

LEAP LEDELSESAADFÆRD OG PERFORMANCE
LEADERSHIP AND PERFORMANCE

Technical report

*Survey of perceived learning outcomes
Spring 2015*

Version: 13.03.2016

Mette Østergaard Pedersen
Christian Bay-Andersen
Katharina Fisker
& Lotte Bøgh Andersen

Table of Contents

Introduction to the project	3
Survey Setup, Collection Methods, Response Rate.....	4
Distributions	6
Leadership practice	6
Treatment specific questions.....	14
Usefulness of the course	17
Factual questions	21
Evaluation of the courses	25
Appendix: Questionnaires	29

Introduction to the project

The Leadership and Performance (LEAP) research project is an experimental study on the effects of leadership training and leadership strategies on organizational performance. The project includes 672 Danish public and private leaders from five different sectors, day care, primary schools, secondary schools, tax divisions and bank branches. The LEAP project is conducted from 2014 to 2017 and is funded by the Danish Council for Independent Research. For more information on LEAP, please visit www.leap-project.dk.

This report summarizes and describes the pre-treatment surveys of participating leaders and their employees. Two surveys were distributed to the leaders and one survey to their employees in the spring and summer of 2014. The report details the procedures, response rates and survey items for each of these surveys. A total number of 4,749 leaders were initially contacted and 1,850 leaders completed the first survey. These 1,850 leaders were invited to participate in the experiment and 735 expressed their interest. 672 leaders committed to participate in the experiment and 607 completed the second leader survey. 19,552 employees reporting to the 672 participating leaders were contacted just before treatment start and 8,861 completed the survey while 1,666 provided some answers.

The report also details the randomization procedure. A stratified random sampling method was used to assign the 672 leaders to treatment and control groups and to ensure an even representation of leaders from each sector across the groups. Within the treatment groups, leaders were assigned to classes according to geographic distribution. Four researchers with extensive teaching experience (Lotte Bøgh Andersen, Niels Westergaard-Nielsen, Anne Bøllingtoft and Christian Bøtcher Jacobsen) were randomly assigned to teach classes on all treatments. Each treatment comprises of four full days of teaching starting September 2014 and concluding June 2015.

Finally, the report describes the theoretical concepts and their operationalization for each of the three surveys. Some concepts were included in both leader and employee surveys (e.g., leadership strategies) while others were included only in the leader surveys (e.g., performance information use) or in the employee survey (e.g., public service motivation). Distributions, descriptive statistics and factor analyses are provided for the measures. The wording of all items (in English and in Danish) can also be found in the full questionnaires (appendices A-F).

Survey Setup, Collection Methods, Response Rate

This questionnaire regards the participating leaders' evaluation of their learning outcome from their teaching sessions during the LEAP project. The questionnaire consisted of 44 questions of which seven questions were treatment specific, which resulted in three different versions of the questionnaire. The last ten questions were designed as an anonymous questionnaire giving the participants an opportunity to comment on good and lesser good parts of the course.

Each questionnaire was constructed in a way that the questions on each page were related, in the sense that they measured the same overall concept. We gave no possibility for the leaders to answer "I don't know" in order to motivate them to answer as many questions as possible. If the leaders did not want to answer, or could not answer a specific question, they could leave the question blank and continue with the remaining questionnaire.

When sending out the questionnaires we discovered an error in one of the questions in the anonymous part of the transformational questionnaire. Instead of the originally seven response categories, there were only six: "partially agree" being the category missing. The error only relates to the respondents who have answered electronically, which accounts for 37 respondents from the transformational questionnaire. To correct this error we recoded response category five as six and category six as seven.

There was also a minor error in the transactional and combined electronic questionnaires regarding the anonymous part. Instead of the label being 'partially agree' the label was 'agree to a minor extent'.

The three versions of the questionnaire were constructed using the online survey software, Survey Xact. The designs were minimalistic and easy to understand in order to encourage respondents to complete the questionnaire. The primary distribution form was a paper version of the questionnaire handed out at the end of the final teaching session. Those, who were unable to attend or in any other way prevented from answering the paper version, received an electronic version by e-mail. The electronic version of the questionnaire meant that it was not possible to separate the anonymous part of the questionnaire from the remaining part, whereby the leaders who answered the electronic

version had to answer the last ten questions without the anonymity mentioned above. Table 1 shows the distribution of leaders who answered the electronic and paper version respectively.

Table 1: Collection method

	E-mail	Paper	N
Transformational	52 (42.3 %)	71 (57.7 %)	123
Combined	50 (40.0 %)	75 (60.0 %)	125
Transactional	48 (37.8 %)	79 (62.2 %)	127
Total	150 (40.0 %)	225 (60.0 %)	375

The electronic version of the questionnaire was sent out on March 8th 2015. Following a reminder e-mail sent out the 18th and then a final reminder on the 20th of March. As shown in the table above the electronic version of the questionnaire accounts for 40 per cent of the leaders who participated in the evaluation. The paper versions of the questionnaire were collected by the teacher after having been filled out by the leaders during the class, and afterwards entered in SurveyXact by two student assistants from the project.

The leaders who filled out the electronic version of the questionnaire had the opportunity to send inquiries, which only few did. There inquiries typically came from leaders who had already filled out the paper version of the questionnaire due to having attended a different class than their own for the final teaching session.

The total response rate for the leaders from the three treatment groups is shown in table 2 below.

Table 2: Response rate

	Distributed	Partially completed	Completed	Missing	Total
Transformational	14 (11.4 %)	2 (1.6 %)	106 (86.2 %)	1 (0.8 %)	123
Combined	17 (13.6 %)	1 (0.8 %)	106 (84.8 %)	1 (0.8 %)	125
Transactional	19 (15.0 %)	4 (3.1 %)	103 (81.1%)	1(0.8 %)	127

As can be seen from the table there is a fairly even distribution of responses across the three treatments and a very high completion rate of more than 80 per cent.

Distributions

Leadership practice

This part of the questionnaire consists of fourteen questions regarding the leaders' leadership practice during the last year. The general tendency is that a majority of the leaders from the project have used a wide range of leadership practices (e.g. clarifying direction, making visions/objectives, involving others in the process and using different forms of communication methods) and that this tendency applies to all three treatments groups. There are, however, a few questions where the leaders from the *transformational* treatment differ from the two other treatments. Compared to the two other treatments there is a relatively higher level of disagreement regarding the statements in question 5 (*I have involved most of my employees in formulating the objective/vision for (my part of) the organization*), question 11 (*I constantly communicate the vision/objective via my actions and my other communication*) and question 12 (*I consistently praise my employees for their specific efforts and/or results linked to the objective/vision*) among the transformational group. There is furthermore a comparatively higher level of agreement regarding the statement in question 10 (*My communication to the employees of (my part of) the organization's objective/vision is very limited (no/only few times)*) among the leaders from the transformational treatment. This could indicate that the leaders from the transformational treatment have used the leadership practices to a lesser extent than the leaders from the two other treatments.

Table 3: Regarding the direction the organization should move

	During the last year, I have done much to clarify the direction in which my organization/my part of the organization should move.							
	Strongly disagree	Disagree	Partially <input type="checkbox"/> disagree	Neither agree or disagree	Partially <input type="checkbox"/> agree	Agree	Strongly agree	N
Transformational	0.0%	1.9%	3.7%	10.3%	29.0%	35.5%	19.6%	107
Combined	0.0%	0.9%	0.0%	5.6%	29.9%	43.0%	20.6%	107
Transactional	0.0%	0.0%	0.9%	3.7%	28.0%	40.2%	27.1%	107
Total	0.0%	0.9%	1.6%	6.5%	29.0%	39.6%	22.4%	321

The table shows that a majority of leaders across treatments agree to a greater or lesser extent with the statement “*During the last year, I have done much to clarify the direction in which my organiza-*

tion/my part of the organization should move”. Only a small minority of the leaders express their disagreement.

