

# **Challenging gender stereotypes:**

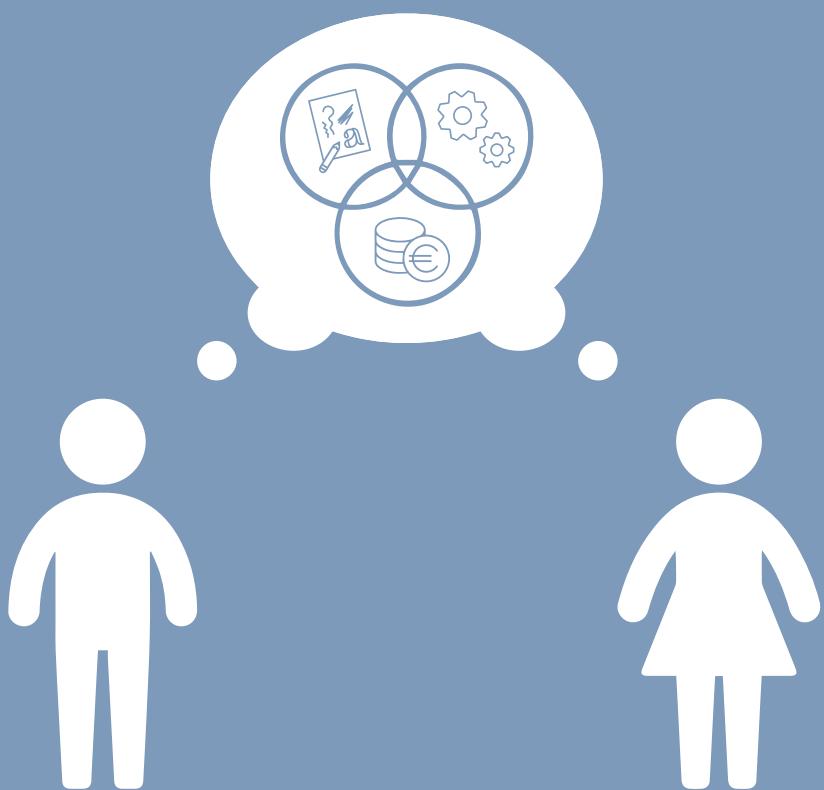
The application of attribution theory for boys and girls when performing a strategic design task

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## **Appendix**

Inge Vrolijk

MSc Strategic Product Design





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# A. Written strategic design task

## Internal and external company analysis

The goal of this sub assignment is to analyse, together with your group, what happens in and around the company. Carrying out this assignment will reveal the needs of the company and will help you to make substantiated choices in the design process during the follow up assignment (especially assignment 2 and 3). During this sub assignment you can ask questions to Miss Vrolijk. She is an expert in the area of company analysis.

### *Internal company analysis:*

Within the internal company analysis, you will take a look at everything that the company is already doing, so what happens internally. You will take a look at the following:

- General information and (short) history of the company
- What is the mission of the company?
- Which resources are currently available in the company?
- Marketing mix
  - o Which products and services does the company offer? (product)
  - o Where are these offered? (place)
  - o How are the products and services promoted? (promotion)
  - o What is the cost of the products and services? (price)

### *External company analysis:*

Within the external company analysis, you will have a look at everything that happens outside of the company that has an influence on the company. You will have a look at the following things:

- The company's competitors
  - o What kind of services and products do the competitors offer?
- To what extent is there an overlap in what the competitors and the company do?

The result of this sub assignment will be part of the final report. Apart from the text in the report, also give a visual representation of the analysis. You can do this in the form of a poster, mind map, collage or story board.



# B. Questionnaire 1

(Section 1)

## Questionnaire 1 R&D 3VWO

In this questionnaire you are asked to fill in a 1 to 5 point scale for each question. Take a look at the following example question below.

*Example question (this question does not count for the study)*

If you would say green is a very beautiful colour, check the box with 5. If you would say you do not really think green is beautiful but also not really think it is ugly, check the box with 3.

To what extent do you agree with the following statement?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I think the colour green is beautiful.	1	2	3	4	5

(Section 2)

### General information

Below, fill in your name, your age and who your teammates are.

Name:

Age:

Teammates:

(Section 3)

### Part 1: School subjects

The following questions are about school subjects. Please answer the following questions for each given subject.

How interesting do you find the following subjects?

	Very uninterested	Uninterested	Neutral	Interested	Very interested
Biology	1	2	3	4	5
Culture and Communication	1	2	3	4	5
Dutch	1	2	3	4	5
Economics	1	2	3	4	5
English	1	2	3	4	5

Film and Photography	1	2	3	4	5
French	1	2	3	4	5
Geography	1	2	3	4	5
German	1	2	3	4	5
History	1	2	3	4	5
Mathematics	1	2	3	4	5
Physical Education	1	2	3	4	5
Physics	1	2	3	4	5

How good are you at the following subjects?

	Very bad	Bad	Average	Good	Very good
Biology	1	2	3	4	5
Culture and Communication	1	2	3	4	5
Dutch	1	2	3	4	5
Economics	1	2	3	4	5
English	1	2	3	4	5
Film and Photography	1	2	3	4	5
French	1	2	3	4	5
Geography	1	2	3	4	5
German	1	2	3	4	5
History	1	2	3	4	5
Mathematics	1	2	3	4	5
Physical Education	1	2	3	4	5
Physics	1	2	3	4	5

(Section 4)

*Part 2: Strategic design task*

#### **(interest)**

In the R&D assignment you are working on the internal and external company analysis. This is a strategic design task. Given are several statements concerning the aspects of strategic design tasks.

For the following statements, on a scale of 1 to 5 points indicate to what extent you agree or disagree.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I like being creative.	1	2	3	4	5
I like designing products.	1	2	3	4	5
I like it if design challenges result in more than one solution.	1	2	3	4	5

I like to solve design challenges for a company.	1	2	3	4	5
I like to choose my own approach in solving design challenges.	1	2	3	4	5
I like to work on challenges of which the outcome is unsure.	1	2	3	4	5

### (self-confidence, abilities, success and failure)

For the following statements, indicate on a scale of 1 to 5 points to what extent you agree or disagree to each statement. Keep **R&D and the strategic design task** in mind.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I feel that I have a number of good qualities.	1	2	3	4	5
I am able to do things as well as most other people.	1	2	3	4	5
I feel useless at times.	1	2	3	4	5
I take a positive attitude toward myself.	1	2	3	4	5
I feel confident about my own abilities.	1	2	3	4	5
I am worried about whether others think I am a success or failure.	1	2	3	4	5
I feel that others respect and admire me.	1	2	3	4	5
I feel as smart as others.	1	2	3	4	5
I feel good about myself.	1	2	3	4	5
I feel confident that I understand things.	1	2	3	4	5
I am worried about what other people think of me.	1	2	3	4	5
I feel like I'm not doing the assignment well.	1	2	3	4	5

(Section 5)

*End of the questionnaire*

Thank you for filling in the questionnaire!



