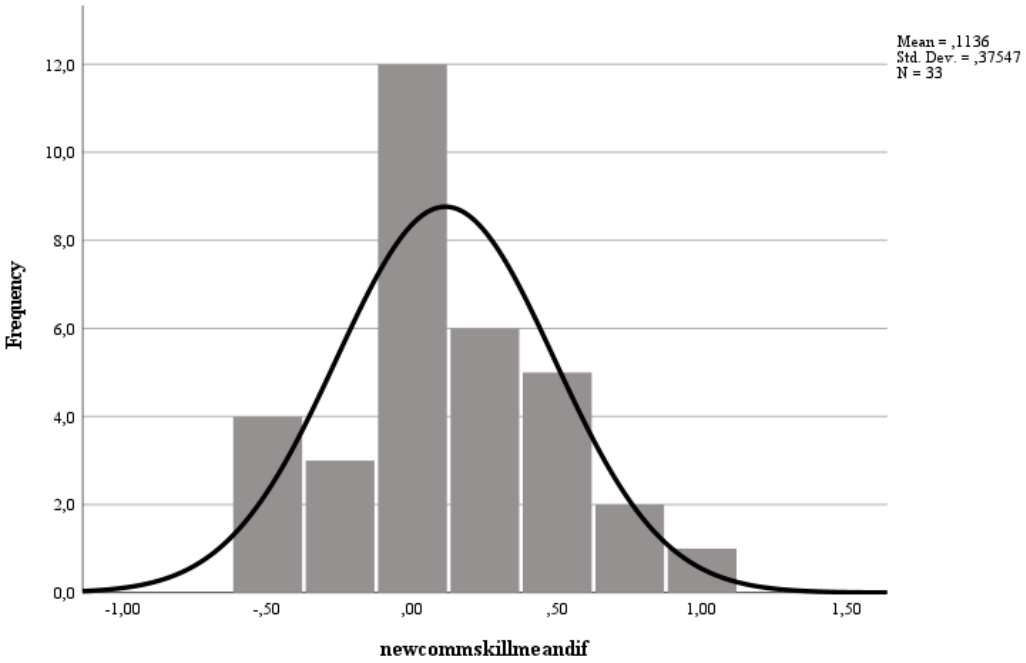

Figure 12: *Histogram with normal curve for differences between pre- and post-communication skills scales*

8.2. Appendix II: Tables

Table 1 *Survey operationalisation*

Main variable	Sub-Variable	Variable dimension	SPSS variable label	Question nr.	Question orientation
Goal-achievement skills	*1. Goal setting abilities*	Frequency of goal setting	Goalset 1	1	+
		Clarity of goal(s)	Goalset 2	2	+
		Subjective challenge provided by goal(s)	Goalset 3	3	+
		Subjective degree of complexity of goal(s)	Goalset 4	4	+
		Degree of commitment to goal(s)	Goalset 5	5	+
		Degree of internal feedback	Goalset 6	6	+
		Desire for external feedback	Goalset 7	7	+
	2. Discipline	Degree of discipline in goal achievement	Disc 8	8	+
		Degree of discipline to resist temptations	Disc 9	9	-
	3. Planning abilities	Estimated planning abilities	Planabil 10	10	+
		Ability to prioritise	Planabil 11	11	-
		Ability to analyse all options	Planabil 12	12	-
		Ability to select the best course of action	Planabil 13	13	-
	4. Decisiveness	Ability to quickly decide	Dec 14	14	+
		Degree of decision confidence	Dec 15	15	+
	5. Feelings of responsibility	Feelings of responsibility for oneself	Respons 16	16	+
		Feelings of responsibility for others	Respons 17	17	+
Communication skills	*Communication skills*	Degree of social experience	Commskill 33	33	+
		Degree of social confirmation	Commskill 34	34	+

			Degree of social composure	Commskill 35	35	+
			Degree of appropriate disclosure	Commskill 36	36	+
			Degree of articulation	Commskill 37	37	+
			Degree of usage of wit to solve tensions	Commskill 38	38	-
Self-confidence	*1.*	*Self-confidence*	Belief in achievement of certain outcome	Selfconf 18	18	+
			Belief in own skills and abilities	Selfconf 19	19	+
	2.	*Resilience*	Capacity to adapt to disturbances (new)	Resil 20	20	+
			Capacity to adapt to disturbances (unexpected)	Resil 21	21	-
			Exposure to risk	Resil 22	22	+
			Degree of adaptation to risk	Resil 23	23	+
	3.	*Self-awareness*	Degree of introspection and self-reflection	Selfaw 24	24	+
			Recognition of standards (internal)	Selfaw 25	25	+
			Recognition of standards (external)	Selfaw 26	26	-
			Recognition of own attributes/abilities	Selfaw 27	27	+
			Ability to detect gaps in personal behaviours, traits and goal process	Selfaw 28	28	+
			Ability to detect gaps in personal behaviours, traits and goal process	Selfaw 29	29	+
	4.	*Reflective abilities*	Frequency of self-reflection	Reflabil 30	30	+
			Frequency of self-reflection on difficult situations	Reflabil 31	31	-
			Frequency of self-reflection for improvement	Reflabil 32	32	+

Table 2 *MDT Missie course frequency table*

		Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid		46	52,9	52,9	52,9
	8	22	25,3	25,3	78,2
	9	19	21,8	21,8	100,0
	Total	87	100,0	100,0	

Table 3 *Age Frequency Table*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		43	49,4	49,4	49,4
	16	1	1,1	1,1	50,6
	17	9	10,3	10,3	60,9
	18	5	5,7	5,7	66,7
	19	7	8,0	8,0	74,7
	20	3	3,4	3,4	78,2
	21	3	3,4	3,4	81,6
	22	3	3,4	3,4	85,1
	23	4	4,6	4,6	89,7
	24	2	2,3	2,3	92,0
	25	2	2,3	2,3	94,3
	27	4	4,6	4,6	98,9
	51	1	1,1	1,1	100,0
	Total	87	100,0	100,0	

Table 4 *Old and new variable reliability based on Cronbach alpha and Spearman's Rho correlation coefficient.*

Variable label	Old reliability	New variable label	Changed reliability	Mean	Sample size
Goalsetmean	$\alpha = 0.700$	Newgoalsetmean	$\alpha = 0.764$	$\bar{x}$ = 3,7256	n = 78
Goalsetmean_v2	$\alpha = 0.595$	Newgoalsetmean_v2	$\alpha = 0.733$	$\bar{x}$ = 3,8727	n = 44
Discmean	$r_s = 0.429$	n.a.	n.a.	$\bar{x}$ = 3,0921	n = 76
Discmean_v2	$r_s = 0.409$	n.a.	n.a.	$\bar{x}$ = 3,4762	n = 42
Planabilmean	$\alpha = 0.785$	n.a.	n.a.	$\bar{x}$ = 3,2533	n = 76
Planabilmean_v2	$\alpha = 0.757$	n.a.	n.a.	$\bar{x}$ = 3,4085	n = 41

Decmean	r_s = 0.310	Dec14	n.a.	$\bar{x}$ = 3,34	*n* = 76
Decmean_v2	r_s = 0.352	Dec14_v2	n.a.	$\bar{x}$ = 3,44	*n* = 41
Responsmean	r_s = 0.478	n.a.	n.a.	$\bar{x}$ = 3,6711	*n* = 76
Responsmean_v2	r_s = 0.644	n.a.	n.a.	$\bar{x}$ = 3,6707	*n* = 41
Selfconfmean	r_s = 0.442	n.a.	n.a.	$\bar{x}$ = 4,0000	*n* = 76
Selfconfmean_v2	r_s = 0.517	n.a.	n.a.	$\bar{x}$ = 3,8902	*n* = 41
Resilmean	α = 0.296	Newresilmean	α = 0.815	$\bar{x}$ = 3,7193	*n* = 76
Resilmean_v2	α = 0.167	Newresilmean_v2	α = 0.750	$\bar{x}$ = 3,7750	*n* = 40
Selfawmean	α = 0.486	Newselfawmean	α = 0.614	$\bar{x}$ = 3,7412	*n* = 76
Selfawmean_v2	α = 0.532	Newselfawmean	α = 0.809	$\bar{x}$ = 3,7650	*n* = 39
Reflabilmean	α = 0.732	Newreflabilmean	r_s = 0.533	$\bar{x}$ = 3,1118	*n* = 76
Reflabilmean_v2	α = 0.582	Newreflabilmean_v2	r_s = 0.390	$\bar{x}$ = 3,0513	*n* = 39
Commskillmean	α = 0.738	Newcommskillmean	α = 0.717	$\bar{x}$ = 3,7390	*n* = 76
Commskillmean_v2	α = 0.649	Newcommskillemean_v2	α = 0.782	$\bar{x}$ = 3,8782	*n* = 39

Note. The sample sizes and means are retrieved from tables 36 to 75 in appendix VIIA. The reliability scores are retrieved from tables 1 to 35 in appendix VIIA.

