

Erasmus University Rotterdam

Master Thesis

Economics and Business – Marketing

**The effect of peer pressure on salespeople's
performance**



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09-07-2020

Acknowledgment

Now the realization of this master thesis has come to an end, the moment has come to reflect back to the past years. What a ride it has been. As a high school student, nobody thought I was going to do a study or whatsoever. Six years later, as a master student at ESE, after completing a bachelor vocational degree, and now handing in my master thesis, it feels like quite an accomplishment. Without the people who surrounded and motivated me, I never could have dreamed to come this far.

First, I would like to thank my fellow students Karel Kral, Tom Huis, Isabel Spek and Lotte Walhout for the past five years. Without you guys, always helping each other in difficult times and with difficult assignments and exams, this would never be possible. Secondly, I would like to thank my parents, which helped me with several things during my studies. Thirdly, I would like to thank my friends and girlfriend, since they helped me with to mind off things and have a good time being a student. This triangle of people gave me the motivation to do what I have accomplished so far, and to build on that for my future career.

Lastly, I want to thank my supervisor Stacey Malek, who guided me through this process. Giving the right feedback, and willing to spar with me really helped me with improving the quality of my thesis.

Hereby, I proudly present my master thesis.

Cédrique Antoine Aardoom

Abstract

Organizations implement Sales Management Control Systems (SMCS), to align sales activities to company objectives. These Sales Management Controls Systems have two components, formal and informal controls. One specific informal control, peer pressure, seemed to have a positive effect on the performance of salespeople in SMCS and peer pressure literature. Extending this line of inquiry for one specific type of peer pressure, namely passive peer pressure tries to uncover the research question: *“How does peer pressure influence a salesperson’s behavior and performance?”*. The hypotheses made for this research are that passive peer pressure has a direct effect on performance. Another variable, years of experience also should have a direct effect on performance. And the last hypothesis assumed that the effect of peer pressure affects less experienced salespeople in such way they perform better, compared to more experienced salespeople. In order to test this, two studies were conducted. The results of the studies were mixed. Passive peer pressure did not have a statistically significant direct effect on the performance of salespeople. Years of experience did not have a statistically significant direct effect on the performance of salespeople. But an interaction of passive peer pressure and years of experience does have a statistically significant effect on the performance of salespeople. Representatives with more than 10 years’ experience performed better when exposed to peer pressure, where sales representatives with less than 10 years’ experience performed worse when exposed to peer pressure. Furthermore, implications and directions for future research are provided.

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1. Introduction

Sales Management Control Systems (SMCS) are designed to align salespeople's activities to company objectives (Malek, Sarin, & Jaworski, 2018). These control systems vary from one specific type of control (e.g. formal control; sales target) to very complex and elaborated systems with more than one type of control in place simultaneously. Diving deeper in these control systems will provide insights of what these controls exactly are, and how managers could use these control systems to optimize the performance of salespeople and sales teams.

1.1. Research question and motivation

Control systems in marketing and sales teams is a topic where in the past many authors have written about, and where scholars still do research on. (Jaworski, 1988) was among the first to distinguish control types (formal vs informal and their sub controls). Formal controls are output driven types of control. Management sets certain targets, which the employees needs to achieve (e.g. sales target). Informal controls are more worker-initiated controls, people can set for themselves or a (sales)team can do. Although the vast majority of sales research on controls focus on formal control, (Ouchi, 1979) and (Anderson & Oliver, 1987) also spoke about the power a clan (cultural control; part of informal control) can have within the organization. Those scholars made a distinction between three types of informal control; self, social (peer) and cultural (clan) controls.

Although informal controls have been deemed important, little research has been done to date. For instance, (Jaworski & MacInnes, 1989) tested the informal controls self and professional (social), in combination with (formal) output controls with positive results. Also, (Panagopoulos, Johnson, & Mothersbaugh, 2015) tested the effect of the informal controls self, professional (social) and cultural control on several outcome variables. They confirmed that these informal controls have a positive effect on behavior, customer relationship and outcome performance. (Cravens, Lassk, Low, & Marshall, 2004) and Jaworski (1988) have shown that both forms of control are important and could improve the performance of salespeople, in order to achieve the organizations' goals. On the other hand, (Jaworski, Stathakopoulos, & Krishan, 1993) also did research on combinations of control types within SMCS. Besides some positive results, they also found mixed results (neutral and negative)

from these control systems on their tested dependent variables. This taken together, there is limited research on informal controls, and with mixed findings.

Besides the SMCS literature on informal controls, social and peer control in particular is of importance for this research. Where scholars like (Chiaburu & Harrison, 2008) and (Loughry & Tosi, 2008) tested if support/positive and antagonism/negative influences from peers had an effect on salespeople's performance, which it seemed to have. (Sunder, Kumar, Gorenczny, & Maurer, 2017) and (Baker, Jensen, & Murphy, 1988) tested if the influence of peers had an effect on the turnover of salespeople or sales team incentives schemes, which showed mixed results. Another scholar did two studies on learning effect of salespeople. (Chan, Li, & Pierce, 2014) showed in both of their papers from 2014 that the results from learning effects among peers had most of the time a positive and significant effect, provided for the fact their research also showed neutral and negative results. Besides that, (Onyemah, Swain, & Hanna, 2010) advocates that social learning, based on (Bandura, 1977) social learning theory occurs in workplaces when people needs to adapt to new situations. Before adapting to such a situation, people combine information about the past and potential outcomes of behavior based on others (e.g. (non)verbal communication). In essence, this is learning by doing and modeling of situations, which also holds for sales teams.

Based on prior research, where positive results (e.g. Jaworski and McInnes (1989)), and neutral and negative results were shown (e.g. Jaworski et al. (1993)), it is not perfectly clear what the effect of social and peer control on behavior and performance of salespeople is. Most of prior research are based on surveys, (e.g. Onyemah et al. (2010)), which do not prove causality in a way a controlled experiment can. The effects of prior research done with surveys may correlate with other (latent) variables, which cannot be discovered or measured with a survey. To my knowledge, no research has been done on responses of actual (potential) consumers to sales pitches written by salespeople, with the presence or absence of peer pressure.

Since most literature claims that informal control types can have a beneficial influence on behavior and performance and most literature on peer effects show positive effects, this research extends this line of inquiry. This thesis attempts to expand our knowledge on when a specific type of peer pressure (passive) would affect performance. Findings would help managers understand this control type and what effect it can have. Specifically, this thesis will try to answer the following research question:

“How does peer pressure influence a salesperson’s behavior and performance?”

To test to what extent peer pressure would affect a salesperson performance, two experiments are constructed. The first experiment consists of sales representatives making a sales pitch, after being subjected to passive peer pressure (or not). In a second study, a survey measures the effectiveness of those pitches among potential customers. Study 1 also takes differences of the level of experience among salespeople into account, to enhance the line of inquiry and to search for interaction effects. Therefore, the research of the effect of peer pressure on performance will make an addition to the SMCS literature and the peer pressure literature, since there are gaps in our complete understanding of the effect of peer pressure (social control) on salespeople’s performance.