# C. Questionnaire 2

(Section 1)

## Questionnaire 2 R&D 3VWO

In this questionnaire you are asked to fill in a 1 to 5 point scale for each question. Take a look at the following example question below.

*Example question (this question does not count for the study)*

If you would say green is a very beautiful colour, check the box with 5. If you would say you do not really think green is beautiful but also not really think it is ugly, check the box with 3.

To what extent do you agree with the following statement?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I think the colour green is beautiful.	1	2	3	4	5

(Section 2)

### General information

Below, fill in your name, your gender, your age and who your teammates are.

Name:

Gender:

Age:

Teammates:

(Section 3)

### Part 1: Strategic design task

#### (interest)

In the R&D assignment you have been working on the internal and external company analysis. This is a strategic design task. Given are several statements concerning the aspects of strategic design tasks.

For the following statements, on a scale of 1 to 5 points indicate to what extent you agree or disagree.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I like being creative.	1	2	3	4	5
I like designing products.	1	2	3	4	5

I like it if design challenges result in more than one solution.	1	2	3	4	5
I like to solve design challenges for a company.	1	2	3	4	5
I like to choose my own approach in solving design challenges.	1	2	3	4	5
I like to work on challenges of which the outcome is unsure.	1	2	3	4	5

#### (self-confidence, abilities, success and failure)

For the following statements, indicate on a scale of 1 to 5 points to what extent you agree or disagree to each statement. Keep **R&D and the strategic design task** you have performed in mind.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I feel that I have a number of good qualities.	1	2	3	4	5
I am able to do things as well as most other people.	1	2	3	4	5
I feel useless at times.	1	2	3	4	5
I take a positive attitude toward myself.	1	2	3	4	5
I feel confident about my own abilities.	1	2	3	4	5
I am worried about whether others think I am a success or failure.	1	2	3	4	5
I feel that others respect and admire me.	1	2	3	4	5
I feel as smart as others.	1	2	3	4	5
I feel good about myself.	1	2	3	4	5
I feel confident that I understand things.	1	2	3	4	5
I am worried about what other people think of me.	1	2	3	4	5
I feel like I'm not doing the assignment well.	1	2	3	4	5

(Section 4)

#### *Part 2: Performance (type of attribution)*

In the R&D assignment you have been working on the internal and external company analysis. This is a strategic design task. Given are a number of statements concerning the performance of the strategic design task.

#### (success or failure)

For the following statements, indicate on a scale of 1 to 5 points to what extent you agree or disagree to each statement.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I think my team and I have performed the strategic design task well.	1	2	3	4	5
I feel satisfied with the final result of the strategic design task.	1	2	3	4	5
I think my team and I have not performed the strategic design task well.	1	2	3	4	5
I feel dissatisfied with the final result of the strategic design task.	1	2	3	4	5

### **Internal factors**

#### Ability (stable)

For the following statements, indicate on a scale of 1 to 5 points to what extent you agree or disagree to each statement.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I have enough knowledge to perform a strategic design task.	1	2	3	4	5
I possess the right skills to perform a strategic design task.	1	2	3	4	5
I know enough to perform a strategic design task.	1	2	3	4	5

#### Effort (unstable)

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I feel like I tried my best for this strategic assignment.	1	2	3	4	5
I feel like working hard has resulted in achieving a good result for this strategic design task.	1	2	3	4	5
I feel like I made an effort to achieve a good result for the strategic design task.	1	2	3	4	5

### **External factors**

#### Task difficulty (stable)

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I found the strategic design task harder than earlier tasks within the R&D course.	1	2	3	4	5

I have had to think a lot about how to perform the strategic design task.	1	2	3	4	5
I found the strategic design task difficult to solve.	1	2	3	4	5

Luck (unstable)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Luckily I was in a good team during performing the strategic design task.	1	2	3	4	5
I feel that the result of the strategic design task is a coincidence and I am not sure if next time it will go as well.	1	2	3	4	5
I feel like I have had little influence on the final result of the strategic design task.	1	2	3	4	5

(Section 5)

**(own grade)**

What grade would you give yourself for performing this strategic design task? Choose a grade between 1 and 10.

*End of the questionnaire*

Thank you for filling in the questionnaire!

# D. Questionnaire 3

(Section 1)

## Questionnaire 3 R&D 3VWO

In this questionnaire you are asked to fill in a 1 to 5 point scale for each question. Take a look at the following example question below.

*Example question (this question does not count for the study)*

If you would say green is a very beautiful colour, check the box with 5. If you would say you do not really think green is beautiful but also not really think it is ugly, check the box with 3.

To what extent do you agree with the following statement?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I think the colour green is beautiful.	1	2	3	4	5

(Section 2)

## General information

Below, fill in your name, your gender, your age and who your teammates are.

Name:

Gender:

Age:

Teammates:

(Section 3)

## Part 1: Strategic design task

### (self-confidence, abilities, success and failure)

For the following statements, indicate on a scale of 1 to 5 points to what extent you agree or disagree to each statement. Keep **R&D and the strategic design task** you have performed and received a grade for in mind.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I feel that I have a number of good qualities.	1	2	3	4	5
I am able to do things as well as most other people.	1	2	3	4	5

I feel useless at times.	1	2	3	4	5
I take a positive attitude toward myself.	1	2	3	4	5
I feel confident about my own abilities.	1	2	3	4	5
I am worried about whether others think I am a success or failure.	1	2	3	4	5
I feel that others respect and admire me.	1	2	3	4	5
I feel as smart as others.	1	2	3	4	5
I feel good about myself.	1	2	3	4	5
I feel confident that I understand things.	1	2	3	4	5
I am worried about what other people think of me.	1	2	3	4	5
I feel like I did not do the assignment well.	1	2	3	4	5

(Section 4)

#### *Part 2: Performance (type of attribution)*

In the R&D assignment you have been working on the internal and external company analysis. This is a strategic design task. You have now received a grade for the performance of the strategic design task. Given are a number of statements concerning the performance of the strategic design task.

#### **(success or failure)**

For the following statements, indicate on a scale of 1 to 5 points to what extent you agree or disagree to each statement.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I think my team and I have performed the strategic design task well.	1	2	3	4	5
I feel satisfied with the final result of the strategic design task.	1	2	3	4	5
I think my team and I have not performed the strategic design task well.	1	2	3	4	5
I feel dissatisfied with the final result of the strategic design task.	1	2	3	4	5

#### **Internal factors**

##### **Ability (stable)**

For the following statements, indicate on a scale of 1 to 5 points to what extent you agree or disagree

to each statement.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I have enough knowledge to perform a strategic design task.	1	2	3	4	5
I possess the right skills to perform a strategic design task.	1	2	3	4	5
I know enough to perform a strategic design task.	1	2	3	4	5

Effort (unstable)

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I feel like I tried my best for this strategic assignment.	1	2	3	4	5
I feel like working hard has resulted in achieving a good result for this strategic design task.	1	2	3	4	5
I feel like I made an effort to achieve a good result for the strategic design task.	1	2	3	4	5

### External factors

Task difficulty (stable)

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I found the strategic design task harder than earlier tasks within the R&D course.	1	2	3	4	5
I have had to think a lot about how to perform the strategic design task.	1	2	3	4	5
I found the strategic design task difficult to solve.	1	2	3	4	5

Luck (unstable)

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
Luckily I was in a good team during performing the strategic design task.	1	2	3	4	5

I feel that the result of the strategic design task is a coincidence and I am not sure if next time it will go as well.	1	2	3	4	5
I feel like I have had little influence on the final result of the strategic design task.	1	2	3	4	5

(Section 5)

**(Self-confidence about performing a similar strategic design task in the future)**

Given are a number of statements concerning performing a strategic design task a next time.