Table 4: Clarifying the direction

	The effort to clarify the direction for (my part of) the organization has been done within a specific framework defined by the board/my own leaders.							
	Strongly disagree	Disagree	Partially <input type="checkbox"/> disagree	Neither agree or disagree	Partially <input type="checkbox"/> agree	Agree	Strongly agree	N
Transformational	2.8%	8.3%	3.7%	4.6%	27.8%	38.9%	13.9%	108
Combined	1.9%	3.8%	3.8%	16.0%	22.6%	34.9%	17.0%	106
Transactional	1.9%	0.9%	4.7%	14.0%	24.3%	35.5%	18.7%	107
Total	2.2%	4.4%	4.0%	11.5%	24.9%	36.4%	16.5%	321

A vast majority of leaders across treatments express that they to a greater or lesser extent agree with the statement “*The effort to clarify the direction for (my part of) the organization has been done within a specific framework defined by the board/my own leaders.*” The table only shows only slight differences between the three treatments in the level of agreement with the statement.

Table 5: Autonomy to create a vision/objective

	I have had autonomy to make a vision/an objective, which is adapted to my specific (part of the) organization.							
	Strongly disagree	Disagree	Partially <input type="checkbox"/> disagree	Neither agree or disagree	Partially <input type="checkbox"/> agree	Agree	Strongly agree	N
Transformational	2.8%	5.6%	5.6%	9.3%	13.9%	35.2%	27.8%	108
Combined	1.9%	8.4%	7.5%	11.2%	17.8%	30.8%	22.4%	107
Transactional	1.9%	3.7%	7.5%	8.4%	22.4%	36.4%	19.6%	107
Total	2.2%	5.9%	6.8%	9.6%	18.0%	34.2%	23.3%	322

A vast majority of leaders across treatments express that they to a greater or lesser extent agree with the statement “*I have had autonomy to make a vision/an objective, which is adapted to my specific (part of the) organization*”.

Table 6: Involvement of own leader/the board

	I have involved my own leader/the board in my efforts to formulate an objective/a vision for (my part of) the organization.							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree	N
Transformational	10.2%	14.8%	8.3%	19.4%	19.4%	18.5%	9.3%	108
Combined	7.5%	13.1%	8.4%	15.9%	16.8%	24.3%	14.0%	107
Transactional	7.5%	9.3%	2.8%	14.0%	25.2%	33.6%	7.5%	107
Total	8.4%	12.4%	6.5%	16.5%	20.5%	25.5%	10.2%	322

The table shows considerable variation within all three treatments regarding the statement “*I have involved my own leader/the board in my efforts to formulate an objective/a vision for (my part of) the organization*” indicating that there are big differences in the extent to which the leaders have engaged their own leader/board of directors in the task of formulating a goal/vision for the organization. A majority, however, express their agreement with the statement.

Table 7: Involvement of employees

	I have involved most of my employees in formulating the objective/vision for (my part of) the organization.							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree	N
Transformational	5.6%	14.0%	9.3%	15.0%	20.6%	20.6%	15.0%	107
Combined	1.9%	7.5%	6.5%	16.8%	23.4%	25.2%	18.7%	107
Transactional	4.7%	5.6%	6.5%	9.3%	32.7%	26.2%	15.0%	107
Total	4.0%	9.0%	7.5%	13.7%	25.5%	24.0%	16.2%	321

Table 7 shows that the majority of leaders express agreement with the statement “*I have involved most of my employees in formulating the objective/vision for (my part of) the organization*” although about 20 per cent of the leaders express disagreement to a greater or lesser extent, especially the leaders from the transformational treatment.

Table 8: Oral communication

	I use oral dissemination from me to the employees to communicate about the objective/vision (e.g. speeches on employee meetings).							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially <input type="checkbox"/> agree	Agree	Strongly agree	N
Transformational	8.3%	3.7%	0.9%	6.5%	25.0%	50.9%	13.0%	108
Combined	8.5%	0.0%	5.6%	5.6%	19.6%	42.1%	27.1%	107
Transactional	11.2%	0.9%	1.9%	2.8%	27.1%	45.8%	21.5%	107
Total	9.3%	1.6%	2.8%	5.0%	23.9%	46.3%	20.5%	322

The table shows that a vast majority of the leaders across treatments agree either partially or strongly with the statement “*I use oral dissemination from me to the employees to communicate about the objective/vision (e.g. speeches on employee meetings)*”.

Table 9: Written communication

	My communication about the objective/vision has especially consisted of written dissemination from me to the employees (e.g. newsletter).							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially <input type="checkbox"/> agree	Agree	Strongly agree	N
Transformational	8.3%	26.9%	24.1%	15.7%	18.5%	6.5%	0.0%	108
Combined	8.5%	26.4%	15.1%	14.2%	23.6%	9.4%	2.8%	106
Transactional	11.2%	18.7%	23.4%	15.0%	23.4%	7.5%	0.9%	107
Total	9.3%	24.0%	20.9%	15.0%	21.8%	7.8%	1.2%	321

A majority of the leaders express that they disagree to a smaller or larger extent with the statement “*My communication about the objective/vision has especially consisted of written dissemination from me to the employees (e.g. newsletter)*” although about 20 per cent of the leaders across treatments express that they partially agree with the statement.

Table 10: Dialog communication

	The internal communication of objective/vision has to a high degree been face-to-face dialog with the employees.							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree	N
Transformational	1.9%	6.7%	1.9%	9.5%	22.9%	39.0%	18.1%	105
Combined	0.0%	2.8%	4.7%	15.1%	24.5%	32.1%	20.8%	106
Transactional	0.9%	3.8%	5.7%	8.5%	28.3%	34.9%	17.9%	106
Total	0.9%	4.4%	4.1%	11.0%	25.2%	35.3%	18.9%	317

The majority of the leaders express that they to a greater or lesser degree agree with the statement “*The internal communication of objective/vision has to a high degree been face-to-face dialog with the employees*“. This tendency applies to all three treatments.

Table 11: Other channels of dialog

	Other channels than face-to-face discussions (e.g. intranet and notice boards) play an important role in the dialog about the objective/vision.							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree	N
Transformational	7.6%	18.1%	10.5%	12.4%	20.0%	27.6%	3.8%	105
Combined	6.6%	17.0%	9.4%	24.5%	26.4%	13.2%	2.8%	106
Transactional	4.7%	15.9%	15.9%	21.5%	23.4%	17.8%	0.9%	107
Total	6.3%	17.0%	11.9%	19.5%	23.3%	19.5%	2.5%	318

The table shows a distribution where only a few leaders express strong agreement or disagreement with the statement “*Other channels than face-to-face discussions (e.g. intranet and notice boards) play an important role in the dialog about the objective/vision*”, and most respondents express either agreement/disagreement, partial agreement/disagreement or neither agreement or disagreement.