1.2. Thesis outline

This thesis consists of six chapters, including this introduction, which is chapter one. Chapter two will provide an overview of work that has been done on SMCS, peer pressure and years of experience, concerning the relationship with the dependent variable performance. In chapter three the hypotheses will be drawn with help from the literature review, using the conceptual framework where the research model will be developed on. In chapter four, the research method, population, sample and variables are discussed. Chapter five provides an overview of the research results based on the quantitative analysis and hypothesis testing is provided. In chapter six, the theoretical and managerial implication will be discussed. After that, the limitations of the study will be discussed, resulting in the conclusion of this study.

2. Literature review

This study focuses on the effect of passive peer pressure of a salesperson's performance, with sales experience as a possible mediator. Therefore, relevant papers on Sales Management Control Systems (SMCS), peer pressure and years of experience on performance are reviewed in this section.

2.1. Sales Management Control Systems and performance

SMCS are designed to align salespeople's activities to company objectives (Anderson and Oliver, 1987; (Darmon & Martin, 2011); Jaworski, 1988; Malek et al. 2018). The literature makes a distinction between formal and informal types of controls.

The traditional (formal) way of (sales) management control systems are output driven. With this traditional (formal) system, management specifies desired output or performance, (e.g. sales targets) (Merchant, 1985). These targets have to be achieved by the people working on the task by giving them the right input, (e.g. training) and to monitor and evaluate their performances (Anderson and Oliver, 1987; Merchant, 1985). Anderson and Oliver (1987) also discussed behavior control systems. These behavior control systems address the process of selling, (e.g. knowledge, presentation, closing ability, services performed, etc.) rather than the outcomes, (e.g. targets) (Jackson, Keith, & Schlacter, 1983). Systems like these are much more comprehensive, compared to formal controls systems based on outcomes. Therefore, it can help managers to eliminate inequities that can arise when only output driven measures are used. On the other hand, behavior controls are highly complex and rely on bias, since most salespeople develop their own tactics, and the subjectivity of evaluation of managers can cause these inequities ((Adkins, 1979); Jackson et al. 1983).

Although, Anderson and Oliver (1987) and others discuss informal control which they define as 'clan', informal controls have largely been viewed as outside the control of managers. Namely, clan covers an informal control system which means that people working within an organization see their colleagues rather as family than as coworkers, colleagues or an organization. Ouchi (1979) was first to mention informal "clan" control. He described different types of control, but he did not explicitly research the effect of these types of control.

Jaworski (1988) advocated that traditional control systems are limited in scope and application. This lack of depth is due to the incompleteness of environmental considerations and other forms of control. In his article, Jaworski (1988) defined three types of formal control; input controls, behavioral/process controls and output controls. Besides the formal controls, Jaworski (1988) also described informal controls as worker-initiated mechanisms, which can be divided in three types; self-controls, social (peer) controls and cultural controls. These informal controls could be linked to the informal “clan” control in the Anderson and Oliver (1987) and Ouchi (1979) papers, since both are worker-initiated mechanisms. Most of the literature on SMCS are built on formal control systems, however, Jaworski (1988) assumed that problems can occur when organizations restrict their scope on output and thus formal controls. Informal control systems including self, social (peer), cultural (clan) control might increase performance and offset high tension on formal controls (Jaworski, 1988).

Research also has shown that besides the formal forms of control, informal (cultural) control like “clan” as Anderson and Oliver (1987) and Ouchi (1979) described, can work within the organization to work towards mutual goals and performance (Ouchi, 1979). Jaworski (1988) also found evidence suggesting both formal and informal control could be in place simultaneously, and that a combination of (high)-formal and informal control could result in more favorable company and salesperson results, (Anderson and Oliver, 1987; (Futrell, Swan, & Todd, 1986)).

Where most of the research tested if formal controls had an effect on dependent variables like behavior and performance, Jaworski and MacInnes (1989) were the first to test both formal and informal (self and professional (social)) control on consequences for marketing personnel. Their research supported that higher level of self-control resulted in less dysfunctional behavior, which can be interpreted as a higher probability for better results and performance of personnel. Jaworski and MacInnes (1989) advised to do further research to provide insights around this this topic.

Jaworski et al. (1993) did research on how different types of formal and informal control, and high versus low control organizations performed on different dependent variables, including performance as a dependent variable. This paper does not support the hypothesis that clan control affects performance of the organization. However, this paper does support evidence to believe that clan control enhances job satisfaction.

Another additional research has been done by (Kreutzer, Cardinal, Walter, & Lechner, 2016) which did research on if formal and informal controls could substitute or complement each other. Trying to answer this question, they made legio inteactions plots on the combination of formal and informal controls on their dependent variables. Their conclusion was that formal and informal controls do complement each other, especially when formal controls are lower and informal controls are higer, which is the result of reinforcing power in order to perform at a certain level. However, they found evidence to believe that this effect is stronger in task related context. The more exploratory the task, the better this combination works.

Panagopoulos et al. (2015) did test the effect of formal and informal controls: self, professional (social) and cultural control on behavior, customer relationship and outcome performance. Panagopoulos et al. (2015) confirmed that these informal controls have a positive effect on behavior, customer relationship and outcome performance. More precise, the professional (social) control has a direct effect on behavior and customer relations. Both behavior and customer relations performance have a positive influence on outcome performance and outcome performance on financial performance. Despite the fact that in this research some effects are mediated by other, more latent variables, this paper provides data that supports the claim that informal controls (in this case professional control) does have a positive effect on sales performance.

But as in many marketing, sales and managerial literature, information of informal control; self, social and cultural apart from formal controls is very brief and therefore focusing solely on formal control could lead to inaccurate conclusions (Jaworski, 1988). These management control systems, both formal and informal, are important for organizations because research has shown that these controls combined, result in higher productivity and lead to better overall performance of salespeople (Cravens, Lask, Low, & Marshall, 2004). Moreover, a combination of both formal and informal controls will reinforce each other, resulting in more desirable results of the performance of individuals and teams (Kreutzer et al., 2016).

2.2. Peer pressure

As mentioned in the literature review from the SMCS, social control, especially peer pressure is less developed in all research about SMCS. Therefore, a specific review of peer pressure in sales literature is done. This provides a better and overseeable understanding of what past research has and has not pointed out.

According to (Calvó-Armengol & Jackson, 2010), peer pressure is a feeling a person can experience, actively or passively, which can influence behavior and let people act differently. Active peer pressure means that a person experiences direct lobbying from someone, and acts on that pressure. Passive peer pressure means that a person is likely to act on behavior from peers, but that a person does that on behalf of their own beliefs based on peer behavior and views, instead of direct lobbying.

Chiaburu and Harrison (2008) did research on whether coworker support (positive) and coworker antagonism (negative) had an effect on several variables like job satisfaction and performance. The results for coworker support showed a positive effect on performance, but this effect was not significant. They also found empirical evidence to believe that coworkers predict perceptual, attitudinal and behavioral outcomes of their colleagues, related to performance. According to Baker et al. (1988) and (Sewell, 1998), peers can influence coworkers to work towards group expectations, in order to get accepted or to be praised by fellow peers.