For the following statements, indicate on a scale of 1 to 5 points to what extent you agree or disagree to each statement.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I feel convinced I can successfully perform a strategic design task next time.	1	2	3	4	5
I feel that performing this strategic design task has given me more self-confidence about performing a strategic design task a next time.	1	2	3	4	5
I feel confident about performing a similar strategic design task a next time.	1	2	3	4	5
I am not sure if I can successfully perform a strategic design task next time.					
I am worried about performing a strategic design task a next time.	1	2	3	4	5

*End of the questionnaire*

Thank you for filling in the questionnaire!

## E. Assessment rubric for strategic design task

Onderdelen	Inhoud	Toelichting
<b>Interne bedrijfsanalyse</b>	<b>8</b>	
alg. info/ geschiedenis	1	
missie	1	
materialen en middelen	2	
marketingmix:		
-product	1	
-plaats	1	
-promotie	1	
-prijs	1	
<b>Externe bedrijfsanalyse</b>	<b>6</b>	
concurrenten	2	
-producten en diensten	2	
-overlap	2	
<b>Algemeen</b>	<b>3</b>	
-lay out	1	
Nederlands	1	
-argumentatie	1	
<b>Visualisatie</b>	<b>3</b>	
-duidelijke visuele weergave van intern en externe analyse	3	
PUNTEN	20	
CLJFER		



# F. Interview results

## 1. Laura, Noor, Maud, Luna

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

7,5

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Iedereen

Ben je het eens met het cijfer dat je hebt gekregen?

Mee eens, was wel lastig om er iets over te vinden. Heel erg ons best voor gedaan, dit is een mooi cijfer gezien een 10 halen sowieso wel lastig is.

Wat vond je van de taak?

Maquettes bouwen is leuker.

Wat zou er beter kunnen aan de taak volgend jaar?

Iets duidelijker, woord web maken was niet duidelijk.

## 2. Izabella, Solane, Evi

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

6,6

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Nee.

Ben je het eens met het cijfer dat je hebt gekregen?

Veel tijd aan besteed en veel verbeterd maar uiteindelijk nog niet opgehoogd. Hele les hieraan besteed. Aangevuld met mind map etc. Dus dat is wel jammer.

Wat vond je van de taak?

Wel prima, maar niet heel erg leuk. Maar wel handig. Als je eenmaal bezig bent is het zo wel klaar, maar niet echt gebruikt voor het ontwerp dat gemaakt is.

Wat zou er beter kunnen aan de taak volgend jaar?

Veel lage cijfers, veel 6en. Duidelijker wat je moet doen. Van tevoren de beoordelingscriteria al delen zodat je weet waar je aan moet voldoen.

## 3. Jolie, Hanneke, Jacky

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

6,8

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Niet heel erg. Wel hoger verwacht.

Ben je het eens met het cijfer dat je hebt gekregen?

Hoeveelheid werk was wel hoger dan het cijfer dat hierbij hoort. Gedaan wat er stond, er moesten later nog erbij. Dit was van tevoren niet helder.

Wat vond je van de taak?

Onnодig om uit te voeren. Uiteindelijk deze analyse niet gebruikt voor het uiteindelijke ontwerp.

Wat zou er beter kunnen aan de taak volgend jaar?

Onduidelijk wat je moet doen. Eerst presentatie maken en nu weer poster. Van tevoren meer

duidelijkheid voor de gehele opdracht en wat er aan het einde verwacht wordt. Sommige dingen lijken niet zo nuttig wat de leerlingen doen.

#### **4. Erynn, Mara, Charlotte**

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

7,8

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Mara was er wel mee eens, Erynn had liever hoger gehad. Charlotte denkt dat ze wel hoger hadden kunnen halen doordat ze afgeleid werden.

Ben je het eens met het cijfer dat je hebt gekregen?

Gedaan wat ze moesten doen en wat er gezegd werd. Vond eigenlijk wel dat er een hoger cijfer gehaald had kunnen worden omdat er dan weer iets nieuws werd gezegd ten opzichte van wat er vervolgens aangepast was.

Wat vond je van de taak?

Wel lastig om te doen. Sommige dingen kon je niet makkelijk vinden. Eerst een 6 en toen aangepast, maar ze hadden wel hoger verwacht omdat ze naar hun idee alles hadden gedaan wat ze moesten doen.

Wat zou er beter kunnen aan de taak volgend jaar?

Wat duidelijker de stappen van wat je moet doen. Voor zichzelf ook helder hebben. Elke keer werd er iets anders gezegd, per dag lijkt het te wisselen. Iets leuker laten lijken, in het begin leek het best saai maar uiteindelijk is het toch wel leuk. Groepje van de drones zou er elke les zijn maar uiteindelijk was hij er maar een keer. Wat meer op het niveau van de leerlingen denken.

#### **5. Nelleke, Vita, Saosan**

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

7,3

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Met O&O is het lastig om hoge cijfers te halen omdat de verwachting niet duidelijk is. Daarom wel tevreden mee.

Ben je het eens met het cijfer dat je hebt gekregen?

Ja wel mee eens. Alleen hadden ze wel iets hoger verwacht. De hoeveelheid werk die verwacht werd was niet helemaal duidelijk. Op het laatste moment toch nog erachter komen dat er nog iets gedaan moest worden (woord web). De verwachtingen waren niet helemaal duidelijk. Te veel haasten daarom minder goed werken.

Wat vond je van de taak?

Wel leuk maar wel lastig omdat het niet precies duidelijk was wat er nou gedaan moest worden omdat het nieuw was. Info lastig te zoeken maar wel heel leuk om het bedrijf te leren kennen.

Wat zou er beter kunnen aan de taak volgend jaar?

Duidelijker uitleggen wat erin moet en alles op een rijtje wat er nou eigenlijk in moet en hoe lang het moet zijn, zodat het beter inschatten is wat er precies verwacht wordt.

#### **6. Duncan, Coen, D-Dre, Robin**

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

7,1

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Wel tevreden over het cijfer, zolang het maar boven de 6 is.

Ben je het eens met het cijfer dat je hebt gekregen?

Wel iets hoger verwacht. Eerst was het een 4 maar na aanpassingen is het dit geworden. Wel blij mee.

Wat vond je van de taak?

Moeilijke opdracht omdat er weinig op internet te vinden was. Beetje saai om uit te voeren.