Table 12: The amount of communication

	My communication to the employees of (my part of) the organization's objective/vision is very limited (no/only few times).							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree	N
Transformational	18.9%	22.6%	12.3%	13.2%	17.9%	14.2%	0.9%	106
Combined	22.4%	25.2%	24.3%	8.4%	15.9%	2.8%	0.9%	107
Transactional	19.6%	39.3%	14.0%	8.4%	9.3%	9.3%	0.0%	107
Total	20.3%	29.1%	16.9%	10.0%	14.4%	8.8%	0.6%	320

The table shows a distribution where only very few leaders express that they strongly agree with the statement “*My communication to the employees of (my part of) the organization's objective/vision is very limited (no/only few times)*” while the remaining answers are somewhat evenly distributed among the remaining categories, although there is a higher level of agreement with the statement among the leaders from the transformational treatment compared to the two other treatments.

Table 13: Frequency of communication

	I constantly communicate the vision/objective via my actions and my other communication.							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree	N
Transformational	0.9%	3.7%	10.2%	15.7%	28.7%	28.7%	12.0%	108
Combined	0.0%	4.7%	0.9%	12.1%	42.1%	35.5%	4.7%	107
Transactional	0.9%	0.0%	4.7%	4.7%	44.9%	35.5%	9.3%	107
Total	0.6%	2.8%	5.3%	10.9%	38.5%	33.2%	8.7%	322

The table shows a distribution where a vast majority of the leaders answered affirmatively to the statement “*I constantly communicate the vision/objective via my actions and my other communication*”. This tendency applies to all three treatments although there is a larger level of disagreement among the respondents from the transformational treatment compared to the other two treatments.

Table 14: The praising of employees

	I consistently praise my employees for their specific efforts and/or results linked to the objective/vision.							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree	N
Transformational	0.9%	3.8%	10.4%	18.9%	28.3%	28.3%	9.4%	106
Combined	0.0%	1.9%	5.6%	10.3%	48.6%	25.2%	8.4%	107
Transactional	0.0%	0.0%	1.9%	12.3%	47.2%	31.1%	7.5%	106
Total	0.3%	1.9%	6.0%	13.8%	41.4%	28.2%	8.5%	319

A vast majority of the leaders express that they to a larger or smaller amount agree with the statement “*I consistently praise my employees for their specific efforts and/or results linked to the objective/vision*”. This tendency applies to all three treatments although there is a larger level of disagreement among the respondents from the transformational treatment compared to the other two treatments.

Table 15: The use of bonuses

	In my (part of the) organization, bonuses to some extent depend on employee efforts and/or results.							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree	N
Transformational	28.0%	10.3%	2.8%	15.0%	15.9%	20.6%	7.5%	107
Combined	25.2%	16.8%	2.8%	17.8%	10.3%	16.8%	10.3%	107
Transactional	17.0%	13.2%	7.5%	13.2%	15.1%	18.9%	15.1%	106
Total	23.4%	13.4%	4.4%	15.3%	13.8%	18.8%	10.9%	320

The table shows a distribution with considerable variation regarding the statement “*In my (part of the) organization, bonuses to some extent depends on employee efforts and/or results*”. The three treatments are almost evenly divided between agreeing and disagreeing.

Table 16: Actions towards unsatisfactory work/results

	I consistently take action in relation to employees who do not deliver satisfactory work and/or results.							
	Strongly disagree	Disagree	Partially disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree	N
Transformational	0.9%	3.7%	9.3%	5.6%	36.1%	37.0%	7.4%	108
Combined	0.0%	1.0%	6.7%	14.3%	32.4%	37.1%	8.6%	105
Transactional	0.0%	0.0%	8.4%	10.3%	38.3%	36.4%	6.5%	107
Total	0.3%	1.6%	8.1%	10.0%	35.6%	36.9%	7.5%	320

The table shows a distribution where the vast majority of leaders answered affirmatively to the statement “*I consistently take action in relation to employees who do not deliver satisfactory work and/or results*”.

Treatment specific questions

The leaders from were each given seven questions specific to the treatment to test their knowledge of the content taught as a part of the LEAP course. Each question had three options and one correct answer except the question ‘*When my organization are going to change vision and goals, and it is necessary to change employees’ existing patterns of thought, it is most important*’ from the transformational treatment which had two correct answers due to indistinctness in the options given. The questions were answered correctly by between 73 % and 98 % of the leaders except one question. Only 58 % of the leaders answered the question ‘*As a leader I can highlight the meaningfulness of the work. This can be done by:*’ correctly. Below is presented three histograms showing the distribution of the number of correct answers given by the leaders in the different treatments.