Table 5 *Changed variables for data analysis*

Variable category	Variable	Item content	Item label	Item nr.
Goal-achievement skills	*Goal setting abilities*	Frequency of goal setting	Goalset 1	1
		Clarity of goal(s)	Goalset 2	2
		Subjective challenge provided by goal(s)	Goalset 3	3
		Degree of commitment to goal(s)	Goalset 5	5
		Degree of internal feedback	Goalset 6	6
	Discipline	Degree of discipline in goal achievement	Disc 8	8
		Degree of discipline to resist temptations	Disc 9	9
	Planning abilities	Estimated planning abilities	Planabil 10	10
		Ability to prioritise	Planabil 11	11
		Ability to analyse all options	Planabil 12	12

		Ability to select the best course of action	Planabil 13	13
	Decisiveness	Ability to quickly decide	Dec 14	14
	Feelings of responsibility	Feelings of responsibility for oneself	Respons 16	16
		Feelings of responsibility for others	Respons 17	17
Communication skills	*Communication skills*	Degree of social experience	Commskill 33	33
		Degree of social composure	Commskill 35	35
		Degree of appropriate disclosure	Commskill 36	36
		Degree of articulation	Commskill 37	37
Self-confidence	*Self-confidence*	Belief in achievement of certain outcome	Selfconf 18	18
		Belief in own skills and abilities	Selfconf 19	19
	Resilience	Capacity to adapt to disturbances (new)	Resil 20	20
		Capacity to adapt to disturbances (unexpected)	Resil 21	21
		Degree of adaptation to risk	Resil 23	23
	Self-awareness	Recognition of own attributes/abilities	Selfaw 27	27
		Ability to detect gaps in personal behaviours, traits and goal process	Selfaw 28	28
		Ability to detect gaps in personal behaviours, traits and goal process	Selfaw 29	29
	Reflective abilities	Frequency of self-reflection	Reflabil 30	30
		Frequency of self-reflection on difficult situations	Reflabil 31	31

Table 6 *Interview responses core variables*

Variable	Respondent	Change	Estimated cause
Goal setting abilities	*Organiser 1*	Improves, but varies per participant	Course elements that help participants find their 'true selves', e.g. meditation, ice bath, breathing exercises.
	Organiser 2	Improves (but based on hearsay from coaches and instructors).	n.a.
	Military instructor 1	Improves, but effect remains only if	Course removes phone and other distractions, enabling clear thinking and focus.

		participants actively try.	
	Military instructor 2	Improves	Developing a clear vision via group sessions with coaches and instructors.
	Coach 1	Improves, but varies per participant.	Developing a clear vision via group sessions with coaches and instructors.
	Coach 2	Improves, but for about 50-60 percent.	Developing a clear vision via group sessions with coaches and instructors, but also learning from experience.
Discipline	*Organiser 1*	Improves	Military culture, rules and enforcement.
	Organiser 2	Improves	Military culture, rules and enforcement.
	Military instructor 1	Improves for given tasks, but long-term improvement is uncertain.	Military culture, and by letting participants experience benefits of discipline.
	Military instructor 2	Improves	Military culture, rules and enforcement, but also coaching
	Coach 1	Improves for given tasks, but long-term improvement is uncertain.	Military culture, and by letting participants experience benefits of discipline.
	Coach 2	Improves.	Military culture, and by letting participants experience benefits of discipline.
Planning abilities	*Organiser 1*	Improves	Military culture, rules and enforcement.
	Organiser 2	Improves (but based on hearsay).	Military culture, rules and enforcement.
	Military instructor 1	Needs improvement	n.a.
	Military instructor 2	Improves	Military culture, rules and enforcement, but also peer enforcement.
	Coach 1	n.a.	Planning required for Social Mission challenges participants.
	Coach 2	Improves	n.a.
Decisiveness	*Organiser 1*	Improves	Time pressure during Impact Bivak, and by getting to know oneself and own abilities via coaching, which leads to more self-confidence.
	Organiser 2	Improves	Getting to know oneself and own abilities via coaching, in a safe space with removal of distractions.
	Military instructor 1	Improves	Increased motivation due to teamspirit.
	Military instructor 2	Unclear, varies per participant.	n.a.
	Coach 1	Improves, but varies per participant.	Time pressure and responsibilities during Impact Bivak, and by getting to know oneself and own abilities via coaching.
	Coach 2	Improves, but long term	Exercises and responsibilities during Impact Bivak, and by getting to know oneself and own abilities via coaching.

		improvement is uncertain.	
Feelings of responsibility	*Organiser 1*	Improves	Military buddy system.
	Organiser 2	Improves, but long term improvement is uncertain.	Military buddy system.
	Military instructor 1	Improves	By getting to know ones role in a team and own abilities via coaching.
	Military instructor 2	Improves	By increased awareness of own and others actions.
	Coach 1	Improves, but varies per participant.	By receiving responsibilities in leadership roles and making time pressured choices.
	Coach 2	Improves	Military buddy system and team spirit.
Self-confidence	*Organiser 1*	Improves	By getting to know oneself and own abilities via coaching, which leads to more self-confidence.
	Organiser 2	Improves	By getting to know oneself and own abilities via coaching and support from peers.
	Military instructor 1	Improves	By getting to know oneself and own abilities via coaching, support from peers and open communication in safe space.
	Military instructor 2	Improves	By getting to know oneself and own abilities via coaching in a safe space, and expanding boundaries.
	Coach 1	Improves	By getting to know oneself and own abilities via coaching and open and vulnerable communication in a safe space, and expanding boundaries.
	Coach 2	Improves, but long term improvement is uncertain.	By getting to know oneself and own abilities via coaching in a safe space, and expanding boundaries. Reflection is key.
Resilience	*Organiser 1*	Improves	Challenges during the Impact Bivak, but also self-defence classes.
	Organiser 2	Improves, but long term improvement is uncertain.	Vulnerable moments during the coaching.
	Military instructor 1	Improves	Vulnerable moments during the coaching, in a safe space.
	Military instructor 2	Improves, but varies per participant.	Coaching sessions.
	Coach 1	Improves, but varies per participant.	Expanding boundaries through activities as ice bath, climbing tower and obstacle course.
	Coach 2	Improves, but could also be conditioning, so long term improvement uncertain	n.a.

Self-awareness	*Organiser 1*	Improves	Coaching sessions, with goal to find true self.
	Organiser 2	Improves	By getting to know oneself and own abilities via coaching in a safe space, and teamwork.
	Military instructor 1	Improves	By getting to know oneself and own abilities via coaching, and open communication with peers.
	Military instructor 2	Unclear, varies per participant.	n.a.
	Coach 1	Improves, but extent varies per participant.	By getting to know oneself and own abilities via coaching, especially focusing on 'impact, passion and talent'.
	Coach 2	Improves, but long term improvement is uncertain.	By getting to know oneself and own abilities via coaching.
Reflective abilities	*Organiser 1*	Improves	Reflecting during coaching sessions.
	Organiser 2	Improves, (but based on hearsay from coaches and instructors).	Reflecting during coaching sessions.
	Military instructor 1	Unclear, but introduces participants to reflecting.	Making mistakes, and reflecting during coaching sessions and from exercises.
	Military instructor 2	Improves	n.a.
	Coach 1	Improves	Reflecting during coaching sessions, and via the military buddy system.
	Coach 2	Improves	Reflecting during coaching sessions and from exercises.
Communication skills	*Organiser 1*	Improves	Military culture, rules and enforcement.
	Organiser 2	Unclear, varies per participant.	n.a.
	Military instructor 1	No clear improvement.	n.a.
	Military instructor 2	Improves, but varies per participant.	Military culture, rules and enforcement.
	Coach 1	Improves	Military culture, rules and enforcement, and by being handed leadership roles.
	Coach 2	Improves	Military culture, rules and enforcement, and by being handed leadership roles.

Table 7 *interview responses general questions*

	Organiser 1	Organiser 2	Military instructor 1	Military instructor 2	Coach 1	Coach 2
Role description	Military project supervisor, HR and financial management, recruiting participants.	Civil project supervisor from TijdvoorActie, management of external relations for Social Mission and administrative tasks.	Military instructor, guiding participants during Impact Bivak and reunion. Also business development role, growing MDT Missie from 500 to 3100 participants.	Military instructor, guiding participants during Impact Bivak and reunion.	Coach from IdentityCraft, coaching participant during Impact Bivak and some during Social Mission. Focussing on participants' personal development.	Coach from IdentityCraft, coaching participant during Impact Bivak and some during Social Mission. Focussing on participants' personal development. Main person of contact of the coaches.
Description of partner organisations	TijdvoorActie is main network partner of Ministry of Defence. TijdvoorActie covers YourCube which provides coaching.	TijdvoorActie is main network partner of Ministry of Defence. TijdvoorActie covers various organisations that help with coaching and finding Social Mission partners.	n.a.	n.a.	IdentityCraft provides coaching.	IdentityCraft provides coaching.
Important course elements	Core theme: finding the best version of you. Hiring process, challenging and fun exercises and coaching.	Combination of military aspects and personal coaching. Hiring process. Especially boundary expanding activities important.	Military skills, drills and rules. Action and reflection.	Varies per participant. Especially boundary expanding activities important and teamwork.	All equally important, but boundary expanding activities important and coaching in safe and open setting.	Action and reflection. Varies per participant.