Wat zou er beter kunnen aan de taak volgend jaar?

Was niet helemaal duidelijk dat het ook over lasergamen ging. Betere uitleg wat er nou precies gedaan moet worden.

## 7. Tijn, Timo, Taco, Mark Luca

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

7,3

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Wel tevreden over het cijfer.

Ben je het eens met het cijfer dat je hebt gekregen?

Veel werk in gestoken, maar het is wel oke. Veel opgezocht. Misschien een 7,5 of 7,8 ish.

Wat vond je van de taak?

Beetje saai. Wel een duidelijke opdracht. Lastig te vinden wie de concurrenten waren en de geschiedenis van het bedrijf. Wel interessant.

Wat zou er beter kunnen aan de taak volgend jaar?

Wat het gebied is van concurrenten, dat was niet helder. Welke regio het dan om gaat, dit was te vaag.

## 8. Mick, Valentijn, Giovanni, Jelle

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

6,9

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Niet laaiend enthousiast maar wel oke.

Ben je het eens met het cijfer dat je hebt gekregen?

Wel een prima cijfer. Iets boven de 7 hadden ze wel verwacht.

Wat vond je van de taak?

Niet zo bijzonder, wel oke.

Wat zou er beter kunnen aan de taak volgend jaar?

Beetje overheen gelezen dat er iets visueel gemaakt moest worden stond te veel in de kleine letters en dat was niet helder.

## 9. Milan, Walid, Assifiwe, Tauseeq

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

5,8

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Niet tevreden, Walid en Tauseeq hebben het opgehoogd. Beter dan dat het was. Wel veel werk in gestoken, verkeerde dingen aandacht gegeven en het was niet duidelijk.

Ben je het eens met het cijfer dat je hebt gekregen?

Niet mee eens, er is een en ander verbeterd. Volgens de leerlingen was het duidelijk. Het was slordig

maar er is niet uitgelegd wat er slordig was. Niet duidelijk wat er fout is gedaan.

Wat vond je van de taak?

Half leuk, niet zo leuk. Het nut was niet duidelijk. Niet gebruikt voor het ontwerp. Interne bedrijfsanalyse was nog wel zinnig maar extern niet zozeer. Ligt ook aan de richting van het project, gadgets niet.

Wat zou er beter kunnen aan de taak volgend jaar?

Duidelijker maken. In plaats van een verslag maken, beter iets nuttigs waar je later iets aan hebt. Uitleg over het algemeen een stuk duidelijk.

## **10. Shaqiel, Olivier, Daan, Nathan**

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

8,8

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Zeker!

Ben je het eens met het cijfer dat je hebt gekregen?

Inspanning staat gelijk aan het cijfer dat er is gegeven.

Wat vond je van de taak?

Typisch O&O opdracht, lastig om het op internet te zoeken. Er mist altijd iets. Beter en minder vaag dan de meeste O&O opdrachten.

Wat zou er beter kunnen aan de taak volgend jaar?

Vrij duidelijk, wat tips geven waar je aan kan denken en waar je je informatie vandaag kan halen.

Wat gerichtere tips daarover. Het was sowieso een stuk duidelijker dan meeste projecten.

## **11. Thijs, Youri, Gijs, David**

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

6,5

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Nee niet tevreden.

Ben je het eens met het cijfer dat je hebt gekregen?

Wel mee eens, maar na aanpassen hadden ze hoger verwacht. Alles verbeterd wat er genoemd is maar het was wel laag. Een 7 of 7,5 verwacht. Er is niet toegelicht waarom het een 6,5.

Wat vond je van de taak?

Minder leuk, minder over het onderwerp echt. Het stond wat los van elkaar. De connectie tussen deze opdracht en het ontwerp is niet duidelijk en daarom niet leuk.

Wat zou er beter kunnen aan de taak volgend jaar?

Project duidelijker is. Scrummen heeft geen nut. Waarom en wat je moet doen. Maak er niet zon groot punt van, de opdrachtgever weet toch wel wat erin zijn bedrijf gebeurd.

## **12. Spike, Ihsaan, Timur**

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

7,0

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Jawel.

Ben je het eens met het cijfer dat je hebt gekregen?

Geen hoger cijfer verwacht, misschien wel lager.

Wat vond je van de taak?

Het hoort er wel bij, als je het niet hebt mis je wat. Niet heel interessant om te doen.

Wat zou er beter kunnen aan de taak volgend jaar?

Het was wel te doen, sommige dingen kon je echt alleen vragen aan de opdrachtgever. Online was er niet zoveel te vinden.

### **13. Anthony, Maurits, Jesse**

Wat was het cijfer voor het eerste deel (interne en externe bedrijfsanalyse)?

6,5

Wie is er tevreden over het cijfer (interne en externe bedrijfsanalyse)?

Niet heel erg, maar omdat het voldoende is het wel oke.

Ben je het eens met het cijfer dat je hebt gekregen?

De hoeveelheid werk kwam in eerste instantie wel overeen met het cijfer, nu verwachten ze een hoger cijfer.

Wat vond je van de taak?

Niet zo erg, vervelend omdat het soms te specifiek was. De website en wat er vroeger was gebeurd.

Korte overview maar uiteindelijk niet gedaan omdat het te veel werk kostte.

Wat zou er beter kunnen aan de taak volgend jaar?

Soms was het wat vaag of wat er gedaan moest worden. Mag wel wat duidelijker.



# G. Overview table of the hypotheses per variable theme

Variable theme	Hypotheses	Measured during
1. Interest and performance in school subjects	<p><i>Hypothesis 1.1A:</i> Ho: Boys and girls show equal interest in mathematics, physics and PE. H1: Boys show more interest in mathematics, physics and PE than girls.</p> <p><i>Hypothesis 1.1B:</i> Ho: Boys and girls show equal interest in languages and arts. H1: Girls show more interest in languages and arts than boys.</p> <p><i>Hypothesis 1.2A:</i> Ho: Boys and girls perform equally well in mathematics, physics and PE. H1: Boys perform better in mathematics, physics and PE than girls.</p> <p><i>Hypothesis 1.2B:</i> Ho: Boys and girls perform equally well in languages and arts. H1: Girls perform better in languages and arts than boys.</p>	Measurement 1
2. Interest in the strategic design task	<p><i>Hypothesis 2A:</i> Ho: Boys and girls show equal interest in the strategic design task before starting it. H1: Girls show more interest in the strategic design task than boys before starting it.</p> <p><i>Hypothesis 2B:</i> Ho: Boys and girls show equal interest in the strategic design task after finishing it. H1: Girls show more interest in the strategic design task than boys after finishing it.</p>	Measurement 1 & 2