Figure 1: Histogram of the transformational specific questions

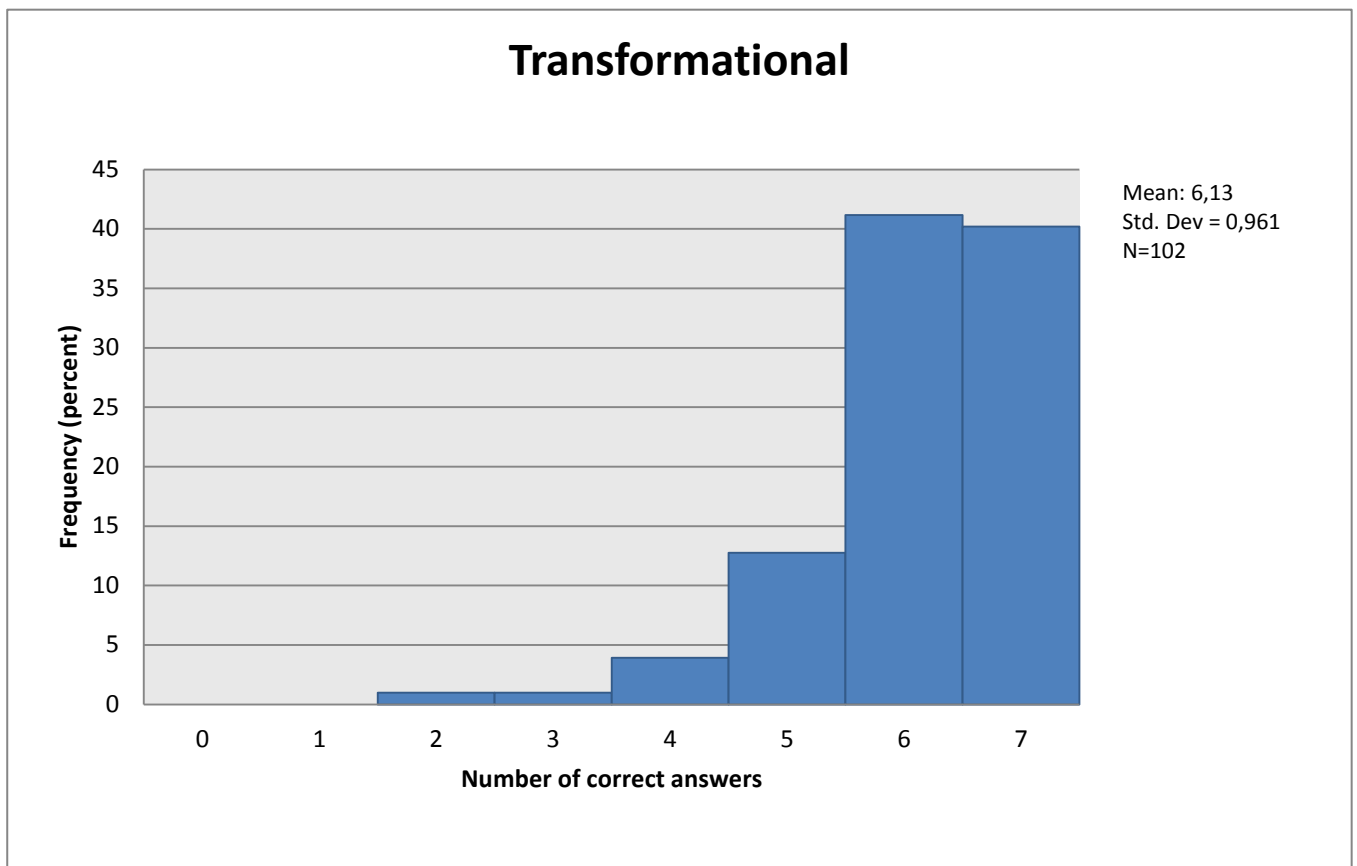


Figure 2: Histogram of the combined specific questions

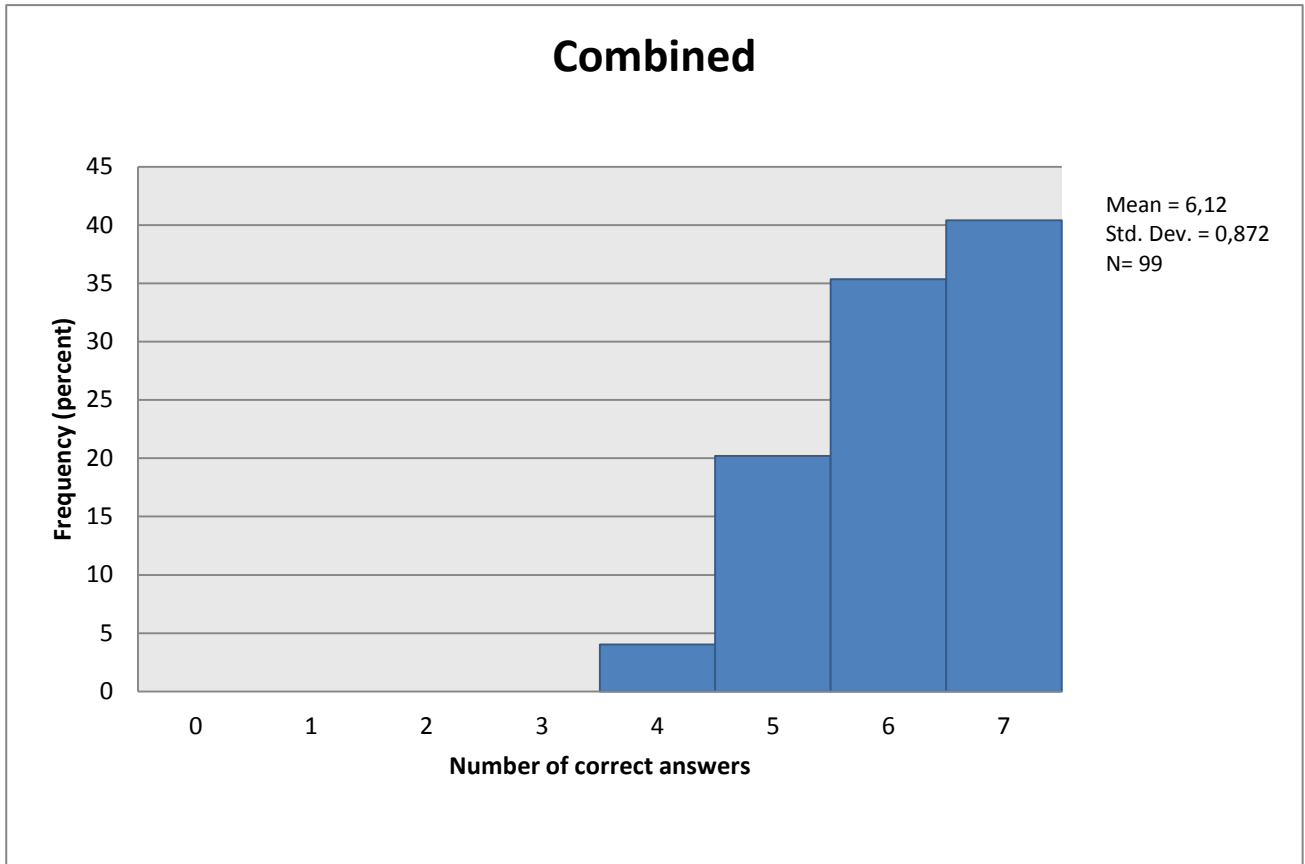
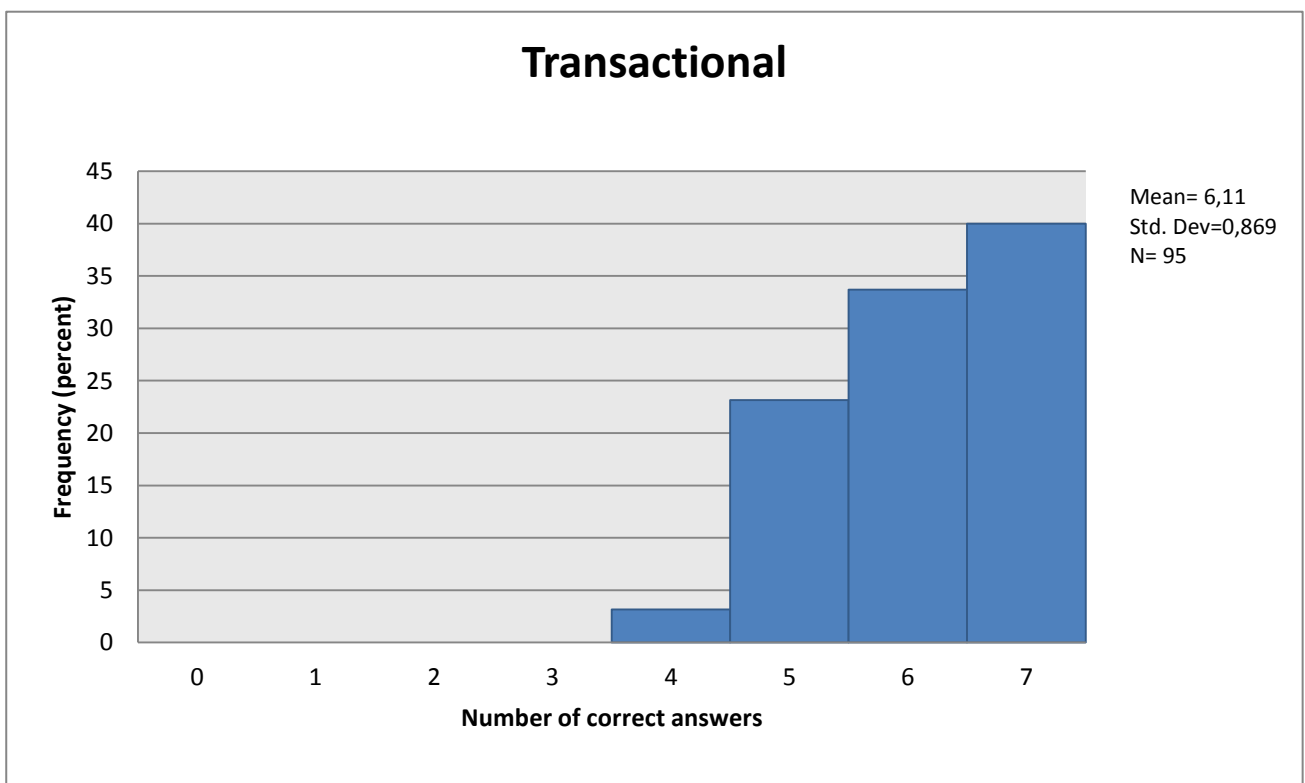


Figure 3: Histogram of the transactional specific questions



The three histograms show that the leaders in general score between four and seven correct answers meaning that they answered more than half the questions correct. From the transformational treatment there were, however, two leaders with only two or three correct answers respectively. The mean scores of the three treatments shown in the tables are almost identical with a mean score between 6,11 and 6,13 indicating very little variation in the difficulty level of the treatment specific questions.