Course methods for personal development	Difficult team exercises, reflecting on them in coaching. Setting goals per participant.	Tension due to the unknown, boundary expanding activities. Tough love in coaching.	Military skills, drills and rules, expanding boundaries. From strict to loose approach with time, e.g. via humor.	Combination of military aspects and personal coaching.	Boudary expanding activities: Icebath, climbing tower etc. Pressure cooker youth work. Coaching in safe and open setting.	Coaching. Action and reflection.
Personal goal(s) for participants	Teaching participants their unique abilities and volunteering benefits.	Making personal impact on participants. and societal impact Making participants feel seen and teaching their societal relevance.	Making societal impact, and contributing to personal development.	Making participant achieve goals, but varies per participant.	Making societal impact, and contributing to personal development.	Teaching participants their unique abilities and goals, and contributing to personal development.
Opinion on future obligatory MDT courses	n.a.	Undesirable, Social Mission requires motivation and dedication.	Desirable, but requires an adapted course due to less motivation.	n.a.	Undesirable, Social Mission requires motivation.	n.a.

Table 8 *Participants' most memorable activities during the Impact Bivak*

Activity category	Specific activity	Count
Military activities	Icebath / Wim Hof method	19
	Crash move	12
	Obstacle course	7
	Marching	3
	Navigation exercise	3
	Climbing tower	2
	Observation mission	2
	Physical activities	1
	Tent construction	1
	Category total	50
Sport activities	Swimming	2

	Volleyball		1
	HIIT		1
	Category total		4
Social activities	Day 3: Volunteering activity		2
	Teamwork with strangers		2
	Coaching session		2
	- Final coaching session	1	
	Teamspirit		1
	Category total		7
	Total		61

Table 9 *Participants' personal boundary expanding experiences during the Impact Bivak*

Experience category	Specific experience	Count	
Exceeding expectations	Exceeding personal expectations of oneself		18
	- Physically	6	
	Category total		18
Resilience	Persevering difficulties		9
	Handling unexpected situations		2
	Overcoming fears		2
	- Fear of heights	1	
	Category total		13
Teamwork challenges	General teamwork challenges		3
	Listening to others		2
	Asking for help		2
	Opening up to others		2
	- Emotionally	1	
	Understanding others better		1
	Taking a step back when needed		1
	Category total		11
Leadership	Taking the lead		1
Self-awareness	Recognizing personal limits		1
Control	Handing off control to others		1

No boundary expanding experiences had	1
Unclear response	3
Total	49

Table 10 *Participants' skills developed during the Impact Bivak*

Skill category	Specific skill	Count	
Teamwork	Working in a team		7
	Listening to others before deciding		2
	Helping others		2
	Motivating others		2
	- Using positivity	1	
	Category total		11
Self-expression	Taking the lead		4
	Expressing boundaries		1
	Talking about feelings		1
	Asking for help		1
	Making oneself heard		1
	Category total		8
Resilience	Perseverance		9
	- Physical	1	
	Reacting to unexpected situations		1
	Category total		10
Self-confidence	Increased self-confidence		5
	Controlling insecurity		1
	Category total		6
Discipline	General discipline		1
	Working structured		2
	Category total		3
Control	Handing off control		1
	Letting go of negative feelings		1
	Category total		2
Other skills	Sportsmanship		1
	Military skills		2
	General mental growth		1

	Assertiveness	1
	Category total	5
	Total	45

Table 11 *Participants' volunteering activities during the Social Mission*

Volunteering activities	Count	
Teaching		7
- General teaching	2	
- About unacceptable behaviour	1	
- At ponycamp	1	
- Language assistance	2	
- Homework assistance	1	
Elderly care		4
- Assisting elderly at gym	1	
Assisting at events		5
Assisting at campsites/holidays		3
Developing a social media plan		1
Working with refugees		5
- Organising sport activities for refugees	3	
- Working at refugee shelter		
Working at homeless shelter	2	
Working with veterans		2
- Working at veteran institute		4
- Veterans search team	2	
Working with youths	2	
- Youth project		4
- Buddy project	1	
- Cooking for youths	2	
Assisting Red Cross	1	
Working with animals		2
- Assisting at a farm		2
- Helping at dogcare	1	
Helping people move	1	
Internship at football club		1
Not yet conducted		1

			2
	Total		43

Table 12 *Participants' most memorable activities during the Social Mission*

Activity category	Specific activity	Count	
Conversations	General conversations		3
	Listening to others' stories		2
	- Veterans' stories	1	
	Conversations with homeless people		1
	Conversing with people who do not speak the same language		1
	Category total		7
Positive work experiences	Experiencing gratitude		3
	- For fresh meals	1	
	- For ones efforts	1	
	Open work environment		1
	Category total		4
Teaching / working with kids	Teaching session in the woods		1
	Teaching by singing		1
	Playing games with kids		1
	Category total		3
Giving attention to others	Generally giving others attention		1
	Giving compliments to youths		1
	Helping others		2
	- Helping poor/lonely people	1	
	- Helping others at event	1	
	Visiting a museum with a veteran		1
	Category total		5
Interacting with elderly	Generally interacting with elderly		2
	BBQ with personel and eldery		1

	Category total	3
Working at events	Avondvierdaagse	1
	Bingo game	1
	Invictus Games	1
	Working behind a bar	1
	Category total	4
Other activities	A fainting	1
	Construction work	1
	Organising	1
	The general experience	1
	Category total	4
	Total	30

Table 13: Participants' personal boundary expanding experiences during the Social Mission

Experience category	Specific experience	Count
Interaction with others	Conversating with strangers	4
	Teaching via humor	1
	Interacting with people with different values	1
	Interacting with a language barrier	3
	Getting to know different cultures	2
	Approaching others	1
	Expressing myself	1
	Category total	13
Exceeding own expectations	Doing things I normally would not	1
	Not running from difficult situations	2
	Overcoming fears	1
	Working outside comfort zone	1
	Performing under pressure	1
	Category total	6

Changed mindset	Thinking more about how to help others	1
	Being open to opportunities	1
	Realizing my potential	1
	Category total	3
Assertiveness	Taking the lead	2
Responsibility	Taking responsibility	1
Control	Controlling disturbances and emotions	1
No such experiences		6
Unclear response		2
	Total	34

Table 14: *Participants' skills developed during the Social Mission*

Skill category	Specific skill	Count
Communication skills	Starting conversations	4
	Conversation techniques	2
	Listening carefully	1
	Listening to others	2
	Using humour to teach	1
	Teaching	2
	Coaching	2
	Category total	14
Self-confidence	General confidence	2
	Standing up for oneself	1
	Category total	3
Self-awareness	Recognizing and applying skills	1
Planning	Planning skills	1
Resilience	Handling unexpected situations	2
	Handling hectical situations	1
	Thinking in solutions, not giving up	1
	Category total	4
Discipline	Restraining oneself	1
	Paying attention to detail	1

	Category total	2
Leadership	Taking initiative	2
	Leading	2
	Autonomy	1
	Category total	5
Other skills	Handling projects	1
	Driving in a wheelchair	1
	Gained knowledge	1
	Category total	4
No skills learned		5
	Total	39

8.3. Appendix III: Operationalisation – Dutch Survey question list pre-participation

Deze enquête is onderdeel van onderzoek naar het MDT Missie traject. Dit onderzoek bestaat uit een enquête voor en na deelname aan het hele MDT Missie traject. Het doel van dit onderzoek is om erachter te komen wat deelname MDT Missie doet voor de persoonlijke ontwikkeling van deelnemers. Deze vragenlijst bestaat uit een aantal stellingen waarbij je mag aangeven in hoeverre je het eens bent met de stellingen. Deze stellingen gaan over jezelf en je eigen ervaringen, zowel binnen het MDT Missie traject als binnen je leven in het algemeen. Als je je echt niet comfortabel voelt met het beantwoorden van een vraag, kun je deze altijd beantwoorden met 'Dit zeg ik liever niet'. Als je echt niet verder wil met het beantwoorden van vragen, kan je tijdens het invullen van de enquête altijd je deelname nog beëindigen door de enquête te sluiten. Door op 'akkoord' te klikken ga je akkoord met deze voorwaarden en kan je beginnen met de vragenlijst. Indien je hier niet mee akkoord gaat kan je de enquête meteen sluiten.

- Wat is je naam?
- Op welke emailadres kan ik je bereiken?

Persoonlijke doelen gerelateerde dimensies

Doelstellingsvaardigheden

1. Hoe vaak zet je persoonlijke doelen voor jezelf? Denk hierbij bijvoorbeeld aan het behalen van een opleiding, rijbewijs, een baan etcetera, maar ook bijvoorbeeld aan doelen als 'fitter worden, beter worden in…'

In hoeverre ben je het eens met de volgende stellingen

2. Ik heb een goed beeld van mijn persoonlijke doel(en).
3. Mijn persoonlijke doel(en) is/zijn uitdagend voor mij.
4. Mijn persoonlijke doel(en) is/zijn moeilijk om te behalen.
5. Als het moet doe ik veel moeite om mijn persoonlijke doel(en) te behalen.
6. Ik kijk vaak hoe goed het mij lukt om mijn persoonlijke doel(en) te bereiken.
7. Ik laat anderen mij vaak advies geven over het bereiken van mijn persoonlijke doel(en).