			Measurement 1
3. Self-confidence	<p><i>Hypothesis 3A:</i> Ho: The self-confidence of boys and girls is equal before starting the strategic design task. H1: Boys have more self-confidence before starting the strategic design task than girls.</p> <p><i>Hypothesis 3B:</i> Ho: The self-confidence of boys and girls is equal after completing the strategic design task. H1: Girls have more self-confidence after completing the strategic design task than boys.</p> <p><i>Hypothesis 3C:</i> Ho: The self-confidence of boys and girls is equal after grading the strategic design task. H1: Girls have more self-confidence after receiving a grade for the result of the strategic design task than boys.</p>	<p>Measurement 2</p>	
	<p><i>Hypothesis 8:</i> Ho: There is no relation between self-confidence before starting and after finishing the strategic design task. H1: There is a positive relation between self-confidence before starting and after finishing the strategic design task.</p>	<p>Measurement 3</p>	
	<p><i>Hypothesis 9:</i> Ho: There is no relation between self-confidence after finishing the strategic design task and after receiving a grade for it. H1: There is a positive relation between self-confidence after finishing the strategic design task and after receiving a grade for it.</p>	<p>Measurement 1 &amp; 2</p>	
			Measurement 2 & 3

<p>4. Type of attribution</p> <p><i>Hypothesis 4:</i></p> <p>Ho: Boys and girls attribute success and failure to equal factors after completing the strategic design task.</p> <p>H1: Boys attribute success to internal factors and girls attribute success to external factors after completing the strategic design task.</p>	<p>Measurement 2</p>
<p><i>Hypothesis 5:</i></p> <p>Ho: Boys and girls attribute a grade to equal factors after completing the strategic design task.</p> <p>H1: Boys attribute a good grade to internal factors and girls attribute a good grade to external factors after completing the strategic design task.</p>	<p>Measurement 3</p>
<p>5. Self-confidence in the future</p>	<p>Measurement 3</p>

<p>6. Self-confidence vs. attribution of success</p> <p><i>Hypothesis 10:</i></p> <p>Ho: There is no relation between self-confidence and the attribution of success after finishing the strategic design task.</p> <p>H1: There is a positive relation between self-confidence and the attribution of success after finishing the strategic design task.</p> <p><i>Hypothesis 11:</i></p> <p>Ho: There is no relation between self-confidence and the attribution of success after receiving a grade for the strategic design task.</p> <p>H1: There is a positive relation between self-confidence and the attribution of success after receiving a grade for the strategic design task.</p>	<p>Measurement 2</p> <p>Measurement 3</p>
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# H. Variables description as used in SPSS

In the following the newly computed variables for answering hypotheses are described. The newly computed variables are clustered per variable theme (as is done in appendix G).

## 1 Interest and performance in school subjects

‘Avg\_interest\_languages’

This is the average of the scores for interest in Dutch, English, French and German, it is used to answer hypothesis 1.1B.

‘Avg\_interest\_arts’

This is the average of the scores for interest in Culture and Communication and Film and Photography, it is used to answer hypothesis 1.1B.

‘Avg\_performance\_languages’

This is the average of the scores for performance in Dutch, English, French and German it is used to answer hypothesis 1.2B.

‘Avg\_performance\_arts’

This is the average of the scores for performance in Culture and Communication and Film and Photography, it is used to answer hypothesis 1.2B.

## 2 Interest in the strategic design task

‘Avg\_interestSDT\_A’.

This is the average of the scores for interest in the strategic design task during questionnaire 1, it is used to answer hypothesis 2A.

‘Avg\_interestSDT\_B’.

This is the average of the scores for interest in the strategic design task during questionnaire 2, it is used to answer hypothesis 2B.

Both ‘Avg\_interestSDT\_A’ and ‘Avg\_interestSDT\_B’ are used to answer hypothesis 7.

## 3 Self-confidence

‘Avg\_selfconfidence\_A’

This is the average of the scores for self-confidence during questionnaire 1, it is used to answer hypothesis 3A.

‘Avg\_selfconfidence\_B’

This is the average of the scores for self-confidence during questionnaire 2, it is used to answer

hypothesis 3B.

‘Avg\_selfconfidence\_C’

This is the average of the scores for self-confidence during questionnaire 3, it is used to answer hypothesis 3C.

Both ‘Avg\_selfconfidence\_A’ and ‘Avg\_selfconfidence\_B’ are used to answer hypothesis 8.

Both ‘Avg\_selfconfidence\_B’ and ‘Avg\_selfconfidence\_C’ are used to answer hypothesis 9.

#### 4 Type of attribution

‘Avg\_success\_B’, ‘Avg\_failure’, ‘Avg\_ability’, ‘Avg\_effort’, ‘Avg\_taskdifficulty’ and ‘Avg\_luck’. These variables represent the average scores of respectively success, failure, ability, effort, task difficulty and luck during questionnaire 2, these are used to answer hypothesis 4.

‘Avg\_success\_C’, ‘Avg\_failure’, ‘Avg\_ability’, ‘Avg\_effort’, ‘Avg\_taskdifficulty’ and ‘Avg\_luck’. These variables represent the average scores of respectively success, failure, ability, effort, task difficulty and luck during questionnaire 3, these are used to answer hypothesis 5.

#### 5 Self-confidence in the future

‘Avg\_futureselfconfidence’

This is the average of the scores for self-confidence in a future task, it is used to answer hypothesis 6.

#### 6 Self-confidence vs. attribution of success

Both ‘Avg\_selfconfidence\_B’ and ‘Avg\_success\_B’ (the same as described in (3 Self-confidence’ and ‘4 Type of attribution’) are used to answer hypothesis 10.

Both ‘Avg\_selfconfidence\_C’ and ‘Avg\_success\_C’ (the same as described in (3 Self-confidence’ and ‘4 Type of attribution’) are used to answer hypothesis 11.

# I. Statistical analyses hypotheses

Within this appendix all raw descriptions of the performed statistical analyses are described. The statistical analyses are performed according to Field (2009). For the complete digital SPSS output, please send an e-mail to: vrolijkinge@gmail.com.

## Hypothesis 1

### H1.1A

#### **MANOVA:**

Box's test is non significant ( $p=.423$ ). Therefore, the assumption of homogeneity is met.

'Multivariate tests' are all significant ( $p=.027$ ). Therefore,  $H_0$  is rejected.

Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects only shows a significant difference ( $p=.010$ ) for the interest in physics. Difference for interest in PE and mathematics are non significant ( $p>.05$ ). For interest in physics, boys (mean = 4.33) show more interest in physics than girls (mean = 3.81).  $H_1$  is therefore only accepted for interest in physics.  $H_1$  is rejected for interest in PE and mathematics.

### H1.1B

#### **MANOVA:**

Box's test is non significant ( $p=.273$ ). Therefore, the assumption of homogeneity is met.

'Multivariate tests' are all non significant ( $p=.065$ ). Therefore,  $H_0$  is accepted.

Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects only shows a significant difference ( $p=.021$ ) for the interest in languages. Difference for interest in arts is non significant ( $p>.05$ ). For interest in languages, girls (mean = 3.19) show more interest in the languages than boys (mean = 2.68).  $H_1$  is only accepted for interest in languages.  $H_1$  is rejected for interest in arts.

### H1.2A

#### **MANOVA:**

Box's test is non significant ( $p=.989$ ). Therefore, the assumption of homogeneity is met.