Loughry and Tosi (2008) did research on peer monitoring and how that is affecting performance. In their paper, they examined direct and indirect peer monitoring. Direct peer monitoring resulted in noticing and responding to peers who performed properly, giving feedback to coworkers when they made a mistake and reported dishonesty from coworkers. This had a positive effect on performance. Indirect peer monitoring turned out to be gossip on poorly performing coworkers and avoiding them. This had no direct effect on performance. They concluded that this type of peer monitoring is not in the interest of organizations, since it might result in less performing coworkers or coworkers leaving the organization.

Onyemah et al. (2010) advocates that social learning occurs in workplaces when people needs to adapt to new situations. They did research on the effect of information seeking of salespeople and on competitiveness among salespeople on performance, while using sales technology. They found mixed but significant results. Information seeking of salespeople had a positive and significant effect on performance. Competitiveness had a negative but significant effect on their performance. This refers to the fact that people combine information about the potential outcomes of behavior, based on for example (non)verbal communication in their favor, which is called modeling. When the environment becomes competitive, the opposite occurs and it will harm their performance.

Sunder et al. (2017) did research on why salespeople quit. They formulated a hypothesis on if organizations with a low variance of performance of salespeople (which can be translated to organizations where salespeople are less challenged by each other) is leading to lower motivated salespeople and leading to negative results on a salespersons turnover. They found significant evidence which proves that a higher level of variation within a sales team (which means that people are performing very differently) has a negative effect on sales turnover. This effect is not supporting the hypothesis. However, they found that this peer effect has greater impact on the voluntary turnover of a salesperson, which could be translated to higher levels of self and social (peer) controls.

Whereas Sunder et al. (2017) concluded that different performing salespeople lead to negative results in sales turnover, Chan et al. (2014) advocate in their two papers from 2014 that peer interaction and learning from each other are crucial for achieving firm goals. This could be seen a solution for the problem of different performing salespeople, as in the paper of Sunder et al. (2017) and for designing salesforce incentive plans (which refers back to the SMCS literature). These peer learning effects will affect long-term productivity of the salespeople (Chan et al., 2014a&b).

Where performance can be measured in many ways (e.g. turnover) as in Sunder et al. (2017) paper, or achieving mutual goals and for incentive plans, Chan et al. (2014), also peer pressure can be measured in several ways. In (Atefi & Pourmasoudib, 2019) paper, they review plenty papers about peer effects in sales literature. Based on their overview, a table is presented with an overview of peer effects in sales literature relevant for this study. This overview is presented in table 1.1.

<i>Paper</i>	<i>Topic</i>	<i>Type of peer effect</i>	<i>Type of performance</i>	<i>Results/effect</i>
	Positive vs Negative			
<i>Chiaburu and Harrison (2008)</i>		Coworker support (positive) or antagonism (negative)	Task performance	Support: Positive and significant Antagonism: negative and significant
	Direct vs Indirect			
<i>Loughry and Tosi (2008)</i>		Direct (praise) and indirect (gossip) peer monitoring	Problem free work unit performance	Praise: positive and significant Gossip: Negative, not significant
	Turnover			
<i>Sunder, Kumar, Gorenczny & Maurer (2017)</i>		Peer performance variance	(In)voluntary Turnover	Negative and significant
<i>Baker, Jensen & Murphy (1988)</i>		Peer monitoring for team-based incentives	Team-Incentives	Literature suggest positive
	Learning effects			
<i>Chan, Li & Pierce (2014a)</i>		Individual vs team effect of peers	Compensation systems	Mixed effect but significant
<i>Chan, Li & Pierce (2014b)</i>		Peer based learning (superior vs inferior)	Weekly sales in \$	Positive and significant
<i>Onyemah, Swain & Hanna (2010)</i>		Information seeking from peers and experiencing competitiveness	Performance by using sales technology	Information seeking: positive and significant Competitiveness: negative and significant

Used significance level: $\alpha = 0.05$

Table 2.1 – Overview peer effects in sales literature

To summarize table 2.1, peer pressure as (informal control) appears to have in most cases a positive and significant effect on performance, sometimes depending on other (moderator) variables. However, no research to date has looked at passive peer pressure specifically, nor how it influences actual sales person performance, depending on a salesperson's level of experience.

2.3. Years of Experience

As a matter of fact, every human being is aging. As they say, with age comes wisdom, but is this also the fact within sales literature? (Ford, Hartley, Walker, & Churchill, 1987) found significant evidence that age is explaining a small percentage of sales performance. Therefore, a second independent variable age will be reviewed, which will later be defined as years of experience.

(Landau & Werbel, 1995) incorporated age as an indirect variable in their research model and tested the direct and indirect effect of age on sales productivity. They assumed that among less experienced salespeople (which are most of the time younger people) sales productivity is influenced directly or indirectly through the learning process. Learning in their research consisted of information seeking, joint sales calls with more experienced colleagues and prospecting techniques. As in the paper of (Lawrence, 1984), she stated that age norms exist, regarding what a person has achieved in his or her career. This implies that people within a firm have different performance expectations of older (more experienced, new) colleagues than from younger (less experienced, new) colleagues. Besides that, Landau and Werbel (1995) suggested that because the expectation differences between younger and older colleagues, older colleagues are more reserved with asking for information to fellow peers, compared to younger colleagues. This also resonates towards less experienced salespeople. Therefore, less experienced colleagues may not receive the information from other (experienced) colleagues they need to succeed on the job. The results from their research showed a significant direct result of age on sales productivity. Besides the direct effect, Landau and Werbel (1995) tested if age had a moderation effect on the other independent variables information seeking, joint sales calls and prospecting methods. They did not find any support to believe that age moderated with other independent variables.

On the other hand, some scholars did research on the effect of age on their dependent variable. As an example, (Rhodes, 1983) did research on the effect of age on job attitudes. She found significant evidence to believe that age was affecting job attitudes differently for older people than for younger people. Therefore, where Lawrence (1984) advocates age has an impact on performance expectation among colleagues, Landau and Werbel (1995) suggested age could have a different effect for older people than for younger people, due to the experience.

Moreover, age is explaining people are getting more experienced over time, resulting in higher productivity with relatively less effort. On the other hand, younger people tend to be more ambitious and motivated because they want to learn and grow, which also can lead to higher productivity of salespeople (Lawrence, 1984).

3. Theoretical framework

In this chapter, the theoretical framework for the hypotheses will be discussed. Using this framework, and using the reviewed scholars in the literature review, the hypotheses for this thesis can be developed.

3.1. Social learning theory

As already discussed briefly in the introduction of this thesis, social learning theory will be used as framework for the hypotheses. Bandura (1977) advocates that observation and modeling are key in order to learn. Bandura's (1977) social learning theory goes beyond other behavioral theories, which are based on conditioning (e.g. watching, imitation and cognitive theories), because his social learning theory also takes into account psychological conditions such as attention, memory and modeling.