Discipline

8. Ik werk gedisciplineerd aan het bereiken van mijn persoonlijke doel(en).
9. Ik geef makkelijk toe aan verleidingen die het bereiken van mijn doel in de weg staan. Denk bij verleidingen bijvoorbeeld aan gedachtes, emoties, impulsen etc.

Plan vaardigheden

10. Ik ben erg goed in plannen.
11. Ik vind het moeilijk om te bepalen in welke volgorde van taken ik naar mijn persoonlijke doel(en) moet werken.
12. Ik vind het moeilijk om plannen voor het bereiken van mijn persoonlijke doel(en) te bedenken.
13. Ik vind het moeilijk om het beste plan voor het bereiken van mijn persoonlijke doel(en) te kiezen

Besluitvaardigheid

14. Ik vind het makkelijk om **snel** uit een aantal plannen het beste plan te kiezen.
15. Ik ben er meestal zeker van dat ik de juiste beslissing(en) heb gemaakt.

Verantwoordelijkheidsgevoel

16. Ik ben teleurgesteld in mezelf als beslissingen die ik maak onverwacht niet goed uitpakken voor mijzelf.
17. Ik ben kwaad op mezelf als beslissingen die ik maak onverwacht niet goed uitpakken voor anderen.

Zelfvertrouwen

18. Ik heb er vertrouwen in dat ik mijn persoonlijke doel(en) ga behalen.
19. Ik denk dat ik genoeg vaardigheden heb om mijn persoonlijke doel(en) te behalen.

Weerbaarheid

20. Ik kan mijzelf goed aanpassen als ik in nieuwe situaties terecht kom.
21. Wanneer ik in onverwachte situaties terecht kom kan ik mij hier slecht aan aanpassen.
22. Ik heb vaak last van situaties die het behalen mijn persoonlijke doel(en) moeilijker maken.
23. Wanneer ik met de bij de vorige vraag genoemde situaties in contact kom kan ik deze met gemak overkomen.

Zelfbewustzijn

24. De dingen die ik meemaak beïnvloeden mijn eigen gedrag.
25. Ik denk vaak bewust na over mijn gedachten en emoties, en over hoe deze mijn gedrag beïnvloeden.
26. Ik denk niet dat mijn gedrag beïnvloed wordt door de verwachtingen van anderen.
27. Ik weet duidelijk welke vaardigheden ik wel en niet heb.
28. Ik weet duidelijk welke positieve eigenschappen ik heb.
29. Ik weet duidelijk welke negatieve eigenschappen ik heb.

Reflectie vaardigheden

30. Ik neem vaak ’s avonds de tijd om terug te kijken en na te denken over mijn dag.
31. Ik neem weinig de tijd om terug te kijken en na te denken over moeilijke situaties die ik tegen ben gekomen en mijn reactie hierop.
32. Ik neem vaak de tijd om na te denken over eigen vaardigheden en hoe ik deze zou kunnen verbeteren of uitbreiden.

Communicatieve vaardigheden

33. Ik denk dat ik goed ben in gesprekken voeren.
34. Ik accepteer mensen voor wie ze zijn in een gesprek.
35. Als gespreksleider ben ik kalm en zelfverzekerd.
36. Ik weet in gesprekken hoe formeel ik iemand aan moet spreken.
37. Ik denk dat ik mijn ideeën in een gesprek duidelijk naar voren kan brengen.
38. Ik vind het moeilijk om in gespannen gesprekssituaties de situatie te kalmeren met humor.

8.4. Appendix IV: Operationalisation – Dutch Survey question list post-participation

Deze enquête is onderdeel van onderzoek naar het MDT Missie traject. Dit onderzoek bestaat uit een enquête voor en na deelname aan het hele MDT Missie traject. Het doel van dit onderzoek is om erachter te komen wat deelname MDT Missie doet voor de persoonlijke ontwikkeling van deelnemers. Deze vragenlijst bestaat uit een aantal stellingen waarbij je mag aangeven in hoeverre je het eens bent met de stellingen. Deze stellingen gaan over jezelf en je eigen ervaringen, zowel binnen het MDT Missie traject als binnen je leven in het algemeen. Als je je echt niet comfortabel voelt met het beantwoorden van een vraag, kun je deze altijd beantwoorden met 'Dit zeg ik liever niet'. Aan het einde van deze enquête zijn er ook nog een aantal open vragen over je ervaringen tijdens het MDT Missie traject. Als je echt niet verder wil met het beantwoorden van vragen, kan je tijdens het invullen van de enquête altijd je deelname nog beëindigen door de enquête te sluiten. Door op 'akkoord' te klikken ga je akkoord met deze voorwaarden en kan je beginnen met de vragenlijst. Indien je hier niet mee akkoord gaat kan je de enquête meteen sluiten.

- Wat is je naam?
- Op welke emailadres kan ik je bereiken?
- Wat is je leeftijd?
- Aan welke lichting van MDT Missie heb je meegedaan?

Doelstellingsvaardigheden

1. Hoe vaak zet je persoonlijke doelen voor jezelf? Denk hierbij bijvoorbeeld aan het behalen van een opleiding, rijbewijs, een baan etcetera, maar ook bijvoorbeeld aan doelen als 'fitter worden, beter worden in…'

In hoeverre ben je het eens met de volgende stellingen

2. Ik heb een goed beeld van mijn persoonlijke doel(en).
3. Mijn persoonlijke doel(en) is/zijn uitdagend voor mij.
4. Mijn persoonlijke doel(en) is/zijn moeilijk om te behalen.
5. Als het moet doe ik veel moeite om mijn persoonlijke doel(en) te behalen.
6. Ik kijk vaak hoe goed het mij lukt om mijn persoonlijke doel(en) te bereiken.
7. Ik laat anderen mij vaak advies geven over het bereiken van mijn persoonlijke doel(en).

Discipline

8. Ik werk gedisciplineerd aan het bereiken van mijn persoonlijke doel(en).

9. Ik geef makkelijk toe aan verleidingen die het bereiken van mijn doel in de weg staan. Denk bij verleidingen bijvoorbeeld aan gedachtes, emoties, impulsen etc.

Plan vaardigheden

10. Ik ben erg goed in plannen.
11. Ik vind het moeilijk om te bepalen in welke volgorde van taken ik naar mijn persoonlijke doel(en) moet werken.
12. Ik vind het moeilijk om plannen voor het bereiken van mijn persoonlijke doel(en) te bedenken.
13. Ik vind het moeilijk om het beste plan voor het bereiken van mijn persoonlijke doel(en) te kiezen

Besluitvaardigheid

14. Ik vind het makkelijk om **snel** uit een aantal plannen het beste plan te kiezen.
15. Ik ben er meestal zeker van dat ik de juiste beslissing(en) heb gemaakt.

Verantwoordelijkheidsgevoel

16. Ik ben teleurgesteld in mezelf als beslissingen die ik maak onverwacht niet goed uitpakken voor mijzelf.
17. Ik ben kwaad op mezelf als beslissingen die ik maak onverwacht niet goed uitpakken voor anderen.

Zelfvertrouwen

18. Ik heb er vertrouwen in dat ik mijn persoonlijke doel(en) ga behalen.
19. Ik denk dat ik genoeg vaardigheden heb om mijn persoonlijke doel(en) te behalen.

Weerbaarheid

20. Ik kan mijzelf goed aanpassen als ik in nieuwe situaties terecht kom.
21. Wanneer ik in onverwachte situaties terecht kom kan ik mij hier slecht aan aanpassen.
22. Ik heb vaak last van situaties die het behalen mijn persoonlijke doel(en) moeilijker maken.
23. Wanneer ik met de bij de vorige vraag genoemde situaties in contact kom kan ik deze met gemak overkomen.

Zelfbewustzijn

24. De dingen die ik meemaak beïnvloeden mijn eigen gedrag.
25. Ik denk vaak bewust na over mijn gedachten en emoties, en over hoe deze mijn gedrag beïnvloeden.
26. Ik denk niet dat mijn gedrag beïnvloed wordt door de verwachtingen van anderen.

27. Ik weet duidelijk welke vaardigheden ik wel en niet heb.
28. Ik weet duidelijk welke positieve eigenschappen ik heb.
29. Ik weet duidelijk welke negatieve eigenschappen ik heb.

Reflectie vaardigheden

30. Ik neem vaak ’s avonds de tijd om terug te kijken en na te denken over mijn dag.
31. Ik neem weinig de tijd om terug te kijken en na te denken over moeilijke situaties die ik tegen ben gekomen en mijn reactie hierop.
32. Ik neem vaak de tijd om na te denken over eigen vaardigheden en hoe ik deze zou kunnen verbeteren of uitbreiden.

Communicatieve vaardigheden

33. Ik denk dat ik goed ben in gesprekken voeren.
34. Ik accepteer mensen voor wie ze zijn in een gesprek.
35. Als gespreksleider ben ik kalm en zelfverzekerd.
36. Ik weet in gesprekken hoe formeel ik iemand aan moet spreken.
37. Ik denk dat ik mijn ideeën in een gesprek duidelijk naar voren kan brengen.
38. Ik vind het moeilijk om in gespannen gesprekssituaties de situatie te kalmeren met humor.