'Multivariate tests' are all very significant ( $p=.001$ ). Therefore,  $H_0$  is rejected.

Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects shows a very significant difference for the performance in physics ( $p=.002$ ) and the performance in PE ( $p=.005$ ). Difference for performance in mathematics is non significant ( $p>.05$ ). For performance in physics, boys (mean = 4.23) perform higher in physics than girls (mean = 3.50). For performance in PE, boys (mean = 4.07) perform higher in PE than girls (mean = 3.13).  $H_1$  is therefore accepted for performance in physics and PE.  $H_1$  is rejected for performance in mathematics.

## H1.2B

### MANOVA:

Box's test is non significant ( $p=.119$ ). Therefore, the assumption of homogeneity is met. 'Multivariate tests' are all significant ( $p=.031$ ). Therefore,  $H_0$  is rejected. Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects only shows a significant difference ( $p=.016$ ) for the performance in arts. Difference for performance in languages is non significant ( $p>.05$ ). For performance in arts, boys (mean = 3.60) show higher performance in arts than girls (mean = 3.06).  $H_1$  is only accepted for performance in arts.  $H_1$  is rejected for performance in languages.

Note:  $H_1$  states that girls perform better in arts than boys, so actually  $H_1$  is not really accepted since this would mean that girls would perform better in arts than boys. The opposite is true here.

## Hypothesis 2

### H2A

#### Independent t-test (parametric):

Levene's test is non significant, so first row is read. T-test is also non significant ( $t(44) = .600$ ,  $p > .05$ ). From the "group statistics" table, it can be seen that boys (mean = 3.61) show more interest in the strategic design task than girls (mean = 3.51). However, since this difference is non significant, the  $H_1$  is rejected.

#### Mann-Whitney Test (non-parametric):

Average rank for boys (24.27) is higher than average rank for girls (22.06). However, the two-tailed test is non significant ( $p > .05$ ). Therefore,  $H_1$  is rejected and  $H_0$  is accepted.

### H2B

#### Independent t-test (parametric):

Levene's test is non significant, so first row is read. T-test is also non significant ( $t(44) = 1.397$ ,  $p > .05$ ). From the "group statistics" table, it can be seen that boys (mean = 3.76) show more interest in the strategic design task than girls (mean = 3.52). However, since this difference is non significant, the  $H_1$  is rejected.

#### Mann-Whitney Test (non-parametric):

Average rank for boys (25.25) is higher than average rank for girls (20.22). However, the two-tailed test is non significant ( $p > .05$ ). Therefore,  $H_1$  is rejected and  $H_0$  is accepted.

## Hypothesis 3

### H3A

#### Independent t-test (parametric):

Levene's test is non significant, so first row is read. T-test is also non significant ( $t(44) = 1.148$ ,  $p > .05$ ). From the "group statistics" table, it can be seen that boys (mean = 3.61) have more self-confidence before starting the strategic design task than girls (mean = 3.45). However, since this difference is non significant, the  $H_1$  is rejected.

### **Mann-Whitney Test (non-parametric):**

Average rank for boys (25.25) is higher than average rank for girls (20.22). However, the two-tailed test is non significant ( $p > .05$ ). Therefore, H1 is rejected and Ho is accepted.

### *H3B*

#### **Independent t-test (parametric):**

Levene's test is non significant, so first row is read. T-test is also non significant ( $t(44) = .590$ ,  $p > .05$ ). From the "group statistics" table, it can be seen that boys (mean = 3.84) have more self-confidence after completing the strategic design task than girls (mean = 3.77). However, since this difference is non significant, the H1 is rejected.

### **Mann-Whitney Test (non-parametric):**

Average rank for boys (24.95) is higher than average rank for girls (20.78). However, the two-tailed test is non significant ( $p > .05$ ). Therefore, H1 is rejected and Ho is accepted.

### *H3C*

#### **Independent t-test (parametric):**

Levene's test is non significant, so first row is read. T-test is also non significant ( $t(44) = 1.276$ ,  $p > .05$ ). From the "group statistics" table, it can be seen that boys (mean = 3.76) have more self-confidence after receiving a grade for the result of the strategic design task than girls (mean = 3.56). However, since this difference is non significant, the H1 is rejected.

### **Mann-Whitney Test (non-parametric):**

Average rank for boys (24.77) is higher than average rank for girls (21.13). However, the two-tailed test is non significant ( $p > .05$ ). Therefore, H1 is rejected and Ho is accepted.

## **Hypothesis 4**

### **MANOVA: Success and failure**

Box's test is non significant ( $p=.910$ ). Therefore, the assumption of homogeneity is met.

'Multivariate tests' are all non significant ( $p=.624$ ). Therefore, Ho is accepted. Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects shows no significant difference ( $p>.05$ ) for success and failure.

The means of the statements concerning success were: boys (mean = 3.68) and girls (mean = 3.78).

The means of the statements concerning failure were: boys (mean = 2.42) and girls (mean = 2.19).

This indicates that both boys and girls felt like they have succeeded in the strategic design task (mean score below 3 for failure statements and mean score above 3 for success statements).

### **MANOVA: internal factors**

Box's test is non significant ( $p=.654$ ). Therefore, the assumption of homogeneity is met.

'Multivariate tests' are all non significant ( $p=.916$ ). Therefore, Ho is accepted.

Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects shows no significant difference ( $p>.05$ ) for both internal factors (ability and effort).

The means of the statements concerning ability were: boys (mean = 3.58) and girls (mean = 3.54). The means of the statements concerning effort were: boys (mean = 3.78) and girls (mean = 3.81). This indicates that both boys and girls felt like internal factors had an influence on their performance of the strategic design task (mean score above 3 for ability statements and mean score above 3 for effort statements).

### **MANOVA: external factors**

Box's test is non significant ( $p=.922$ ). Therefore, the assumption of homogeneity is met. 'Multivariate tests' are all non significant ( $p=.697$ ). Therefore,  $H_0$  is accepted. Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects shows no significant difference ( $p>.05$ ) for both external factors (ability and effort).

The means of the statements concerning task difficulty were: boys (mean = 2.84) and girls (mean = 2.90).

The means of the statements concerning luck were: boys (mean = 2.77) and girls (mean = 2.87). This indicates that both boys and girls felt like external factors not really had an influence on their performance of the strategic design task (mean score below 3 for task difficulty statements and mean score below 3 for luck statements).

## **Hypothesis 5**

### **MANOVA: Success and failure**

Box's test is non significant ( $p=.391$ ). Therefore, the assumption of homogeneity is met. 'Multivariate tests' are all non significant ( $p=.865$ ). Therefore,  $H_0$  is accepted. Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects shows no significant difference ( $p>.05$ ) for success and failure.

The means of the statements concerning success were: boys (mean = 3.73) and girls (mean = 3.84). The means of the statements concerning failure were: boys (mean = 2.37) and girls (mean = 2.34). This indicates that both boys and girls felt like they have succeeded in the strategic design task (mean score below 3 for failure statements and mean score above 3 for success statements).