His social learning theory elaborates that (1) people can learn from observation and modeling, (2) the mental state of the person is important for learning and (3), learning does not necessarily lead to behavioral changes. In light of this research, people pressuring themselves with passive peer pressure, which can be linked to learning from observing and modeling possible actions to that. People will intrinsically motivate themselves, in order to do or to achieve something they desire, which they have seen others do or achieve. Therefore, these salespeople need to be motivated to produce a sales pitch, and willing to perform better than their peers. As Bandura (1977) states, learning from observation and modeling, and the right mental state does not necessarily lead to behavior changes. Peer pressure is something people need to pressure themselves with in order to work, so intrinsic motivation to complete a certain task is also from great importance. In most literature, peer pressure has a positive effect on performance. For the hypotheses of this thesis, the social learning theory will help to reason and understand the supposed hypotheses.

3.1.1. Peer pressure and Performance

Drawing on the literature review of SMCS, especially on informal controls (which in most cases (could) have a positive effect) and specifically building on peer pressure literature and social learning theory mentioned in the theoretical framework, passive peer pressure is expected to positively influence salespeople's performance. Onyemah et al. (2010) advocated that (in most cases) salespeople will seek information (in their case on sales technology) by observing their environment, suggesting that (social) learning effects on peers in sales do occur. This is also in line with the social learning theory (Bandura, 1977). Salespeople can learn from observing their environment or peers. This learning can happen in several ways. For this study, through passive peer pressure, salespeople will get information and learn, model and adapt what they are told, besides all skills they already developed by working in sales. It is expected that these salespeople do pressure themselves to aim for a certain level, set by their fellow peers. Going further with all literature reviewed of peer effects on performance, these effects in most cases have a positive and significant effect on performance of salespeople. Because most literature shows a positive and significant effect, due to the peer effects and social learning theory, I expect a positive effect from passive peer pressure on sales performance for this study as well. Because a standardized story will be told of what the control group has done, I expect the manipulation group to observe the information, model it and act on the passive peer pressure. These salespeople are likely to act on the information, as described in the social learning theory (Bandura, 1977). Therefore, hypothesis 1 can be presented:

Hypothesis 1 (H1): *Passive peer pressure has a positive effect on the performance of a salesperson's sales pitch*

3.1.2. Years of Experience and performance

Building on the variable age, which suggest that; the older people get, the more they will know and the more experience they will have. Landau and Werbel (1995) showed that age did have an effect on the learning process and subsequently on sales productivity. Bandura's (1977) social learning theory, which advocates that besides people can learn from conditioning and cognitive training, mental state, observations and modeling are key. Taking into account the age norms of Lawrence (1984), it can be assumed that age and years of experience does have a positive relationship with the performance of a salesperson. The older a person gets, the more experience they have and the possibility of them to perform more efficient. This age effect of Lawrence (1984) also explains that it is expected from more experienced salespeople to perform better, compared to less experienced salespeople. This experience can be related to the fact that because they are older and have more experience, they have been in a certain mental state for longer, in order to adapt to different pressures. Furthermore, it can be assumed that they observed a certain task or job (e.g. working in sales) more times in their lives than somebody which is younger. Because they have observed a certain task more times in their life, they also have modeled this task or job more times in their lives, compared to people with less experience in that certain task or job. Therefore, the assumption Landau and Werbel (1995) made is validated by Bandura's (1977) social learning theory. Age (or years of experience) does have a positive effect on the performance of salespeople. Besides the task the salespeople will get for this experiment, more experienced salespeople have a more developed skillset due experience and conditioning in order to perform certain tasks compared to less experienced salespeople. Therefore, I expect this effect also to occur in this study, which will be measured in years of experience. Hypothesis 2 can be presented:

Hypothesis 2 (H2): *Years of experience has a direct effect on the performance of a salesperson's sales pitch*

3.1.3. Interaction between Peer Pressure and Years of Experience on Performance

Going one step further with the variable years of experience and building on Rhodes (1983), it shows that differences could occur between younger and older people. This can be confirmed by Bandura's (1977) social learning theory, because it can be assumed that more experienced people have observed and modelled certain tasks more times than less experienced people, and therefore perform more efficient because of conditioning and experience. Furthermore, because Landau and Werbel (1995) showed that younger, less experienced people are willing to ask more information to complete a certain task compared to more experienced people, passive peer pressure could abolish the effect of years of experience. The reason for this is that in most literature reviewed on peer pressure; peer pressure has a positive effect on performance. Younger people are eager to learn, especially in sales to achieve certain levels (e.g. to earn a bonus) (Lawrence, 1984). This was also shown by Onyemah et al. (2010), who showed that (social) learning among colleagues has a positive effect, provided that the environment does not become (highly) competitive. Therefore, I expect less experienced salespeople, due to the manipulation of the passive peer pressure, to achieve higher productivity and thus perform better than their fellow peers, who does not have been pressured with peer pressure. This might be the case as well for more experienced salespeople manipulated with passive peer pressure, but I expect that to be less effective on more experienced salespeople. The reason for that is that they probably already have a coping mechanism to deal with certain levels of (passive peer) pressure. This can also be related to Bandura's (1977) social learning theory. More experienced salespeople have another mindset, observed and modelled certain tasks more times than less experienced people and therefore developed a more elaborate skillset, compared to less experienced salespeople. Landau and Werbel (1995) could not prove moderation occurring between their independent variables, where I think within the scope of this study that passive peer pressure will affect less experienced salespeople differently than more experienced salespeople. Hypothesis 3 can be presented:

Hypothesis 3 (H3): *Passive peer pressure and years of experience will influence salesperson's performance, such that less experienced salespeople perform better, compared to salespeople with more experience*

3.2. Conceptual Model

To elucidate the formulated hypotheses in the theoretical framework, the conceptual model can be presented. This model consists of the three variables passive peer pressure, years of experience and the dependent variable performance, measured as a sales pitch. The hypotheses (H), indicated between the brackets and their supposed signs, are also included in the model, which can be seen in figure 3.1.

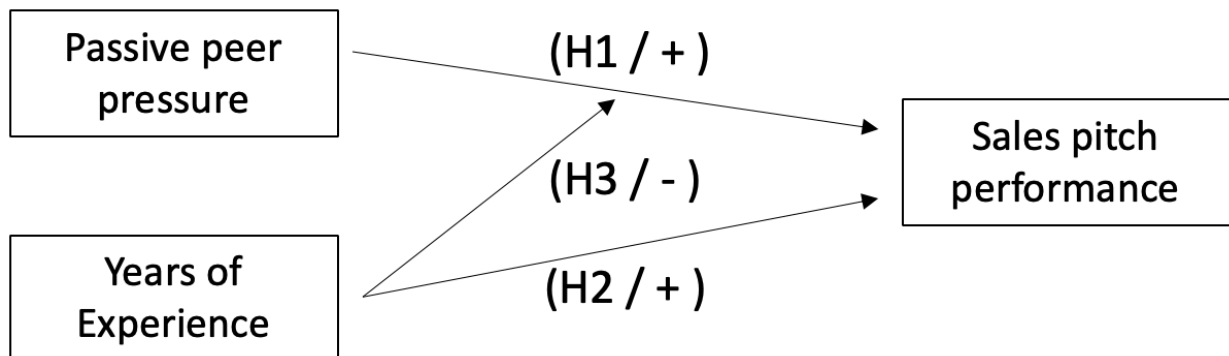


Figure 3.1 - Conceptual Model

4. Method

In this chapter, procedure, research techniques, the populations, samples and the variables of the experiments will be discussed. Because this research consists of 2 studies, both studies will be discussed separately. Both study outcomes will result in the data which will be used in chapter 5, the results and chapter 6, the discussion.