Usefulness of the course

This part of the questionnaire tries to assess the usefulness of the LEAP course to the leaders in the project. In general the responses show that the leaders find the training to have been very useful. This trend is found across all three treatments except in regard to two questions. There is a higher level of disagreement regarding the statement “*I have to a high degree tried out the leadership tools from the LEAP course in my daily practice*” among the leaders from the transformational treatment compared to the leaders from the two other treatments (see table 18). Likewise there are more leaders from the transactional treatment who agree to having experienced barriers compared to the leaders from the two other treatments.

Table 17: Knowledge from the LEAP course

	The LEAP course has given me knowledge that is useful for my tasks as a leader							N
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	
Transformational	0.9%	3.7%	.9%	5.6%	14.0%	33.6%	41.1%	107
Combined	0.0%	1.9%	0.0%	7.6%	8.6%	36.2%	45.7%	105
Transactional	0.0%	1.9%	1.9%	4.9%	13.6%	43.7%	34.0%	103
Total	0.3%	2.5%	1.0%	6.0%	12.1%	37.8%	40.3%	315

A large majority of the leaders either agree or strongly agree with the statement above meaning that they find that the treatment has given them knowledge that is useful to their leadership. This pattern is valid for all three treatments.

Table 18: Using the tools from the LEAP course.

	I have to a high degree tried out the leadership tools from the LEAP course in my daily practice							N
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	
Transformational	1.1%	6.3%	10.5%	13.7%	30.5%	21.1%	16.8%	95
Combined	0.0%	5.2%	3.1%	6.3%	47.9%	31.3%	6.3%	96
Transactional	0.0%	3.1%	6.3%	12.5%	35.4%	38.5%	4.2%	96
Total	0.3%	4.9%	6.6%	10.8%	38.0%	30.3%	9.1%	287

Most leaders either partially agree or agree with the statement above, which means that they to some extent have used the tools provided by the treatment in their daily practice. This tendency applies to all three treatments, although there are relatively more leaders from the transformational treatment who disagree with the statement. This could indicate that the leaders from this treatment group have used the tools to a lesser extent than leaders from the other treatments.

Table 19: Barriers within the organization in relation to using the tools.

	I have experienced many barriers in my organization in relation to using the leadership tools from the LEAP project							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	15.9%	32.7%	8.4%	19.6%	14.0%	8.4%	.9%	107
Combined	12.4%	34.3%	16.2%	19.0%	11.4%	6.7%	0.0%	105
Transactional	6.9%	27.5%	13.7%	22.5%	18.6%	6.9%	3.9%	102
Total	11.8%	31.5%	12.7%	20.4%	14.6%	7.3%	1.6%	314

Most leaders disagree with the statement indicating that they have only experienced barriers to using the tools from the treatment to a limited extent. This pattern is fairly robust across the three treatments although the transactional treatment has slightly more leaders in the agreeing categories.

Table 20: Skills from the course.

	The course has given me skills that directly support that my organization reaches its goals							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	0.9%	3.7%	4.7%	21.5%	23.4%	26.2%	19.6%	107
Combined	0.0%	2.9%	2.9%	17.3%	25.0%	38.5%	13.5%	104
Transactional	0.0%	2.9%	4.9%	12.6%	38.8%	32.0%	8.7%	103
Total	0.3%	3.2%	4.1%	17.2%	29.0%	32.2%	14.0%	314

The leaders across all treatments agree to a lesser or greater extent to the statement indicating that the tools provided by the treatments have helped the leaders achieve their organizational goals.

Table 21: Different types of organizations participating in the LEAP course.

	It is an advantage in terms of learning that leaders from different types of organizations have participated in the LEAP course							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	0.0%	1.9%	2.8%	13.2%	10.4%	29.2%	42.5%	106
Combined	0.0%	0.0%	1.9%	11.4%	5.7%	30.5%	50.5%	105
Transactional	0.0%	1.0%	0.0%	6.8%	12.6%	32.0%	47.6%	103
Total	0.0%	1.0%	1.6%	10.5%	9.6%	30.6%	46.8%	314

A large majority either agree or strongly agree with the statement indicating that the leaders see it as an advantage to have received the treatment together with leaders from different types of organizations.

Table 22: The learning outcome from the discussions during the LEAP course.

	The discussions during the LEAP sessions have improved my ability to handle leadership challenges in my organization							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	0.9%	1.9%	1.9%	18.9%	23.6%	39.6%	13.2%	106
Combined	0.0%	2.9%	1.0%	13.3%	24.8%	41.0%	17.1%	105
Transactional	0.0%	1.9%	4.9%	15.5%	31.1%	28.2%	18.4%	103
Total	0.3%	2.2%	2.5%	15.9%	26.4%	36.3%	16.2%	314

A large majority of leaders across all treatments agree to a greater or lesser extent with the statement above, which shows that the discussions during the courses have helped to improve the leaders' ability to handle challenges in their organizations.

Table 23: Using the LEAP course to create better results.

	I have used the LEAP course as an opportunity to work for better results for my organization							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	1.9%	3.7%	3.7%	15.9%	20.6%	35.5%	18.7%	107
Combined	0.0%	1.0%	1.9%	18.1%	21.0%	37.1%	21.0%	105
Transactional	0.0%	1.0%	6.8%	12.6%	29.1%	33.0%	17.5%	103
Total	0.6%	1.9%	4.1%	15.6%	23.5%	35.2%	19.0%	315

A large majority of the leaders across all treatments agree to a greater or lesser extent with the statement, which indicates that most leaders have used the treatments to try to improve their organizations.

Table 24: Future use of the tools from the LEAP course.

	I will continue to use the leadership tools from the LEAP course							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	1.0%	3.9%	1.0%	6.8%	15.5%	41.7%	30.1%	103
Combined	0.0%	1.0%	1.0%	9.7%	10.7%	43.7%	34.0%	103
Transactional	0.0%	0.0%	1.1%	12.6%	17.9%	43.2%	25.3%	95
Total	0.3%	1.7%	1.0%	9.6%	14.6%	42.9%	29.9%	301

A large majority of the leaders across all treatments agrees to a greater or lesser extent with the statement, indicating that most the leaders will try to continue using the tools provided by the course.

Table 25: Feedback from the teacher.

	My teacher has given me feedback which is useful for my leadership development							N
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	
Transformational	0.0%	2.2%	1.1%	11.2%	11.2%	44.9%	29.2%	89
Combined	2.1%	1.1%	1.1%	5.3%	11.6%	33.7%	45.3%	95
Transactional	0.0%	0.0%	1.1%	7.7%	12.1%	49.5%	29.7%	91
Total	0.7%	1.1%	1.1%	8.0%	11.6%	42.5%	34.9%	275

A large majority of the leaders across all treatments agree to a greater or lesser extent with the statement, meaning that a majority received useful feedback from their teacher.