### **MANOVA: internal factors**

Box's test is non significant ( $p=.198$ ). Therefore, the assumption of homogeneity is met. 'Multivariate tests' are all non significant ( $p=.878$ ). Therefore,  $H_0$  is accepted. Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects shows no significant difference ( $p>.05$ ) for both internal factors (ability and effort).

The means of the statements concerning ability were: boys (mean = 3.70) and girls (mean = 3.69). The means of the statements concerning effort were: boys (mean = 3.91) and girls (mean = 3.83). This indicates that both boys and girls felt like internal factors had an influence on their performance (and thus grade) of the strategic design task (mean score above 3 for ability statements and mean score above 3 for effort statements).

## MANOVA: external factors

Box's test is non significant ( $p=.165$ ). Therefore, the assumption of homogeneity is met.

'Multivariate tests' are all non significant ( $p=.866$ ). Therefore,  $H_0$  is accepted. Levene's test is non significant for all dependent variables ( $p>.05$ ). Therefore, the assumption of homogeneity of variance has been met. Test of between subjects shows no significant difference ( $p>.05$ ) for both external factors (ability and effort).

The means of the statements concerning task difficulty were: boys (mean = 2.81) and girls (mean = 2.81). The means of the statements concerning luck were: boys (mean = 2.81) and girls (mean = 2.92).

This indicates that both boys and girls felt like external factors not really had an influence on their performance (and thus grade) of the strategic design task (mean score below 3 for task difficulty statements and mean score below 3 for luck statements).

## Hypothesis 6

### Independent t-test (parametric):

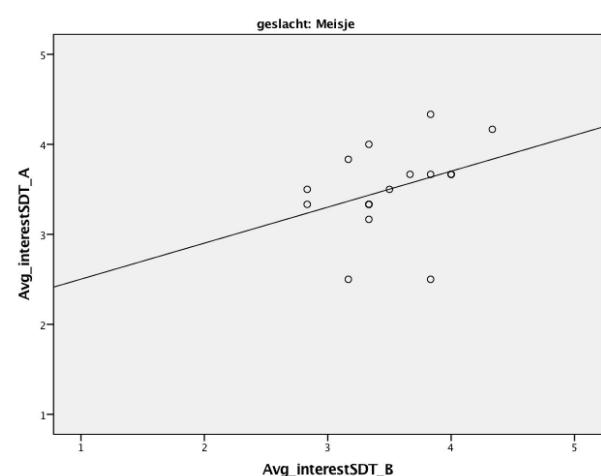
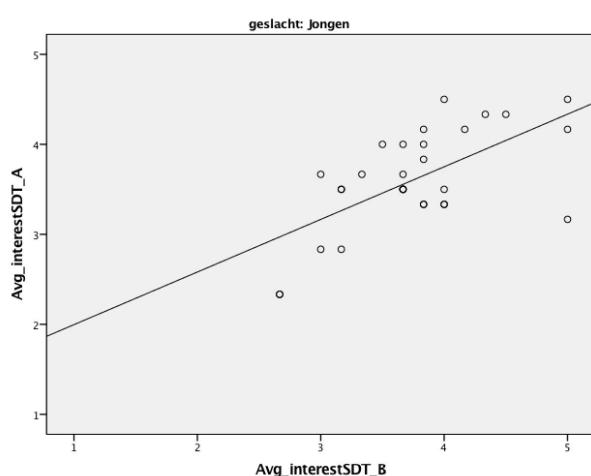
Levene's test is non significant, so first row is read. T-test is also non significant ( $t(44) = -.148$ ,  $p > .05$ ). From the "group statistics" table, it can be seen that girls (mean = 3.66) are slightly more confident in performing a strategic design task than boys (mean = 3.63) in the future. However, since this difference is non significant, the  $H_1$  is rejected.

### Mann-Whitney Test (non-parametric):

Average rank for girls (24.13) is higher than average rank for boys (23.17). However, the two-tailed test is non significant ( $p > .05$ ). Therefore,  $H_1$  is rejected and  $H_0$  is accepted.

## Hypothesis 7

### Correlation analysis:

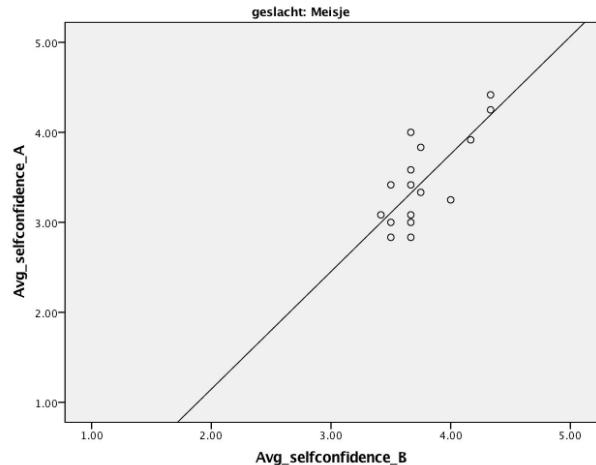
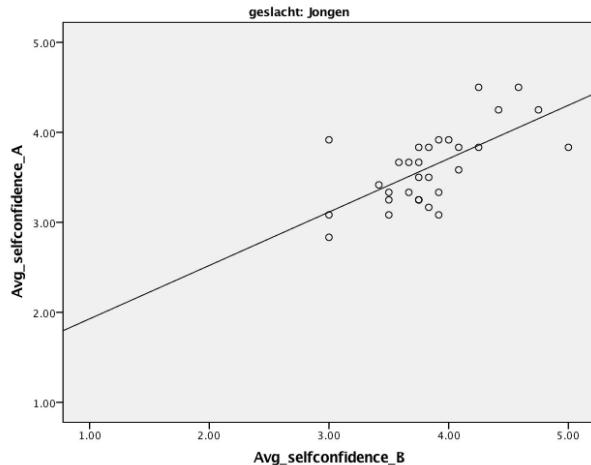


For boys there is a significant, positive relation between the interest in the strategic design task before starting and after finishing it ( $r=.636$ ,  $p<.05$ ). Therefore, for boys  $H_0$  is rejected and  $H_1$  is accepted.

For girls there is no significant relation between the interest in the strategic design task before starting and after finishing it ( $r=.341$ ,  $p>.05$ ). Therefore, for girls  $H_1$  is rejected and  $H_0$  is accepted.