Ervaringen

De volgende laatste vragen zullen gaan over je eigen ervaringen die je hebt opgedaan tijdens je deelname aan het MDT Missie traject.

Impact dagen

- Welke activiteiten tijdens de driedaagse Impact Bivak zijn je het meest bijgebleven?
- Hoe heb jij je grenzen verlegd tijdens deze drie bivakdagen?
- Welke vaardigheden heb je ontwikkeld tijdens de Impact Bivak en waardoor heb je deze ontwikkeld?

Vrijwilligerswerk

- Wat voor vrijwilligerswerk heb je gedaan?
- Welke activiteiten van je vrijwilligerswerk zijn je het meest bijgebleven?
- Hoe heb jij je grenzen verlegd tijdens je vrijwilligerswerk?
- Welke vaardigheden heb je ontwikkeld tijdens je vrijwilligerswerk en waardoor heb je deze ontwikkeld?

8.5. Appendix V: Dutch interview questions

MDT Missie traject

- Wie ben je en wat is je specifieke rol binnen het MDT Missie project?
- Welke organisaties werken er allemaal mee aan het MDT Missie traject?
- Welke onderdelen moet elk traject van jullie bevatten en waarom moeten deze onderdelen aanwezig zijn?
- Welke methodes passen jullie als organisatie toe om persoonlijke ontwikkeling bij de deelnemers te creëren?
- Wat probeer je persoonlijk te bereiken bij de deelnemers?
- Wat zou je vinden van een verplichte MDT deelname voor jongeren?

Verschillen in deelnemers voor en na deelname

- Merk je verschil in de doelstelingsvaardigheden van de deelnemers op de 1e impact dag en op de reünie?
  - Door welke elementen van het traject denk je dat dit komt?
- Merk je verschil in de discipline van de deelnemers op de 1e impact dag en op de reünie?
  - Door welke elementen van het traject denk je dat dit komt?
- Merk je verschil in de plan vaardigheden van de deelnemers op de 1e impact dag en op de reünie?
  - Door welke elementen van het traject denk je dat dit komt?
- Merk je verschil in de besluitvaardigheid van de deelnemers op de 1e impact dag en op de reünie?
  - Door welke elementen van het traject denk je dat dit komt?
- Merk je verschil in het eigen verantwoordelijkheidsgevoel van de deelnemers op de 1e impact dag en op de reünie?
  - Door welke elementen van het traject denk je dat dit komt?
- Merk je verschil in het zelfvertrouwen van de deelnemers op de 1e impact dag en op de reünie?
  - Door welke elementen van het traject denk je dat dit komt?
- Merk je verschil in de weerbaarheid van de deelnemers op de 1e impact dag en op de reünie?
  - Door welke elementen van het traject denk je dat dit komt?
- Merk je verschil in het zelfbewustzijn van de deelnemers op de 1e impact dag en op de reünie?
  - Door welke elementen van het traject denk je dat dit komt?
- Merk je verschil in de reflectie vaardigheden van de deelnemers op de 1e impact dag en op de reünie?

- Door welke elementen van het traject denk je dat dit komt?

- Merk je verschil in de communicatieve vaardigheden van de deelnemers op de 1e impact dag en op de reünie?
    - Door welke elementen van het traject denk je dat dit komt?

8.6. Appendix VI: Communication with course participants

1. Hallo allemaal,

   Mijn naam is Niels en voor mijn studie bestuurskunde aan de Universiteit Twente ben ik bezig met een afstudeeronderzoek samen met de leiding van MDT Missie. Voor dit onderzoek ben ik benieuwd hoe jullie je persoonlijk ontwikkelen door mee te doen aan het MDT Missie traject. Ik zou jullie daarom graag willen vragen om een enquête voor mij in te vullen. Het invullen van de enquête zal ongeveer 15 minuten duren en kan via deze link: https://utwentebs.eu.qualtrics.com/jfe/form/SV_3V0anOhQsKYFT6u. Door de enquête in te vullen zou je mij enorm helpen! Alvast bedankt voor het invullen!
   Met vriendelijke groeten,
   Niels van Dalen

2. Hallo allemaal,

   Daar ben ik weer. Voor mijn afstudeeronderzoek ben ik samen met de leiding van MDT Missie bezig om te kijken hoe jullie als deelnemers je persoonlijk ontwikkelen door het MDT Missie Traject. De meesten van jullie hebben de eerste enquête al ingevuld, en daarom is mijn vraag of jullie nu ook de twee en laatste enquête in willen vullen. Het invullen van de enquête zal ongeveer 15 minuten duren en kan via deze link: https://utwentebs.eu.qualtrics.com/jfe/form/SV_cub9iZl4grI6A9U. Door deze laatste enquête in te vullen zou je mij enorm helpen! Alvast bedankt voor het invullen!

   Met vriendelijke groeten,
   Niels van Dalen

3. Hallo allemaal,

   Een aantal van jullie hebben mijn enquête al ingevuld, maar nog niet iedereen heeft dit gedaan. Mijn vraag is daarom of jullie nu ook de twee en laatste enquête in willen vullen. Als

beloning voor het deelnemen zal ik onder alle deelnemers 5 MDT goodiebags verloten, inclusief Bol.com cadeaukaart ter waarde van €20! Het invullen van de enquête zal ongeveer 15 minuten duren en kan via deze link: https://utwentebs.eu.qualtrics.com/jfe/form/SV_cub9iZl4grI6A9U. Door deze laatste enquête in te vullen zou je mij enorm helpen! Alvast bedankt voor het invullen!

Met vriendelijke groeten,
Niels van Dalen

4. Hoi allemaal,

   Zoals beloofd zou ik onder de deelnemers van mijn enquête vijf MDT goodie bags verloten, inclusief Bol.com cadeaukaarten t.w.v. €20. Ik heb de vijf goodie bags verloot onder degenen die zowel de eerste en de tweede enquête volledig ingevuld hebben, en daaruit zijn de volgende winnaars gekomen: (anonymised)! Als het goed is hebben de winnaars in hun inbox een mail gekregen met daarin de vraag om je contactgegevens door te geven zodat ik de goodie bags kan opsturen. Als jullie deze mail zouden willen beantwoorden kan ik de goodie bags naar jullie opsturen. Iedereen nogmaals bedankt voor het meewerken aan mijn onderzoek!

   Met vriendelijke groeten,
   Niels van Dalen

5. Goedemiddag,
   Bedankt voor je deelname aan de enquête voor mijn scriptie onderzoek over het MDT Missie traject! Als het goed is heb je dit ook al in de whatsappgroep van jouw lichting gelezen, maar ik stuur je deze mail om je te feliciteren. Onder de deelnemers aan mijn enquête had ik beloofd om 5 goodie bags te verloten, en jij bent één van de gelukkige winnaars!Graag zou ik de goodie bag naar je opsturen, maar daar heb ik wel je adres gegevens voor nodig. Zou je mij je volledige naam, adres, postcode en woonplaats door willen sturen? Dan stuur ik de goodie bag zo snel mogelijk naar je op.Nogmaals bedankt voor je deelname!

   Met vriendelijke groeten,
   Niels van Dalen

8.7. Appendix VII: Relevant SPSS output tables

8.7.a. Reliability test results

Table 1 *Reliability Statistics for goalsetmean before recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,700	,718	7

Table 2 *Reliability if items deleted for goalsetmean*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
goalset 1	21,23	7,866	,542	,449	,629
goalset 2	21,30	8,002	,596	,455	,620
goalset 3	20,87	7,904	,702	,569	,601
goalset 4	21,87	9,351	,185	,135	,724
goalset 5	21,40	9,033	,293	,334	,695
goalset 6	21,60	8,270	,417	,285	,664
goalset 7	21,81	8,764	,255	,183	,712

Table 3 *Reliability Statistics for newgoalsetmean after recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,764	,772	5

Table 4 *Reliability Statistics for goalsetmean_v2*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,595	,630	7

Table 5 *Reliability if items deleted for goalsetmean_v2*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
goalset1_v2	21,64	6,702	,403	,399	,527
goalset2_v2	21,48	7,186	,279	,242	,568
goalset3_v2	21,23	6,970	,487	,324	,516
goalset4_v2	22,39	7,871	,083	,115	,631
goalset5_v2	21,50	6,023	,514	,335	,478
goalset6_v2	21,84	5,904	,594	,427	,450
goalset7_v2	22,39	7,684	,022	,250	,683

Table 6 *Reliability Statistics for newgoalsetmean_v2 after recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,733	,738	5

Table 7 *Correlations for discmean and discmean_v2*

			disc8	disc9	disc8_v2	disc9_v2
Spearman's rho	disc8	Correlation Coefficient	1,000	,429**	,619**	,328
		Sig. (2-tailed)	.	<,001	<,001	,055
		N	76	76	35	35
	disc9	Correlation Coefficient	,429**	1,000	,234	,558**