Factual questions

This part of the questionnaire contains factual questions regarding the respondents' use of the LEAP course during the leadership practice.

Table 26: Feedback

	Have you received feedback from your teacher?		
	Yes	No	N
Transformational	72.5%	27.5%	80
Combined	86.4%	13.6%	81
Transactional	50.0%	50.0%	40
Total	73.6%	26.4%	201

The leaders who filled out the online-questionnaire were asked whether or not they have received feedback from their teacher. The overall tendency is that a vast majority received feedback although among the leaders from the transactional treatment this is only the case for 50 per cent of the respondents. This treatment group also has significantly fewer respondents. It should be noted that for both the transformational and the transactional treatment apply that most respondents who answered "no" have participated on the same class (one class accounts for almost half the "no"-answers within the transformational treatment, while two classes account for almost all the "no"-answers within the transactional treatment)

Table 27: Job situation

	Have you changed jobs/organization, or do you expect to do so in the period between August 25 2014 and September 15 2015?			
	Yes. I have changed	Yes. I expect to change jobs	No. I do not expect to change	N
Transformational	11.5%	3.8%	84.6%	104
Combined	7.8%	3.9%	88.2%	102
Transactional	10.1%	7.1%	82.8%	99
Total	9.8%	4.9%	85.2%	305

The leaders were asked whether or not they have changed jobs/organization or if they intend to do so, and here a vast majority of more than 80 per cent of the respondents answered no.

Table 28: Teaching sessions attended

	Please circle all the teaching sessions in which you <u>have participated</u> (either fully or partially, and please also include participation in another geographic location)				
	1	2	3	4	N
Transformational	30.9%	30.9%	34.1%	55.3%	123
Combined	39.2%	44.0%	31.2%	58.4%	125
Transactional	29.1%	30.7%	28.3%	59.1%	127
N	124	132	117	216	375

The leaders were asked to circle the teaching sessions, which they have attended. Their responses suggest that only about a third of the respondents attended each of the first three sessions, while just over half attended the fourth and final treatment session. This tendency indicates either a very low turnout at the sessions or that the question has been misunderstood. The results may be due to the fact that the respondents circled the total number of sessions they attended instead of marking each attended session, e.g. if a leader attended all four sessions and only circled number four instead of circling each of the four boxes. We investigate this possible explanation in the following figure.

Figure 4: Attendance

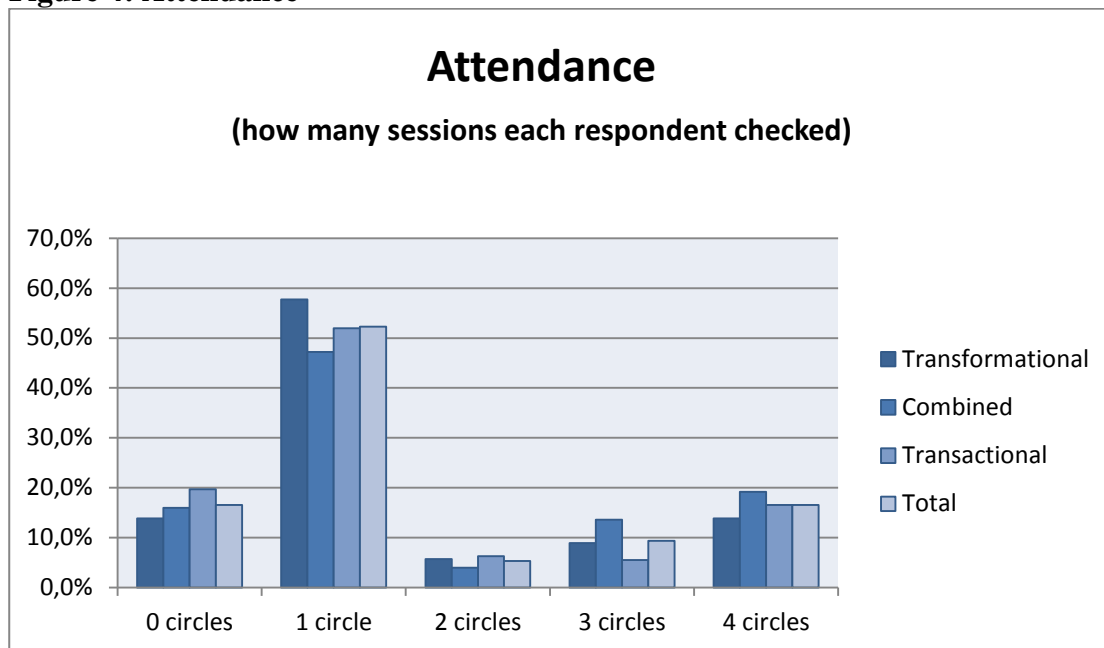


Figure 4 shows that more approx. half of the respondents only checked one box while 15-20 per cent checked either none or all four boxes, and only 10 per cent or less checked two or three boxes. This indicates that a majority of the respondents misunderstood the question from the table above and circled the box with the total number of sessions attended instead of circling a box for each attended session.

Table 29: Participation in network meetings

	Please circle the number of network meetings you <u>have attended</u> as part of the LEAP course.					
	0	1	2	3	4	N
Transformational	14.2%	25.5%	33.0%	25.5%	1.9%	106
Combined	11.4%	22.9%	35.2%	29.5%	1.0%	105
Transactional	9.8%	32.4%	28.4%	26.5%	2.9%	102
Total	11.8%	26.8%	32.3%	27.2%	1.9%	313

Here the leaders were asked to circle the number of network meetings they have attended as part of the LEAP course. The table shows the majority of respondents indicated to have participated one, two or three times, while only few neglected to participate or participated four times.

Table 30: Action plans

	Please circle the number of versions of your <u>action plan</u> which you have until now sent to your network group					
	0	1	2	3	4	N
Transformational	19.6%	30.8%	32.7%	15.0%	1.9%	107
Combined	15.1%	33.0%	24.5%	24.5%	2.8%	106
Transactional	20.4%	32.0%	22.3%	22.3%	2.9%	103
Total	18.4%	32.0%	26.6%	20.6%	2.5%	316

The leaders were asked to circle the number of versions of their action plans, which they have sent to their network group. The table shows a somewhat even distribution of respondents who expressed to have done so zero to three times, while only very few have sent their action plans four times.

Evaluation of the courses

This part of the questionnaire tries to evaluate the quality of the three different treatments in the LEAP course. The responses were anonymous in this part of the questionnaire (except for the leaders who answered the online version as mentioned above). There is a general tendency across questions that a large majority of the leaders express their satisfaction with the quality of the teaching sessions. There is only little variation in the responses given in the three treatment groups. The only question, which divides the leaders, is whether the treatments should be more concentrated; here only a slight majority thinks that the duration of the training was good as it was.

Table 31 The fruitfulness of the leadership training.

	All in all, the leadership training has been fruitful							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	1.0%	3.8%	5.7%	9.5%	4.8%	50.5%	24.8%	105
Combined	0.0%	3.1%	1.0%	7.1%	7.1%	44.9%	36.7%	98
Transactional	0.0%	1.0%	2.0%	5.9%	12.7%	52.9%	25.5%	102
Total	0.3%	2.6%	3.0%	7.5%	8.2%	49.5%	28.9%	305

A large majority agree or strongly agree with the statement meaning that most leaders found the treatments to have been fruitful.

Table 32: The planning of the leadership training.