## Hypothesis 8

### Correlation analysis:

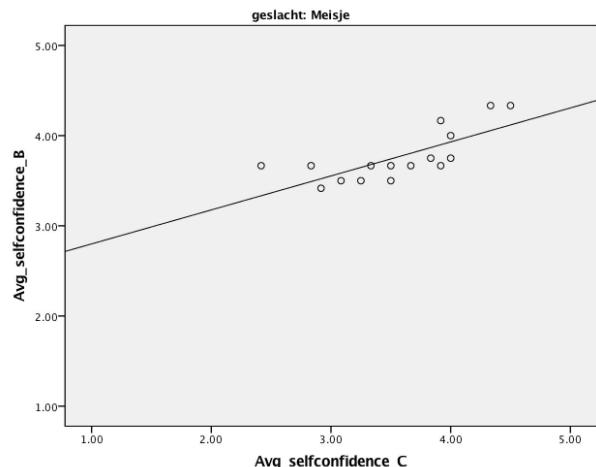
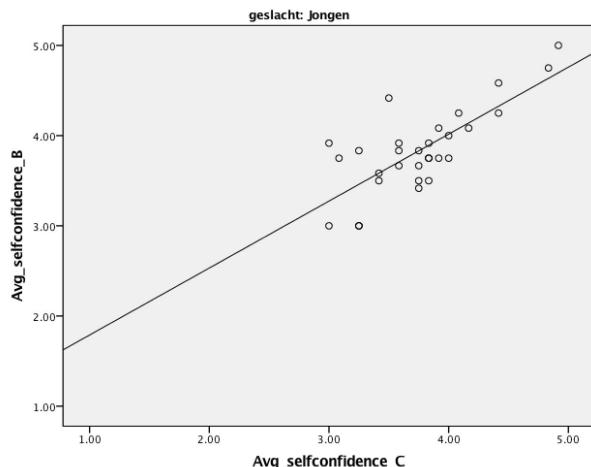


For boys there is a significant, positive relation between self-confidence before starting and after finishing it ( $r=.653$ ,  $p<.05$ ). Therefore, for boys  $H_0$  is rejected and  $H_1$  is accepted.

For girls there is a significant, positive relation between self-confidence before starting and after finishing it ( $r=.755$ ,  $p<.05$ ). Therefore, for girls  $H_0$  is rejected and  $H_1$  is accepted.

## Hypothesis 9

### Correlation analysis:

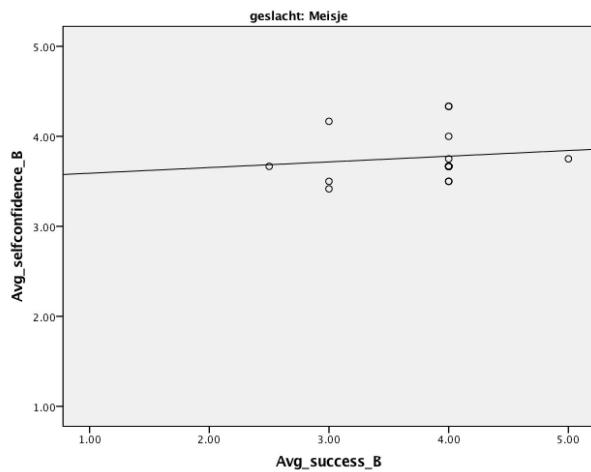
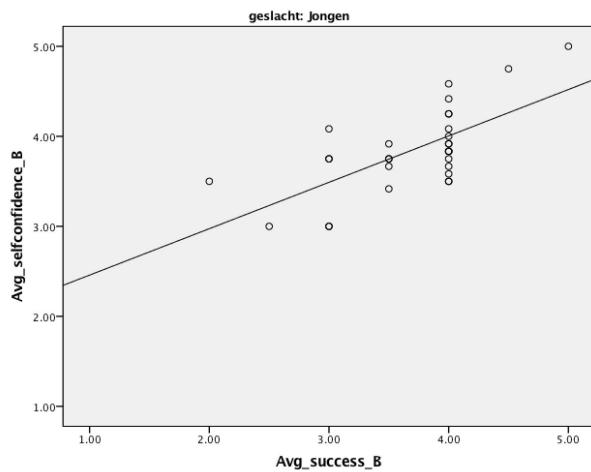


For boys there is a significant, positive relation between self-confidence after finishing the strategic design task and after receiving a grade for it ( $r=.756$ ,  $p<.05$ ). Therefore, for boys  $H_0$  is rejected and  $H_1$  is accepted.

For girls there is a significant, positive relation between self-confidence after finishing the strategic design task and after receiving a grade for it ( $r=.741$ ,  $p<.05$ ). Therefore, for girls  $H_0$  is rejected and  $H_1$  is accepted.

## Hypothesis 10

### Correlation analysis:

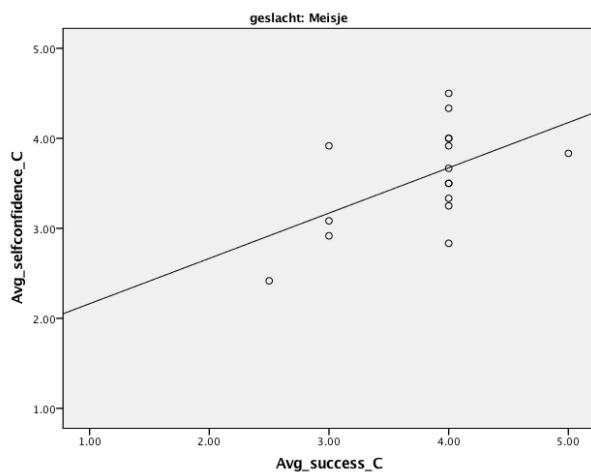
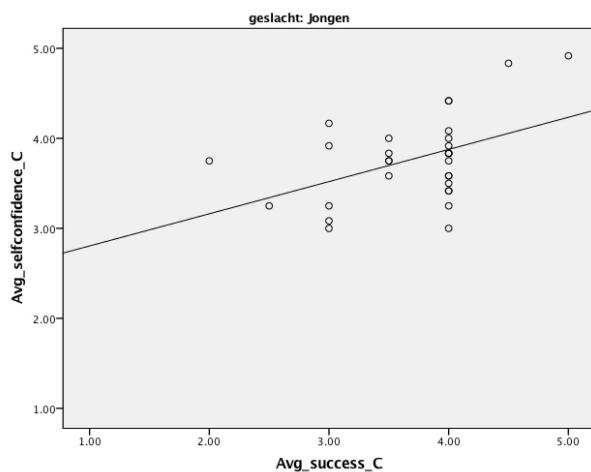


For boys there is a significant, positive relation between self-confidence and the attribution of success after finishing the strategic design task ( $r=.670$ ,  $p<.05$ ). Therefore, for boys  $H_0$  is rejected and  $H_1$  is accepted.

For girls there is no significant relation between self-confidence and the attribution of success after finishing the strategic design task ( $r=.132$ ,  $p>.05$ ). Therefore, for girls  $H_1$  is rejected and  $H_0$  is accepted.

## Hypothesis 11

### Correlation analysis:



For boys there is a significant, positive relation between self-confidence and the attribution of success after receiving a grade for the strategic design task ( $r=.456$ ,  $p<.05$ ). Therefore, for boys  $H_0$  is rejected and  $H_1$  is accepted.

For girls there is a significant relation between self-confidence and the attribution of success after receiving a grade for the strategic design task ( $r=.536$ ,  $p<.05$ ). Therefore, for girls  $H_0$  is rejected and  $H_1$  is accepted.