4.1. Study 1

As presented in the introduction of chapter 4, this research consists of 2 studies. The first study is an experiment with salespeople for the independent variables peer pressure, years of experience for the pitches, which will be used in study 2.

4.1.1. Procedure

To test how peer pressure would affect the performance of a sales person's sales pitch, an experiment was constructed. For study 1, 12 sales representatives were selected to write an elevator pitch of around 30 words (which is in Tweet style) for a fictional fast-moving consumer good (FMCG). Salespeople were recruited from my professional network through theoretical sampling, due to the specific application of the research to a sales context. A FMCG product was chosen for the manipulation because most of these products are impulse buys, which the pitch needs to trigger by the respondents (Babbie, 2014). A fictional product is used because people do not have direct associations with a certain product, but do know in what product category the product belongs to. The product the salespeople wrote the pitches for is presented in appendix B.1. The pitches were written down in Dutch, since the respondents will be mostly Dutch. This makes the survey easier to read and to understand for the respondents in study 2, which will help the internal validity of the experiment and survey (Babbie, 2014). The first group of six (the control group) only heard on what product they have to write the pitch and how long the pitch needed to be. The other group of six (the manipulation group) was manipulated with passive peer pressure by telling them a standardized story of what other peers did and how they performed. The story included: Telling that another group of sales representatives did this already, telling them how fast they did it, telling them for which company they work and telling the functions of the people who wrote the pitches.

To standardize as much as possible between the groups, both heard a pre written script, as presented in appendix B.2&3. This was done to make sure that the differences between groups was made due to the manipulation of the story (as written in the appendix), and not because other possible variables, so both groups went through the same procedure (Babbie, 2014). After telling the story, I muted my webcam and microphone on my laptop, instead of me lobbying directly by staying “online” so they could not hear and see me.

When the sales representatives were done writing the pitches, they were asked to fill in a survey directly after the experiment on if they felt any (passive peer) pressure due to the manipulation. The manipulation check was derived from the story they were told. This was measured on a 5-point Likert scale which indicates if they (strongly) agreed or (strongly) disagreed with these statements (Field, 2009). The control group and manipulation group were asked if they felt any pressure on the fact that other people would do the same and on the amount of words they could use. The manipulation group was asked to fill in some additional questions, including whether they took in consideration what companies others worked for, what job titles others had and the time others took to complete the pitch. This was done to check if the manipulation has worked and what was the main driver of the peer pressure. Some additional info and some control variables were asked (most importantly years of experience) to include in the research model (Babbie, 2014; Field, 2009). The manipulation check questionnaire is presented in appendix B.4.

4.1.2. Population and sample

The population for the first experiment consisted of 12 Dutch sales representatives. These representatives were selected from my own network, and people suggesting other sales representatives, through snowballing. The total sample consisted of ($n = 12$) male representatives, which is 100% of all people who wrote a sales pitch. The average age of all the representatives was 37, where the average age of the junior group was 26 (50%) and the average age of the senior group was 48 (50%). From this sample, 9 of the representatives (75%) were full-time working (36 or > 36 hours a week) and 3 of the representatives (25%) were part-time working (< 36 hours per week). Furthermore, the highest level of education completed of the representatives was more scattered, with 4 representatives completed secondary vocational education – MBO/MTS (33%), 2 representatives completed high school

- HAVO/VWO/Gymnasium (17%), 5 representatives completed higher vocational education
- HBO (42%) and 1 representative completed university – WO (8%).

4.1.3. Measures

Because only the independent variables were obtained during study 1, and for the peer pressure the representatives were randomly assigned to the groups, there is not a specific measurement for the independent variable peer pressure. Therefore, a manipulation check was done to check if representatives felt anything of the manipulation.

4.1.3.1. *Peer pressure*

Peer pressure was measured by 5 items, based on the standardized stories representatives heard before they wrote the pitch. These questions were measured in a 5-point Likert scale, where 1 was strongly disagree and 5 strongly agree.

4.1.3.2. *Manipulation*

The manipulation peer pressure was measured in the manipulation check, but to make a distinction in treatment of the groups for SPSS, two groups were composed. The first group is the control group and the second group are the manipulation group. This was coded as a dummy variable where 0 = control and 1 = manipulation.

4.1.3.3. *Years of experience*

Years of experience was measured as a continuous variable. After that, two groups could be made. One group had less than 10 years' experience in sales, called the junior group and the other group had more than 10 years' experience in sales, called the senior group. This was coded as a dummy variable where 0 = senior and 1 = junior.

4.1.3.4. *Time*

The time representatives took was measured as a continuous variable. From the moment the experiment started to when they were done, using a stopwatch, their time was tracked. After that, their times were manually added to the belonging person in the data set of study 1.

4.2. Study 2

The second study utilizes all data gathered in study 1, which are the pitches, years of experience and if the manipulation has worked. The second study will test if respondents (as potential customers) measure the manipulated pitches to be more effective than the non-manipulated pitches.

4.2.1. Procedure

When the first experiment was completed and the pitches were ready, a survey was constructed. This survey was constructed in Qualtrics (Online survey software). This survey was distributed within my network (Facebook, LinkedIn, WhatsApp chats etc.) to ask if people could fill in the survey and rate six times two different elevator pitches on the fictional product written by the sales representatives (manipulated vs. control) on a 7-point likelihood to buy Likert scale (1:1 comparison) (Babbie, 2014; Field, 2009). Of course, it was not mentioned which pitch was the manipulated one. In between the comparisons, an attention check question was asked. This question asked the respondents to think about green grass, and answer that the color of grass was purple in order to prove that they paid attention (Babbie, 2014). After the six comparisons, some demographic questions were asked. In appendix A.1, the experiment design is shown and in appendix A.2 the condition scheme of the 2x2 design is included. In Appendix B.5, the full questionnaire with pitches can be found. For this survey, a minimum of 30 respondents per condition will be representative for the population (Babbie, 2014; Field, 2009). This implies that a minimum of 120 respondents was required to make the sample externally valid. After one week, 164 respondents were obtained, so the threshold of 120 is exceeded.