		Sig. (2-tailed)	<,001	.	,176	<,001
		N	76	76	35	35
	disc8_v2	Correlation Coefficient	,619**	,234	1,000	,409**
		Sig. (2-tailed)	<,001	,176	.	,007
		N	35	35	42	42
	disc9_v2	Correlation Coefficient	,328	,558**	,409**	1,000
		Sig. (2-tailed)	,055	<,001	,007	.
		N	35	35	42	42

**. Correlation is significant at the 0.01 level (2-tailed).

Table 8 *Reliability Statistics for planabilmean*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,785	,784	4

Table 9 *Reliability Statistics for planabilmean_v2*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,757	,766	4

Table 10 *Correlations for dec14, dec15, dec14_v2 and dec15_v2*

			dec14	dec15	dec14_v2	dec15_v2
Spearman's rho	dec14	Correlation Coefficient	1,000	,310**	,676**	,351*
		Sig. (2-tailed)	.	,006	<,001	,039
		N	76	76	35	35
	dec15	Correlation Coefficient	,310**	1,000	,210	,301
		Sig. (2-tailed)	,006	.	,227	,079
		N	76	76	35	35
	dec14_v2	Correlation Coefficient	,676**	,210	1,000	,417**
		Sig. (2-tailed)	<,001	,227	.	,007
		N	35	35	41	41
	dec15_v2	Correlation Coefficient	,351*	,301	,417**	1,000

	Sig. (2-tailed)	,039	,079	,007	.
	N	35	35	41	41

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 11 *Correlations for responsmean and responsmean_v2*

			respons16	respons17	respons16_v2	respons17_v2
Spearman's rho	respons16	Correlation Coefficient	1,000	,478**	,287	,125
		Sig. (2-tailed)	.	<,001	,094	,473
		N	76	76	35	35
	respons17	Correlation Coefficient	,478**	1,000	,114	,262
		Sig. (2-tailed)	<,001	.	,515	,128
		N	76	76	35	35
	respons16_v2	Correlation Coefficient	,287	,114	1,000	,644**
		Sig. (2-tailed)	,094	,515	.	<,001
		N	35	35	41	41
	respons17_v2	Correlation Coefficient	,125	,262	,644**	1,000
		Sig. (2-tailed)	,473	,128	<,001	.
		N	35	35	41	41

**. Correlation is significant at the 0.01 level (2-tailed).

Table 12 *Correlations for selfconfmean and selfconfmean_v2*

			selfconf18	selfconf19	selfconf18_v2	selfconf19_v2
Spearman's rho	selfconf18	Correlation Coefficient	1,000	,442**	,373*	,090
		Sig. (2-tailed)	.	<,001	,036	,620
		N	74	74	32	33
	selfconf19	Correlation Coefficient	,442**	1,000	,191	,132
		Sig. (2-tailed)	<,001	.	,280	,451
		N	74	76	34	35
	selfconf18_v2	Correlation Coefficient	,373*	,191	1,000	,517**
		Sig. (2-tailed)	,036	,280	.	<,001
		N	32	34	40	40

	selfconf19_v2	Correlation Coefficient	,090	,132	,517**	1,000
		Sig. (2-tailed)	,620	,451	<,001	.
		N	33	35	40	41

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 13 *Reliability Statistics for resilmean*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,296	,377	4

Table 14 *Reliability if items deleted for resilmean*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
resil20	10,05	1,673	,392	,411	-,088[a]
resil21	10,05	1,700	,398	,322	-,086[a]
resil22	11,19	3,127	-,285	,086	,746
resil23	10,59	1,867	,376	,305	-,018[a]

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Table 15 *Reliability Statistics for newresilmean after recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,750	,750	3

Table 16 *Reliability Statistics for resilmean_v2*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,167	,322	4

Table 17 *Reliability if items deleted for resilmean_v2*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
resil20_v2	9,88	2,112	,493	,559	-,414[a]
resil21_v2	10,07	1,507	,492	,564	-,734[a]
resil22_v2	11,33	4,635	-,453	,237	,815
resil23_v2	10,58	2,353	,310	,411	-,176[a]

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Table 18 *Reliability Statistics for newresilmean_v2 after recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,815	,823	3

Table 19 *Reliability Statistics for selfawmean before recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,486	,508	6

Table 20 *Reliability if item deleted for selfawmean*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
selfaw24	18,36	5,585	,158	,145	,484
selfaw25	18,16	4,677	,315	,140	,400
selfaw26	18,79	5,603	,068	,167	,543
selfaw27	18,43	4,843	,308	,376	,406
selfaw28	18,25	5,030	,283	,185	,421
selfaw29	18,15	5,181	,419	,255	,376

Table 21 *Reliability Statistics for newselfawmean after recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,614	,614	3

Table 22 *Reliability Statistics for selfawmean_v2*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,532	,575	6

Table 23 *Reliability if item deleted for selfawmean_v2*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
selfaw24_v2	18,03	6,513	,094	,136	,562
selfaw25_v2	17,95	5,240	,275	,406	,492
selfaw26_v2	18,61	5,056	,222	,195	,536
selfaw27_v2	17,92	5,264	,561	,530	,377
selfaw28_v2	17,89	5,826	,264	,685	,494
selfaw29_v2	17,76	5,699	,389	,559	,447

Table 24 *Reliability Statistics for newselfawmean_v2 after recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,809	,808	3

Table 25 *Reliability Statistics for reflabilmean*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,732	,734	3

Table 26 *Reliability if item deleted for reflabilmean*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
reflabil30	6,59	2,725	,627	,393	,555
reflabil31	6,21	3,048	,545	,308	,660
reflabil32	6,22	3,803	,515	,279	,699

Table 27 *Reliability Statistics for reflabilmean_v2*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,582	,570	3

Table 28 *Reliability if item deleted for reflabilmean_v2*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
reflabil30_v2	6,33	1,807	,576	,333	,142
reflabil31_v2	6,33	2,754	,341	,218	,552
reflabil32_v2	6,10	3,042	,287	,165	,619

Table 29 *Correlations for newreflabilmean and newreflabilmean_v2*

			reflabil30	reflabil31	reflabil30_v2	reflabil31_v2
Spearman's rho	reflabil30	Correlation Coefficient	1,000	,533**	,472**	,015
		Sig. (2-tailed)	.	<,001	,006	,934
		N	76	76	33	33
	reflabil31	Correlation Coefficient	,533**	1,000	,302	,164
		Sig. (2-tailed)	<,001	.	,088	,363
		N	76	76	33	33

	reflabil30_v2	Correlation Coefficient	,472**	,302	1,000	,390*
		Sig. (2-tailed)	,006	,088	.	,014
		N	33	33	39	39
	reflabil31_v2	Correlation Coefficient	,015	,164	,390*	1,000
		Sig. (2-tailed)	,934	,363	,014	.
		N	33	33	39	39

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 30 *Reliability Statistics for commskillmean*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,738	,748	6

Table 31 *Reliability if item deleted for commskillmean*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
commskill33	19,07	6,360	,593	,469	,665
commskill34	18,37	8,210	,253	,158	,750
commskill35	19,11	6,124	,722	,551	,630
commskill36	18,89	7,070	,424	,306	,715
commskill37	19,17	6,470	,616	,452	,661
commskill38	19,32	6,572	,325	,326	,765

Table 32 *Reliability Statistics for newcommskillmean after recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,782	,782	4

Table 33 *Reliability Statistics for commskillmean_v2*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,649	,683	6

Table 34 *Reliability if item deleted for commskillmean_v2*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
commskill33_v2	19,36	5,920	,508	,543	,561
commskill34_v2	19,13	6,325	,280	,259	,647
commskill35_v2	19,44	5,779	,521	,450	,553
commskill36_v2	19,13	6,588	,508	,331	,581
commskill37_v2	19,28	6,418	,392	,330	,603
commskill38_v2	19,56	6,252	,212	,268	,689

Table 35 *Reliability Statistics for commskillmean_v2 after recode*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,717	,711	4

8.7.b. Scale descriptives

Table 36 *Sample size for newgoalsetmean*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
newgoalsetmean	78	89,7%	9	10,3%	87	100,0%

Table 37 *Descriptive statistics for newgoalsetmean*

			Statistic	Std. Error
newgoalsetmean	Mean		3,7256	,06163
	95% Confidence Interval for Mean	Lower Bound	3,6029	
		Upper Bound	3,8484	
	5% Trimmed Mean		3,7425	
	Median		3,8000	
	Variance		,296	
	Std. Deviation		,54426	
	Minimum		2,20	
	Maximum		4,80	
	Range		2,60	
	Interquartile Range		,80	
	Skewness		-,386	,272
	Kurtosis		-,461	,538

Table 38 *Sample size for newgoalsetmean_v2*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
newgoalsetmean_v2	44	50,6%	43	49,4%	87	100,0%

Table 39 *Descriptive statistics for newgoalsetmean_v2*

			Statistic	Std. Error
newgoalsetmean_v2	Mean		3,8727	,07751
	95% Confidence Interval for Mean	Lower Bound	3,7164	
		Upper Bound	4,0290	