	The leadership training has been well-planned							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	0.0%	3.8%	3.8%	10.4%	5.7%	48.1%	28.3%	106
Combined	0.0%	0.0%	1.0%	5.2%	14.4%	43.3%	36.1%	97
Transactional	0.0%	2.0%	0.0%	6.9%	14.7%	48.0%	28.4%	102
Total	0.0%	2.0%	1.6%	7.5%	11.5%	46.6%	30.8%	305

A large majority agree or strongly agree with the statement meaning that most leaders think the planning of the treatments has been good.

Table 33: The relevance of the training

	The leadership training does not fit my leadership situation							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	28,3%	28,3%	4,7%	16,0%	8,5%	9,4%	4,7%	106
Combined	33,7%	32,7%	9,2%	4,1%	10,2%	8,2%	2,0%	98
Transactional	22,5%	41,2%	12,7%	5,9%	8,8%	5,9%	2,9%	102
Total	28,1%	34,0%	8,8%	8,8%	9,2%	7,8%	3,3%	306

Most leaders in all three treatments either disagree or strongly disagree with the statement indicating that the treatments have fitted the leadership situation of the participants to a large extent.

Table 34: The execution of the teaching.

	The teaching has been done in a good way.							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	0%	2.8%	2.8%	12.3%	5.7%	46.2%	30.2%	106
Combined	0%	0.0%	2.0%	6.1%	10.2%	39.8%	41.8%	98
Transactional	0%	2.0%	1.0%	4.9%	10.8%	52.9%	28.4%	102
Total	0%	1.6%	2.0%	7.8%	8.8%	46.4%	33.3%	306

A large majority across all treatments agree or strongly agree with the statement indicating that the teachings have been done in a good way.

Table 35: The teacher's ability of connect scientific knowledge to practice.

	My teacher has been good at connecting scientific knowledge to practice							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	0%	2.8%	2.8%	6.6%	6.6%	36.8%	44.3%	106
Combined	0%	0.0%	2.0%	9.2%	3.1%	28.6%	57.1%	98
Transactional	0%	2.0%	1.0%	4.9%	3.9%	34.3%	53.9%	102
Total	0%	1.6%	2.0%	6.9%	4.6%	33.3%	51.6%	306

A large majority either agrees or strongly agrees with the statements, which shows that the leaders think their teachers have been good at connecting scientific knowledge with practice.

Table 36: The link between theory and practise.

	The link between theory and practice has worked well in my class							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	1.0%	1.0%	3.8%	10.5%	7.6%	45.7%	30.5%	105
Combined	0.0%	0.0%	2.1%	7.4%	10.5%	37.9%	42.1%	95
Transactional	0.0%	2.0%	1.0%	2.9%	9.8%	54.9%	29.4%	102
Total	.3%	1.0%	2.3%	7.0%	9.3%	46.4%	33.8%	302

A large majority of the leaders either agree or strongly agree with the statement meaning that they found that the courses were able to link theory with practice in a good way.

Table 37: The duration of the training programme.

	It would have been better if the leadership training had been more concentrated (e.g. four months instead of eight months)							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	16.2%	22.9%	8.6%	27.6%	3.8%	9.5%	11.4%	105
Combined	10.3%	21.6%	8.2%	23.7%	2.1%	15.5%	18.6%	97
Transactional	10.8%	20.6%	14.7%	18.6%	8.8%	14.7%	11.8%	102
Total	12.5%	21.7%	10.5%	23.4%	4.9%	13.2%	13.8%	304

The distribution is very varied indicating no clear trend on whether the treatments would've been improved by concentrating the classes on a shorter time span. There is a slight overweight in leaders disagreeing with the statement, which could mean that the training is better at the current time span.

Table 38: The interplay with other leaders.

	The experiences of the other participants have contributed to my leadership development.							
	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree	N
Transformational	1.0%	0.0%	5.7%	19.0%	6.7%	49.5%	18.1%	105
Combined	1.0%	4.1%	3.1%	5.1%	19.4%	50.0%	17.3%	98
Transactional	0.0%	0.0%	0.0%	10.9%	25.7%	42.6%	20.8%	101
Total	.7%	1.3%	3.0%	11.8%	17.1%	47.4%	18.8%	304

A very large majority of the leaders agree to a lesser or greater extent to the statement indicating that they have benefited from the experience of other participants in their classes.

Appendix: Questionnaires

LEAP

Questionnaire to the leadership training

Your name: _____

Class no: _____

First, we have some questions about your leadership practice during the last year. Below you see several statements. Please use the response scale below to indicate your agreement or disagreement (for each item, circle the appropriate number next to the statement which fits best).

1	2	3	4	5	6	7
Strongly disagree	Disagree	Partially Disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree

During the last year, I have done much to clarify the direction in which my organization/my part of the organization should move	1	2	3	4	5	6	7
The effort to clarify the direction for (my part of) the organization has been done within a specific framework defined by the board/my own leaders	1	2	3	4	5	6	7
I have had autonomy to make a vision/an objective which is adapted to my specific (part of the) organization	1	2	3	4	5	6	7
I have involved my own leader/the board in my efforts to formulate an objective/a vision for (my part of) the organization	1	2	3	4	5	6	7
I have involved most of my employees in formulating the objective/vision for (my part of) the organization	1	2	3	4	5	6	7
I use oral dissemination from me to the employees to communicate about the objective/vision (e.g. speeches on employee meetings)	1	2	3	4	5	6	7
My communication about the objective/vision has especially consisted of written dissemination from me to the employees (e.g. newsletter)	1	2	3	4	5	6	7
The internal communication of objective/vision has to a high degree been face-to-face dialog with the employees	1	2	3	4	5	6	7
Other channels than face-to-face discussions (e.g. intranet and notice boards) play an important role in the dialog about the objective/vision	1	2	3	4	5	6	7
My communication to the employees of (my part of) the organization's objective/vision is very limited (no/only few times)	1	2	3	4	5	6	7
I constantly communicate the vision/objective via my actions and my other communication	1	2	3	4	5	6	7
I consistently praise my employees for their specific efforts and/or results linked to the objective/vision	1	2	3	4	5	6	7
In my (part of the) organization, bonuses to some extent depends on employee efforts and/or results	1	2	3	4	5	6	7
I consistently take action in relation to employees who do not deliver satisfactory work and/or results	1	2	3	4	5	6	7

Now some questions about visions [ONLY TRANSFORMATIONAL TREATMENT, THE MOST CORRECT ANSWER IS HIGHLIGHTED]

For each of question, please circle the best answer. If you make a mistake, cross-out the circle and choose another response

1. The purpose of a vision is to:
 - a. Clarify what strategic measures the organization is implementing right now
 - b. Clarify what strategic measures the organization will implement in the future
 - c. Clarify the direction for the organization and motivate employees to work towards the right direction
2. For a vision, it is central that:
 - a. It is communicated to the employees
 - b. The employees know where to read about the vision
 - c. It is communicated to the employees and reflected in the leader's behavior
3. As a leader, you can effectively communicate the vision by
 - a. Using few communication media and vary your use of these channels
 - b. Using many different communication media and pay attention to the fact that employees perceive and interpret differently
 - c. Selecting few communication media and ensure that the communication is intense in terms of timing
4. Leader and employee perceptions of the use of visionary leadership often differ. The leader tends to think:
 - a. That he/she uses visions less than the employees perceive
 - b. That leadership via visions is less important than employees perceive
 - c. That he/she uses visions more than the employees perceive
5. To motivate employee it is important for a leader to pay attention to:
 - a. That the tasks are seen as exiting and that there is a perceived contribution to society
 - b. That employees' work load is not too high
 - c. That employees are motivated by fringe benefits such as IPads
6. As a leader I can highlight the meaningfulness of the work. This can be done by:
 - a. Telling what we do, how we do it, and finally why we do it.
 - b. Telling first why we do the work and then how we do it, and what we do
 - c. What, how, and why are all important, and as long as they are all included, the sequence does not matter
7. When my organization are going to change vision and goals, and it is necessary to change employees' existing patterns of thought, it is most important::
 - a. To appreciate their efforts so far
 - b. To communicate the new vision and new goals
 - c. That the employees can see the purpose behind the change

Now some questions about contingent rewards [ONLY TRANSACTIONAL TREATMENT, THE MOST CORRECT ANSWERS ARE HIGHLIGHTED] For each of question, please circle the best answer. If you make a mistake, cross-out the circle and choose another response.