4.2.2. Population and sample

The population of the second study, consisted of in total ($n = 184$) cases. Since 22 people answered the attention check question wrong, they had to be removed from the sample. Eventually, the sample consisted of ($n = 162$). The sample consisted of 160 Dutch respondents (99%), and 2 people who were born in Europe, but not the Netherlands (1%). From the 162 respondents, 74 respondents (46%) were male and 86 respondents (54%) were female. The average age of this sample was 35 years, with the youngest being 17 years

old and the oldest being 74 years old. From these respondents, their main occupation was more scattered. The second biggest group were 44 students (27%). The third biggest group were the 35 part-timers (< 36 hours a week), which represents 22% of the sample. The biggest group were 46 full-timers (36 or > 36 hours a week), which is 28% of the sample. Also, the sample consist of 14 self-employed persons (9%) and 15 entrepreneurs (9%). The last two categories consisted of two people searching for a job (1%) and 6 people were retired (4%). Furthermore, concerning completed education of the respondents, 15 of the respondents (9%) completed high school's – MAVO/VMBO. The second category secondary vocational education – MBO/MTS consisted of 21 respondents (13%). Also, 33 respondents (20%) completed high school's – HAVO/VWO/Gymnasium. The fourth and largest group consisted of 57 people who completed higher vocational education – HBO (35%). The last group of respondents consisted of 36 people (22%), who completed university - WO.

4.2.3. Measures

For study 2, the performance of all pitches was measured. Since performance is the dependent variable, the results of the study will be discussed in chapter 5.

4.2.3.1. *Performance*

The pitches, written by the representatives were measured in study 2. The pitches were measured on a 7-point Likert scale where 1 was not very effective and 7 highly effective.

4.2.3.2. *Manipulation*

The same applied for the second study. The rating was paired to the belonging groups in SPSS. The first group is the control group, and the second group is the manipulation group. This was coded as a dummy variable where 0 = control and 1 = manipulation.

4.2.3.3. *Years of experience*

Years of experience is also paired to the belonging groups in SPSS. One group is the junior group, and the second group is the senior group. This was coded as a dummy variable where 0 = senior and 1 = junior.

5. Results

As discussed in chapter 4 – method, two studies were done. Firstly, the results of the manipulation check will be discussed, and after that, the results of study 2 will be discussed and the hypotheses can be tested.

5.1. Manipulation check (Study 1)

Before the results of the manipulation check were done, assumptions for ANOVA were tested in order to check if the data is suitable (Field, 2009). In this case, the data meets all assumptions:

- Dependent variables are interval or ratio level
- Independent variables are two or more categorical, independent groups
- Independent observations in each group (no people participating in both groups)
- No significant outliers in the data
- Dependent variables are normally distributed
- Homogeneity of variances (Levene's test)

For the variable peer pressure, a manipulation check was done asking all 12 representatives two questions. The first question was if they took in consideration other representatives participating in the experiment as well. This is extracted from if they would pressure themselves when other representatives were doing it as well, without asking them directly. The second question was if they took in consideration the amount of words they could use. Three more questions were asked only to the manipulations group, in order to check how specific manipulations had an effect on the representatives. These questions asked them if they took in consideration the companies worked for, the job titles other representatives had and the time other representatives took to complete the task. All SPSS output used for the analyses of study 1 can be found in Appendix C.1.

The first question: *“When writing the sales pitch, I took in consideration other people writing a pitch too”*, showed a difference in means between the control group and the manipulation group. The control group showed a lower mean than the average ($M = 2.92$), namely ($M = 2.5$, $SD = 0.837$) and the manipulation group showed a higher mean ($M = 3.33$, $SD = 1.033$). Running a one-way ANOVA on question one showed that the difference

between groups was not statistically significant ($F = 2.358$, $p = 0.156$). Because the population of 12 representatives is deliberately small, statistical significance is hard to achieve. But the difference between both groups tells that the stimuli of the peer pressure did affect the manipulation group differently, as can be seen in figure 5.1.

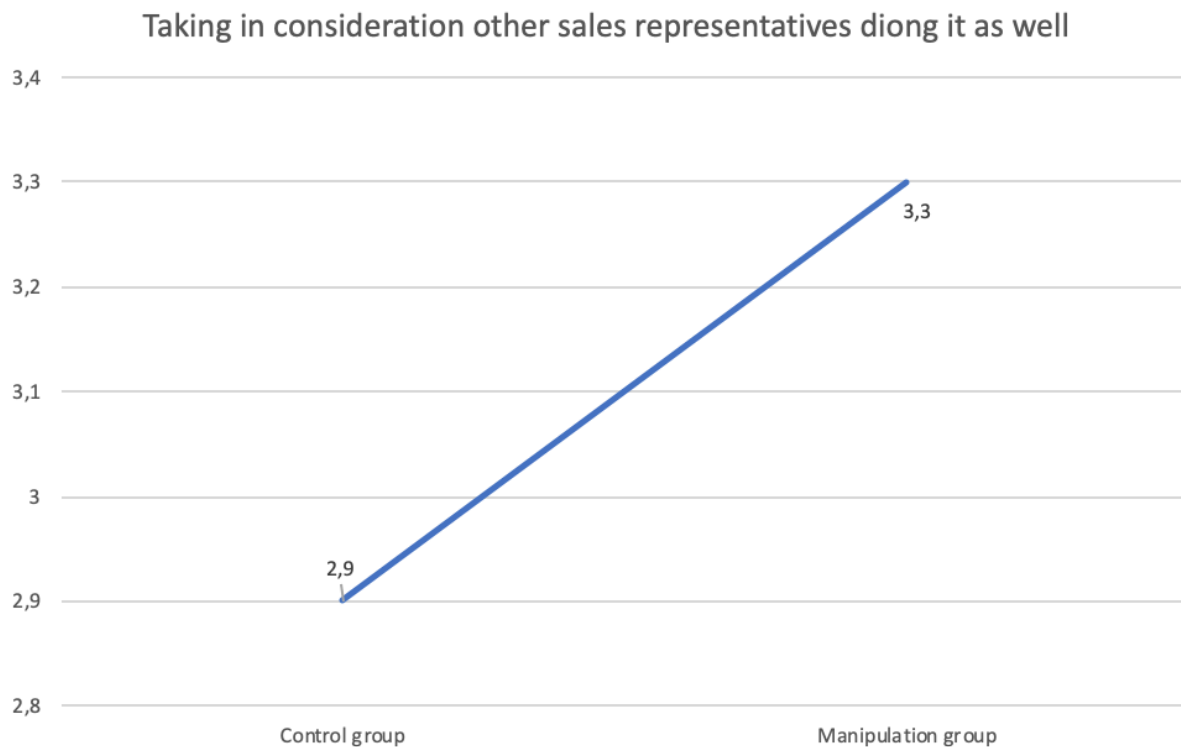


Figure 5.1 – Difference in mean between control and manipulation group

All representatives were told other representatives were doing the experiment too, but the manipulation group was given more information. The last three questions asked to the manipulation group only tries to uncover what was the main driver of the passive peer pressure.

A second analysis on question one was done, but instead of using the control and manipulation group, the junior and senior groups were used. The junior group had a lower mean ($M = 2.5$, $SD = 0.837$), compared to the senior group ($M = 3.33$, $SD = 1.033$). However, running a one-way ANOVA did not prove both groups to be statistically different ($F = 2.358$, $p = 0.156$). But according to the difference in means, both groups reacted differently on the stimulus. The senior group seemed to take more in consideration other representatives doing it as well, compared to the junior group as seen in figure 5.2.