	5% Trimmed Mean	3,8636	
	Median	3,8000	
	Variance	,264	
	Std. Deviation	,51415	
	Minimum	2,80	
	Maximum	5,00	
	Range	2,20	
	Interquartile Range	,60	
	Skewness	,530	,357
	Kurtosis	,213	,702

Table 40 *Sample size for discmean*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
discmean	76	87,4%	11	12,6%	87	100,0%

Table 41 *Descriptive statistics for discmean*

			Statistic	Std. Error
discmean	Mean		3,0921	,08309
	95% Confidence Interval for Mean	Lower Bound	2,9266	
		Upper Bound	3,2576	
	5% Trimmed Mean		3,0877	
	Median		3,0000	
	Variance		,525	
	Std. Deviation		,72439	
	Minimum		1,50	
	Maximum		4,50	
	Range		3,00	
	Interquartile Range		1,00	
	Skewness		-,169	,276
	Kurtosis		-,804	,545

Table 42 *Sample size for discmean_v2*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent

discmean_v2	42	48,3%	45	51,7%	87	100,0%

Table 43 *Descriptive statistics for discmean_v2*

			Statistic	Std. Error
discmean_v2	Mean		3,4762	,11676
	95% Confidence Interval for Mean	Lower Bound	3,2404	
		Upper Bound	3,7120	
	5% Trimmed Mean		3,5000	
	Median		3,5000	
	Variance		,573	
	Std. Deviation		,75670	
	Minimum		1,50	
	Maximum		5,00	
	Range		3,50	
	Interquartile Range		1,00	
	Skewness		-,492	,365
	Kurtosis		-,024	,717

Table 44 *Sample size for planabilmean*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
planabilmean	76	87,4%	11	12,6%	87	100,0%

Table 45 *Descriptive statistics for planabilmean*

			Statistic	Std. Error
planabilmean	Mean		3,2533	,08500
	95% Confidence Interval for Mean	Lower Bound	3,0840	
		Upper Bound	3,4226	
	5% Trimmed Mean		3,2705	
	Median		3,2500	
	Variance		,549	
	Std. Deviation		,74105	
	Minimum		1,50	

	Maximum	5,00	
	Range	3,50	
	Interquartile Range	1,00	
	Skewness	-,379	,276
	Kurtosis	,055	,545

Table 46 *Sample size for planabilmean_v2*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
planabilmean_v2	41	47,1%	46	52,9%	87	100,0%

Table 47 *Descriptive statistics for planabilmean_v2*

			Statistic	Std. Error
planabilmean_v2	Mean		3,4085	,12058
	95% Confidence Interval for Mean	Lower Bound	3,1648	
		Upper Bound	3,6522	
	5% Trimmed Mean		3,4190	
	Median		3,5000	
	Variance		,596	
	Std. Deviation		,77208	
	Minimum		1,50	
	Maximum		5,00	
	Range		3,50	
	Interquartile Range		1,25	
	Skewness		-,339	,369
	Kurtosis		-,429	,724

Table 48 *Sample size for dec14*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
dec14	76	87,4%	11	12,6%	87	100,0%

Table 49 *Descriptive statistics for dec14*

		Statistic	Std. Error
dec14	Mean	3,34	,098

	95% Confidence Interval for Mean	Lower Bound	3,15	
		Upper Bound	3,54	
	5% Trimmed Mean		3,32	
	Median		3,00	
	Variance		,735	
	Std. Deviation		,857	
	Minimum		2	
	Maximum		5	
	Range		3	
	Interquartile Range		1	
	Skewness		-,209	,276
	Kurtosis		-,839	,545

Table 50 *Sample size for dec14_v2*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
dec14_v2	41	47,1%	46	52,9%	87	100,0%

Table 51 *Descriptive statistics for dec14_v2*

			Statistic	Std. Error
dec14_v2	Mean		3,44	,126
	95% Confidence Interval for Mean	Lower Bound	3,18	
		Upper Bound	3,69	
	5% Trimmed Mean		3,43	
	Median		3,00	
	Variance		,652	
	Std. Deviation		,808	
	Minimum		2	
	Maximum		5	
	Range		3	
	Interquartile Range		1	
	Skewness		-,092	,369
	Kurtosis		-,405	,724

Table 52 *Sample size for responsmean*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
responsmean	76	87,4%	11	12,6%	87	100,0%

Table 53 *Descriptive statistics for responsmean*

			Statistic	Std. Error
responsmean	Mean		3,6711	,08458
	95% Confidence Interval for Mean	Lower Bound	3,5026	
		Upper Bound	3,8395	
	5% Trimmed Mean		3,6974	
	Median		4,0000	
	Variance		,544	
	Std. Deviation		,73735	
	Minimum		1,50	
	Maximum		5,00	
	Range		3,50	
	Interquartile Range		1,00	
	Skewness		-,565	,276
	Kurtosis		,314	,545

Table 54 *Sample size for responsmean_v2*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
responsmean_v2	41	47,1%	46	52,9%	87	100,0%

Table 55 *Descriptive statistics for responsmean_v2*

			Statistic	Std. Error
responsmean_v2	Mean		3,6707	,13367
	95% Confidence Interval for Mean	Lower Bound	3,4006	
		Upper Bound	3,9409	
	5% Trimmed Mean		3,6897	

Median	4,0000	
Variance	,733	
Std. Deviation	,85593	
Minimum	2,00	
Maximum	5,00	
Range	3,00	
Interquartile Range	1,50	
Skewness	-,250	,369
Kurtosis	-,774	,724

Table 56 *Sample size for selfconfmean*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
selfconfmean	76	87,4%	11	12,6%	87	100,0%

Table 57 *Descriptive statistics for selfconfmean*

			Statistic	Std. Error
selfconfmean	Mean		4,0000	,06421
	95% Confidence Interval for Mean	Lower Bound	3,8721	
		Upper Bound	4,1279	
	5% Trimmed Mean		4,0146	
	Median		4,0000	
	Variance		,313	
	Std. Deviation		,55976	
	Minimum		2,00	
	Maximum		5,00	
	Range		3,00	
	Interquartile Range		1,00	
	Skewness		-,586	,276
	Kurtosis		1,271	,545

Table 58 *Sample size for selfconfmean_v2*

Cases					
Valid		Missing		Total	
N	Percent	N	Percent	N	Percent

selfconfmean_v2	41	47,1%	46	52,9%	87	100,0%

Table 59 *Descriptive statistics for selfconfmean_v2*

			Statistic	Std. Error
selfconfmean_v2	Mean		3,8902	,09802
	95% Confidence Interval for Mean	Lower Bound	3,6921	
		Upper Bound	4,0883	
	5% Trimmed Mean		3,9051	
	Median		4,0000	
	Variance		,394	
	Std. Deviation		,62762	
	Minimum		2,00	
	Maximum		5,00	
	Range		3,00	
	Interquartile Range		,50	
	Skewness		-,439	,369
	Kurtosis		1,040	,724

Table 60 *Sample size for newresilmean*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
newresilmean	76	87,4%	11	12,6%	87	100,0%

Table 61 *Descriptive statistics for newresilmean*

			Statistic	Std. Error
newresilmean	Mean		3,7193	,06784
	95% Confidence Interval for Mean	Lower Bound	3,5842	
		Upper Bound	3,8544	
	5% Trimmed Mean		3,7495	
	Median		3,6667	
	Variance		,350	
	Std. Deviation		,59143	
	Minimum		1,67	

	Maximum	5,00	
	Range	3,33	
	Interquartile Range	,58	
	Skewness	-,731	,276
	Kurtosis	1,906	,545

Table 62 *Sample size for newresilmean_v2*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
newresilmean_v2	40	46,0%	47	54,0%	87	100,0%

Table 63 *Descriptive statistics for newresilmean_v2*

			Statistic	Std. Error
newresilmean_v2	Mean		3,7750	,11347
	95% Confidence Interval for Mean	Lower Bound	3,5455	
		Upper Bound	4,0045	
	5% Trimmed Mean		3,7963	
	Median		4,0000	
	Variance		,515	
	Std. Deviation		,71765	
	Minimum		2,00	
	Maximum		5,00	
	Range		3,00	
	Interquartile Range		,92	
	Skewness		-,429	,374
	Kurtosis		,029	,733

Table 64 *Sample size for newselfawmean*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
newselfawmean	76	87,4%	11	12,6%	87	100,0%

Table 65 *Descriptive statistics for newselfawmean*

			Statistic	Std. Error

newselfawmean	Mean		3,7412	,06655
	95% Confidence Interval for Mean	Lower Bound	3,6087	
		Upper Bound	3,8738	
	5% Trimmed Mean		3,7398	
	Median		3,6667	
	Variance		,337	
	Std. Deviation		,58016	
	Minimum		2,33	
	Maximum		5,00	
	Range		2,67	
	Interquartile Range		,67	
	Skewness		,004	,276
	Kurtosis		-,169	,545

Table 66 *Sample size for newselfawmean_v2*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
newselfawmean_v2	39	44,8%	48	55,2%	87	100,0%