1. Saying that a reward is contingent means:
 - a. That only some types of employees can get the reward
 - b. That the leader only gives the reward to employees who have delivered high effort and/or good results.**
 - c. That the leader decides whether a given employee should have the reward

2. A reward system is only credible
 - a. If the employees perceive it as supporting their professionalism
 - b. If the employees get the reward if and only if they live up to the expectations formulated as conditions for getting the reward**
 - c. If it has existed for several years

3. To avoid that management initiatives demotivate employees, leaders must
 - a. Totally avoid using management initiatives
 - b. Try to make the employees see the initiatives as supportive**
 - c. Give the employees as much autonomy as possible

4. Feeling competence and autonomy over one's own actions and having meaningful relations with other people are
 - a. Basic needs which all humans have, and where need fulfilment affects motivation**
 - b. Primarily something needed by professional employees
 - c. "Icing on the cake", when all other organizational conditions are in order.

5. Contingent follow-up (using negative sanctions if employees do not live up to the demands for effort and/or results)
 - a. Must be avoided so that the employees are not demotivated
 - b. Can be necessary, but should be implemented so that the employees do not see it as unnecessarily controlling**
 - c. Functions at least equally well compared to contingent reward in order to make sure that the organization reaches its goals.

6. Goal in (parts of) organizations are best formulated when
 - a. Top managers/the board specify exactly what all parts of the organization should achieve
 - b. Top managers/the board determine the overall goal which decentral leaders then translate to more specific goals**
 - c. Decentral leaders get full autonomy to formulate their own goals

7. Rewards in a contingent reward system should always be:
 - a. Preferably similar for all employees
 - b. Totally fitted to the preferences of the employees
 - c. Fitted to the employees, but still with an eye towards making rewards come across as fair**

Now some questions about contingent rewards [ONLY COMBINED TREATMENT, THE MOST CORRECT ANSWERS ARE HIGHLIGHTED]

For each of question, please circle the best answer. If you make a mistake, cross-out the circle and choose another response.

1. The purpose of a vision is to:
 - a. Clarify what strategic measures the organization is implementing right now
 - b. Clarify what strategic measures the organization will implement in the future
 - c. Clarify the direction for the organization and motivate employees to work towards the right direction

2. Saying that a reward is contingent means:
 - a. That only some types of employees can get the reward
 - b. That the leader only gives the reward to employees who have delivered high effort and/or good results.
 - c. That the leader decides whether a given employee should have the reward

3. A reward system is only credible
 - a. If the employees perceive it as supporting their professionalism
 - b. If the employees get the reward if and only if they live up to the expectations formulated as conditions for getting the reward
 - c. If it has existed for several years

4. Visions and rewards are typically
 - a. Leadership tools which are mutually exclusive
 - b. Mutually reinforcing leadership tools
 - c. Leadership tools which are useful as long as they are used separately

5. To motivate employee it is important for a leader to pay attention to:
 - a. That the tasks are seen as exiting and that there is a perceived contribution to society
 - b. That employees' work load is not too high
 - c. That employees are motivated by fringe benefits such as IPads

6. As a leader, you can effectively communicate the vision by
 - a. Using few communication media and vary your use of these channels
 - b. Using many different communication media and pay attention to the fact that employees perceive and interpret differently
 - c. Selecting few communication media and ensure that the communication is intense in terms of timing

7. Feeling competence and autonomy over one's own actions and having meaningful relations with other people are
 - a. Basic needs which all humans have, and where need fulfilment affects motivation
 - b. Primarily something needed by professional employees
 - c. "Icing on the cake", when all other organizational conditions are in order.

The following questions are about the combination of the LEAP course and your own leadership practice. Use the response scale below to indicate your agreement or disagreement. (For each item, circle the appropriate number on the line next to the statement, which fits best).

1	2	3	4	5	6	7
Strongly disagree	Disagree	Partially Disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree

The LEAP course has given me knowledge that is useful for my tasks as a leader	1	2	3	4	5	6	7
I have to a high degree tried out the leadership tools from the LEAP course in my daily practice	1	2	3	4	5	6	7
I have experienced many barriers in my organization in relation to using the leadership tools from the LEAP project	1	2	3	4	5	6	7
The course has given me skills that directly support that my organization reaches its goals	1	2	3	4	5	6	7
It is an advantage in terms of learning that leaders from different types of organizations have participated in the LEAP course	1	2	3	4	5	6	7
The discussions during the LEAP sessions have improved my ability to handle leadership challenges in my organization	1	2	3	4	5	6	7
I have used the LEAP course as an opportunity to work for better results for my organization	1	2	3	4	5	6	7
My teacher has given me feedback which is useful for my leadership development (no feedback: Set a mark here ____)	1	2	3	4	5	6	7
I will continue to use the leadership tools from the LEAP course	1	2	3	4	5	6	7

Finally, we have some questions to your use of the LEAP course in your leadership practice starting with a few factual questions

Have you changed jobs/organization, or do you expect to do so in the period between August 25 2014 and September 15 2015? Please circle the answer which best suits your situation.	Yes, I have changed	Yes, I expect to change jobs	No, I do not expect to change				
Please circle all the teaching sessions in which you <u>have participated</u> (either fully or partially, and please also include participation in another geographic location)	1	2	3	4			
Please circle the number of network meetings you <u>have attended</u> as part of the LEAP course	0	1	2	3	4		
Please circle the number of versions of your <u>action plan</u> which you have until now sent to your network group	0	1	2	3	4	5	More than 5

Evaluation of the LEAP course

Anonymous (don't include your name)

Class no.: _____

Below you see several statements. Please again use the response scale below to indicate your agreement or disagreement with each item by circling the appropriate number next to the statement.

1	2	3	4	5	6	7
Strongly disagree	Disagree	Partially Disagree	Neither agree or disagree	Partially agree	Agree	Strongly agree

All in all, the leadership training has been fruitful	1	2	3	4	5	6	7
The leadership training has been well-planned	1	2	3	4	5	6	7
The leadership training does not fit my leadership situation	1	2	3	4	5	6	7
The teaching has been done in a good way.	1	2	3	4	5	6	7
My teacher has been good at connecting scientific knowledge to practice	1	2	3	4	5	6	7
The link between theory and practice has worked well in my class	1	2	3	4	5	6	7
It would have been better if the leadership training had been more concentrated (e.g. four months instead of eight months)	1	2	3	4	5	6	7
The experiences of the other participants have contributed to my leadership development.	1	2	3	4	5	6	7

What has functioned especially well in the leadership training (then we will keep it this way)?

What could be changed to make the leadership training better (then we will change it in the future)?

Thank you! ☺