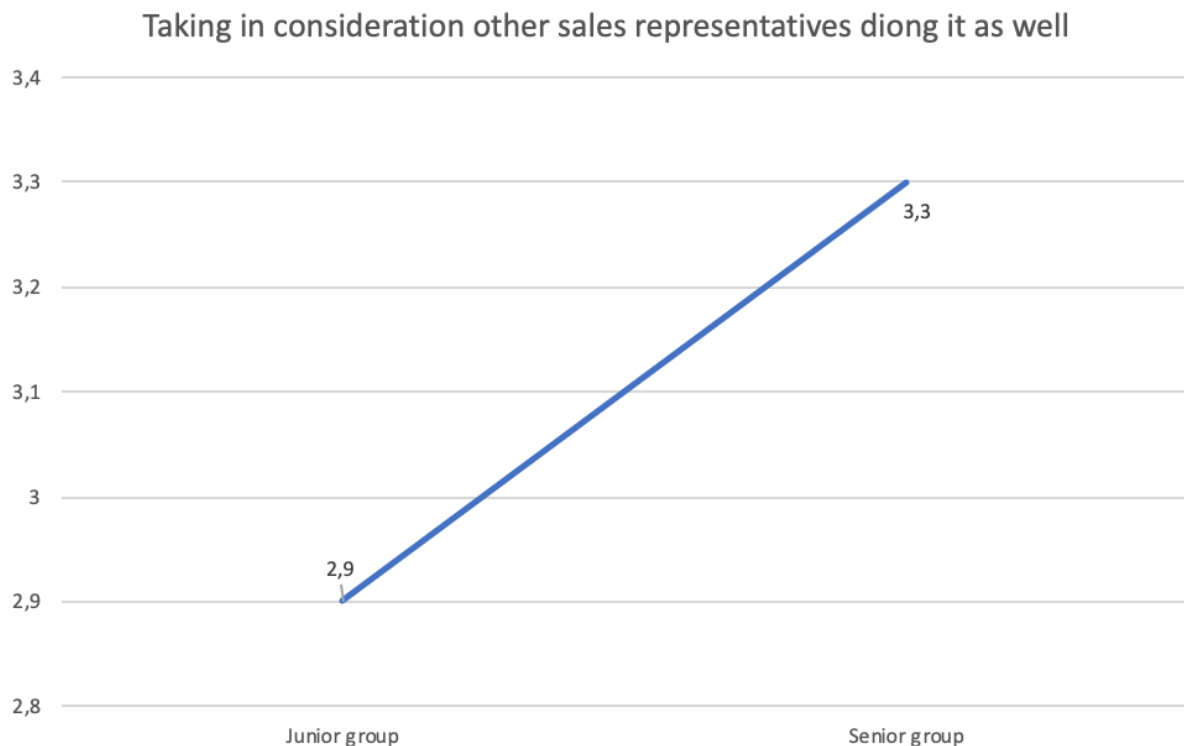


Figure 5.2 – Difference in mean between junior and senior group

Question two: “When writing the sales pitch, I took in consideration how many characters it could use” seemed to affect the representatives. Where the total mean of all answers ($M = 3.92$, $SD = 0.996$), compared to the 2.5 test statistic for the questions, the word count was statistically significant different ($t = 4.296$, $p = 0.000$). Every representative took the wordcount in consideration. A difference is also shown between groups. Where the average was ($M = 3.92$), the mean of the control group was different, namely ($M = 3.83$, $SD = 0.753$), also compared to the manipulation group ($M = 4$, $SD = 1.265$). A one-way ANOVA showed the result of ($F = 0.77$, $p = 0.787$), so the difference was not statistically significant. However, the manipulation group appear to have taken the word count a little more in consideration than the control group, according to the manipulation check for question two.

Also, a second analysis was done for the second question to compare the junior and senior group, to see if there was a difference. The junior group had a higher mean ($M = 4.17$, $SD = 0.983$) compared to the senior group, who had a lower mean ($M = 3.67$, $SD = 1.033$). This explains that the junior group did take more in consideration the amount of words they could use. However, a one-way ANOVA did not show a statistically significant result ($F = 0.378$, $p = 0.411$).

For question three, that was asked to the manipulation group only, the question concerning the companies where the other representatives worked seemed not to have a direct effect on the representatives, since most of them answered (strongly) disagree or nor agree/disagree. The average of question three, ($M = 2.17$, $SD = 0.753$) is lower than the mean 2.5 for the question, since it is measured on a 5-point Likert scale. Running a one sample t-test for question three, this question showed a result of ($t = -1.058$, $p = 0.328$), so no statistically significant difference. The company where others worked did not necessarily result in passive peer pressure, according to this manipulation check. Nonetheless, a one-way ANOVA between the junior vs senior showed that the company did affect these groups differently. The junior group had a higher mean ($M = 2.67$, $SD = 0.577$) compared to the senior group ($M = 1.67$, $SD = 0.577$) resulting in a difference, however not statistically significant, according to the one-way ANOVA ($F = 4.50$, $p = 0.101$). Junior representatives felt more pressure from the companies that other representatives were working at.

Question four, concerning the job titles of other representatives, showed the same average as question three, but with a higher standard deviation ($M = 2.17$, $SD = 0.983$). Most of the representatives answered (strongly) disagree or neither agree/disagree. The variability of the question is just slightly higher in this question. A one sample t-test to compare the average 2.5, measured on a 5-point Likert scale to question four showed a result of ($t = -0.830$, $p = 0.444$), so also no statistically significant difference. The job titles of other representatives did not result in passive peer pressure, according to this manipulation check. But a difference between the junior and senior group was shown in the data. A one-way ANOVA showed a difference in means, where the junior group had ($M = 2$, $SD = 0$) and the senior group had ($M = 2.33$, $SD = 1.528$). The ANOVA showed a non-statistically significant difference ($F = 0.143$, $p = 0.725$). Senior representatives felt more pressure from the job titles of others, compared to junior representatives.

For question five, the last question of the manipulation concerning time seemed to show a difference. Representatives in the manipulation group did take in consideration the time others took to complete their task. The mean of this answer was higher than the mean of questions three and four ($M = 3.83$, $SD = 0.983$). Running a one sample t-test, to test if the answers were different from the average 2.5, measured on a 5-point Likert scale, showed a statistically significance difference ($t = 3.322$, $p = 0.021$). This explains that the representatives in the manipulation group took the time in consideration, resulting in the

main driver of passive peer pressure. Also, an analysis on if there is a difference between the junior and senior group in terms of peer pressure due the time others took was done for question five. A one-way ANOVA showed a slight difference, where the junior group had a higher mean ($M = 4$, $SD = 0$) compared to the senior group ($M = 3.67$, $SD = 1.528$). However, the test result did not show a statistically significant difference ($F = 0.143$, $p = 0.725$). Junior representatives felt a little more pressure from the time others took, compared to the senior group.