Table 67 *Descriptive statistics for newselfawmean_v2*

			Statistic	Std. Error
newselfawmean_v2	Mean		3,7650	,09360
	95% Confidence Interval for Mean	Lower Bound	3,5755	
		Upper Bound	3,9544	
	5% Trimmed Mean		3,7574	
	Median		4,0000	
	Variance		,342	
	Std. Deviation		,58455	
	Minimum		2,67	
	Maximum		5,00	
	Range		2,33	
	Interquartile Range		,67	
	Skewness		,049	,378
	Kurtosis		,071	,741

Table 68 *Sample size for newreflabilmean*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
newreflabilmean	76	87,4%	11	12,6%	87	100,0%

Table 69 *Descriptive statistics for newreflabilmean*

			Statistic	Std. Error
newreflabilmean	Mean		3,1118	,11184
	95% Confidence Interval for Mean	Lower Bound	2,8890	
		Upper Bound	3,3346	
	5% Trimmed Mean		3,1184	
	Median		3,0000	
	Variance		,951	
	Std. Deviation		,97502	
	Minimum		1,00	
	Maximum		5,00	
	Range		4,00	
	Interquartile Range		1,50	
	Skewness		-,124	,276
	Kurtosis		-,487	,545

Table 70 *Sample size for newreflabilmean_v2*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
newreflabilmean_v2	39	44,8%	48	55,2%	87	100,0%

Table 71 *Descriptive statistics for newreflabilmean_v2*

			Statistic	Std. Error
newreflabilmean_v2	Mean		3,0513	,13964
	95% Confidence Interval for Mean	Lower Bound	2,7686	
		Upper Bound	3,3340	
	5% Trimmed Mean		3,0434	

	Median	3,0000	
	Variance	,760	
	Std. Deviation	,87204	
	Minimum	1,00	
	Maximum	5,00	
	Range	4,00	
	Interquartile Range	1,00	
	Skewness	-,071	,378
	Kurtosis	,366	,741

Table 72 *Sample size for newcommskillmean*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
newcommskillmean	76	87,4%	11	12,6%	87	100,0%

Table 73 *Descriptive statistics for newcommskillmean*

			Statistic	Std. Error
newcommskillmean	Mean		3,7390	,06756
	95% Confidence Interval for Mean	Lower Bound	3,6044	
		Upper Bound	3,8736	
	5% Trimmed Mean		3,7342	
	Median		3,7500	
	Variance		,347	
	Std. Deviation		,58900	
	Minimum		2,50	
	Maximum		5,00	
	Range		2,50	
	Interquartile Range		,75	
	Skewness		,114	,276
	Kurtosis		-,537	,545

Table 74 *Sample size for newcommskillmean_v2*

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent

newcommskillmean_v2	39	44,8%	48	55,2%	87	100,0%

Table 75 *Descriptive statistics for newcommskillmean_V2*

			Statistic	Std. Error
newcommskillmean_v2	Mean		3,8782	,08361
	95% Confidence Interval for Mean	Lower Bound	3,7090	
		Upper Bound	4,0475	
	5% Trimmed Mean		3,8579	
	Median		3,7500	
	Variance		,273	
	Std. Deviation		,52212	
	Minimum		3,00	
	Maximum		5,00	
	Range		2,00	
	Interquartile Range		,50	
	Skewness		,858	,378
	Kurtosis		,315	,741

8.7.c. Paired samples T-test results

Table 76 *Paired Samples Effect Sizes*

			Standardizer[a]	Point Estimate	95% Confidence Interval	
					Lower	Upper
Pair 1	newgoalsetmean - newgoalsetmean_v2	Cohen's d	,35328	-,490	-,828	-,145
		Hedges' correction	,36086	-,479	-,811	-,142
Pair 2	discmean - discmean_v2	Cohen's d	,58410	-,514	-,863	-,157
		Hedges' correction	,59740	-,502	-,844	-,154
Pair 3	planabilmean - planabilmean_v2	Cohen's d	,84235	,000	-,331	,331
		Hedges' correction	,86152	,000	-,324	,324
Pair 4	dec14 - dec14_v2	Cohen's d	,702	-,122	-,454	,211
		Hedges' correction	,718	-,119	-,444	,207
Pair 5	responsmean - responsmean_v2	Cohen's d	,93148	,000	-,331	,331
		Hedges' correction	,95267	,000	-,324	,324
Pair 6	selfconfmean - selfconfmean_v2	Cohen's d	,75815	,151	-,184	,483
		Hedges' correction	,77540	,147	-,179	,472
Pair 7	newresilmean - newresilmean_v2	Cohen's d	,61126	-,016	-,352	,320
		Hedges' correction	,62560	-,016	-,344	,313
Pair 8	newselfawmean - newselfawmean_v2	Cohen's d	,47574	-,032	-,373	,310
		Hedges' correction	,48726	-,031	-,364	,302
Pair 9	newreflabilmean - newreflabilmean_v2	Cohen's d	1,12689	,121	-,222	,463
		Hedges' correction	1,15419	,118	-,217	,452
Pair 10	newcommskillmean - newcommskillmean_v2	Cohen's d	,37547	-,303	-,649	,049
		Hedges' correction	,38457	-,295	-,634	,048

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation of the mean difference.

Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

Paired Samples Test

		Paired Differences					t	df	Significance	
					95% Confidence Interval of the Difference					
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			One-Sided p	Two-Sided p
Pair 1	newgoalsetmean - newgoalsetmean_v2	-,17297	,35328	,05808	-,29076	-,05518	-2,978	36	,003	,005
Pair 2	discmean - discmean_v2	-,30000	,58410	,09873	-,50065	-,09935	-3,039	34	,002	,005
Pair 3	planabilmean - planabilmean_v2	,00000	,84235	,14238	-,28936	,28936	,000	34	,500	1,000
Pair 4	dec14 - dec14_v2	-,086	,702	,119	-,327	,155	-,723	34	,237	,475
Pair 5	responsmean - responsmean_v2	,00000	,93148	,15745	-,31997	,31997	,000	34	,500	1,000
Pair 6	selfconfmean - selfconfmean_v2	,11429	,75815	,12815	-,14615	,37472	,892	34	,189	,379
Pair 7	newresilmean - newresilmean_v2	-,00980	,61126	,10483	-,22308	,20347	-,094	33	,463	,926
Pair 8	newselfawmean - newselfawmean_v2	-,01515	,47574	,08282	-,18384	,15354	-,183	32	,428	,856
Pair 9	newreflabilmean - newreflabilmean_v2	,13636	1,12689	,19617	-,26322	,53594	,695	32	,246	,492
Pair 10	newcommskillmean - newcommskillmean_v2	-,11364	,37547	,06536	-,24677	,01950	-1,739	32	,046	,092

Table 77 *Paired Samples Test Summary*

8.7.d. Wilcoxon signed rank test results

Table 78 *Related-Samples Wilcoxon Signed Rank Test Summary for goalsetting abilities*

Total N	37
Test Statistic	400,500
Standard Error	52,264
Standardized Test Statistic	2,612
Asymptotic Sig.(2-sided test)	,009

Table 79 *Related-Samples Wilcoxon Signed Rank Test Summary for discipline*

Total N	35
Test Statistic	243,000
Standard Error	33,206
Standardized Test Statistic	2,801
Asymptotic Sig.(2-sided test)	,005

Table 80 *Related-Samples Wilcoxon Signed Rank Test Summary for planning abilities*

Total N	35
Test Statistic	272,000
Standard Error	50,726
Standardized Test Statistic	,473
Asymptotic Sig.(2-sided test)	,636

Table 81 *Related-Samples Wilcoxon Signed Rank Test Summary for decisiveness*

Total N	35
Test Statistic	63,000
Standard Error	14,431
Standardized Test Statistic	,728
Asymptotic Sig.(2-sided test)	,467

Table 82 *Related-Samples Wilcoxon Signed Rank Test Summary for feelings of responsibility*

Total N	35
Test Statistic	169,000

Standard Error	36,454
Standardized Test Statistic	,178
Asymptotic Sig.(2-sided test)	,858

Table 83 *Related-Samples Wilcoxon Signed Rank Test Summary for self-confidence*

Total N	35
Test Statistic	106,500
Standard Error	29,839
Standardized Test Statistic	-,670
Asymptotic Sig.(2-sided test)	,503

Table 84 *Related-Samples Wilcoxon Signed Rank Test Summary for resilience*

Total N	34
Test Statistic	120,000
Standard Error	28,447
Standardized Test Statistic	,158
Asymptotic Sig.(2-sided test)	,874

Table 85 *Related-Samples Wilcoxon Signed Rank Test Summary for self-awareness*

Total N	33
Test Statistic	70,500
Standard Error	19,039
Standardized Test Statistic	,131
Asymptotic Sig.(2-sided test)	,896

Table 86 *Related-Samples Wilcoxon Signed Rank Test Summary for reflective abilities*

Total N	33
Test Statistic	134,500
Standard Error	34,440
Standardized Test Statistic	-,450
Asymptotic Sig.(2-sided test)	,653

Table 87 *Related-Samples Wilcoxon Signed Rank Test Summary for communication skills*

Total N	33
Test Statistic	160,000
Standard Error	28,242
Standardized Test Statistic	1,576
Asymptotic Sig.(2-sided test)	,115

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