The effect of telling the manipulation group the time other representatives took is also shown in the average times both groups took. The control group took an average time of 4:40 minutes, with as fastest time 2:15 minutes and the slowest time 10:05 minutes. The manipulation group took an average time of 3:10 minutes, with the fastest time 0:35 minutes and the slowest time 7:00 minutes. Running a one-way ANOVA for the control group and manipulation group showed that the mean for the control group was higher, thus slower than average ($M = 4.60$, $SD = 2.912$). The manipulation group was lower than average, thus faster ($M = 3.10$, $SD = 2.277$). However, the ANOVA showed that both groups were not statistically significant different from each other ($F = 0.988$, $p = 0.344$). This is also imputable to the relatively small sample size of ($n=12$), where statistical significance is hard to achieve. But according to the variable time, the manipulation group on average did complete the pitches faster, which is also correlated to the manipulation check question on time. Representatives took time in consideration, resulting in a statistically significant effect. Also, for the variable time, a second analysis with the other group variable years of experience – junior and senior was done. The one-way ANOVA showed that the mean of the junior group was higher ($M = 3.99$, $SD = 1.582$) and therefore slower, compared to the faster senior group ($M = 3.71$, $SD = 3.529$). However, the ANOVA itself did not show a statistically significant difference ($F = 0.032$, $p = 0.861$).

In general, it can be concluded that the manipulation partially has worked. Even since the differences were small, the statistics showed differences between the groups, some of them significant. It seemed that manipulated representatives acted differently compared to the control group, but not statistically significant. What seemed to be the main driver of the manipulation was the time others took, considering that the manipulation check was statistically significant. To summarize all gathered data concerning the manipulation check, all descriptive statistics and test statistics are presented in table 5.1.

Descriptives				
Manipulation		Mean	Standard deviation	Test statistic
Manipulation 1 (Considering others participating as well)		2.92	0.996	$t = 1.449$
	Control vs. Manipulation	2.5 3.3	0.837 0.837	$F = 2.358$
	Junior vs. Senior	2.5 3.3	0.837 0.837	$F = 2.358$
Manipulation 2 (Wordcount)		3.92	0.996	$t = 4.296^{**}$
	Control vs. Manipulation	3.83 4	0.753 1.265	$F = 0.77$
	Junior vs. Senior	4.17 3.67	0.983 1.033	$F = 0.378$
Manipulation 3 (Companies)		2.17	0.753	$t = -1.058$
	Junior vs. Senior	2.67 1.67	0.577 0.577	$F = 4.50$
Manipulation 4 (Job titles)		2.17	0.983	$t = -0.830$
	Junior vs. Senior	2 2.33	0 1.528	$F = 0.143$
Manipulation 5 (Time)		3.83	0.983	$t = 3.322^*$
	Junior vs. Senior	4 3.67	0 1.528	$F = 0.143$
Time (Representatives took)				
	Control vs. Manipulation	4.60 3.10	2.912 2.277	$F = 0.988$
	Junior vs. Senior	3.99 3.71	1.582 3.529	$F = 0.032$

Used significance level: $\alpha = 0.05$

Table 5.1 – Overview manipulation check questions

* = $p\text{-value} < 0.05$

** = $p\text{-value} < 0.005$

5.2. Results performance sales pitches and hypothesis testing (Study 2)

Also, before the results for the performance of the sales pitches are discussed, assumptions for ANOVA were tested in order to check if the data is suitable (Field, 2009). In this case, the data meets five of the six assumptions:

- Dependent variables are interval or ratio level
- Independent variables are two or more categorical, independent groups
- Independent observations in each group
- No significant outliers in the data
- Dependent variables are normally distributed

One assumption, the Homogeneity of variances (Levene's test), cannot be assumed. Levene's test gave a statistically significant difference based on the mean (4.763, $p = 0.003$), meaning that the variances are not equal according to the test. An ANOVA for both conditions (control vs manipulation and junior vs senior) were done to check with the Brown-Forsythe test could refute Levene's test. For the control vs manipulation group, the Brown-Forsythe test did not prove to be statistically significant ($F = 0.489$, $p = 0.484$). The same was found for the junior vs senior group, where a higher F value was found, but not statistically significant ($F = 1.892$, $p = 0.169$). However, Field (2009) explains that the ANOVA is quite robust to heterogeneity of variances, when the sample sizes are equal. For this study, this is the case, since each of the four condition consist of 162 respondents with 486 cases per condition, resulting in 1922 cases in total where the analysis will be built on. All SPSS output used for study 2 can be found in Appendix C.2.

Study 2 aims to uncover the effect of peer pressure on the sales representatives on actual performance. To do so, a Univariate ANOVA analysis was done in order to test the effect of the independent variables on the dependent variable and to test for interaction effects between the conditions. Therefore, the descriptives of the ANOVA analysis showed that overall mean of all pitches is ($M = 3.5$), which is also the half of seven, measured on a 7-point Likert scale. The first condition is the senior control group. They showed a mean of ($M = 3.27$, $SD = 1.756$). The second condition is the junior control group, which showed a mean of ($M = 3.66$, $SD = 1.795$). Within the control group, the pitches of the junior representatives were rated more effectively based on the mean, compared to the senior representatives.

The third condition is the senior manipulation group, which showed a mean of ($M = 3.84$, $SD = 1.952$). The fourth and last condition, the junior manipulation group showed a mean of ($M = 3.21$, $SD = 1.942$). Within the manipulation group, the pitches of the senior representatives were rated more effectively based on the mean, compared to the junior representatives.

To test a difference between the control and manipulation group, the Univariate ANOVA analysis did not show a statistically significant difference ($F = 0.498$, $p = 0.480$). The control group has a higher mean compared to the manipulation group, so the control pitches were rated more effectively compared to the manipulated pitches. However, the result does not prove statistically evidence in support of hypothesis 1 (H1). Passive peer pressure does not have a direct influence on the performance of the sales pitch.

A second Univariate ANOVA was done to test a difference between the junior and senior groups. The analysis did not show a statistically significant result ($F = 1.926$, $p = 0.165$). For the years of experience variable, the junior group has a lower mean, compared to the senior group, so the senior pitches were rated more effectively compared to the junior representatives. Furthermore, the result does not prove statistically evidence in support of hypothesis 2 (H2). Years of experience does not have a direct effect on the performance of the sales pitch.

For the third variable in the analysis, which is the interaction between the condition the groups were exposed to and the years of experience, the Univariate ANOVA analysis did show a statistically significant difference ($F = 36.453$, $p = 0.000$). The manipulation did affect the junior group different compared to the senior group. As stated above, within the control group, the junior representatives did perform better compared to the senior representatives. Within the manipulation group, the senior representatives performed better than the junior representatives. So, the manipulation of the peer pressure had a positive effect for the senior representatives according to the performance of the sales pitches, and the peer pressure manipulation had a negative effect on the junior representatives, according to the performance of their sales pitches. The interaction plot can be seen in figure 5.3.

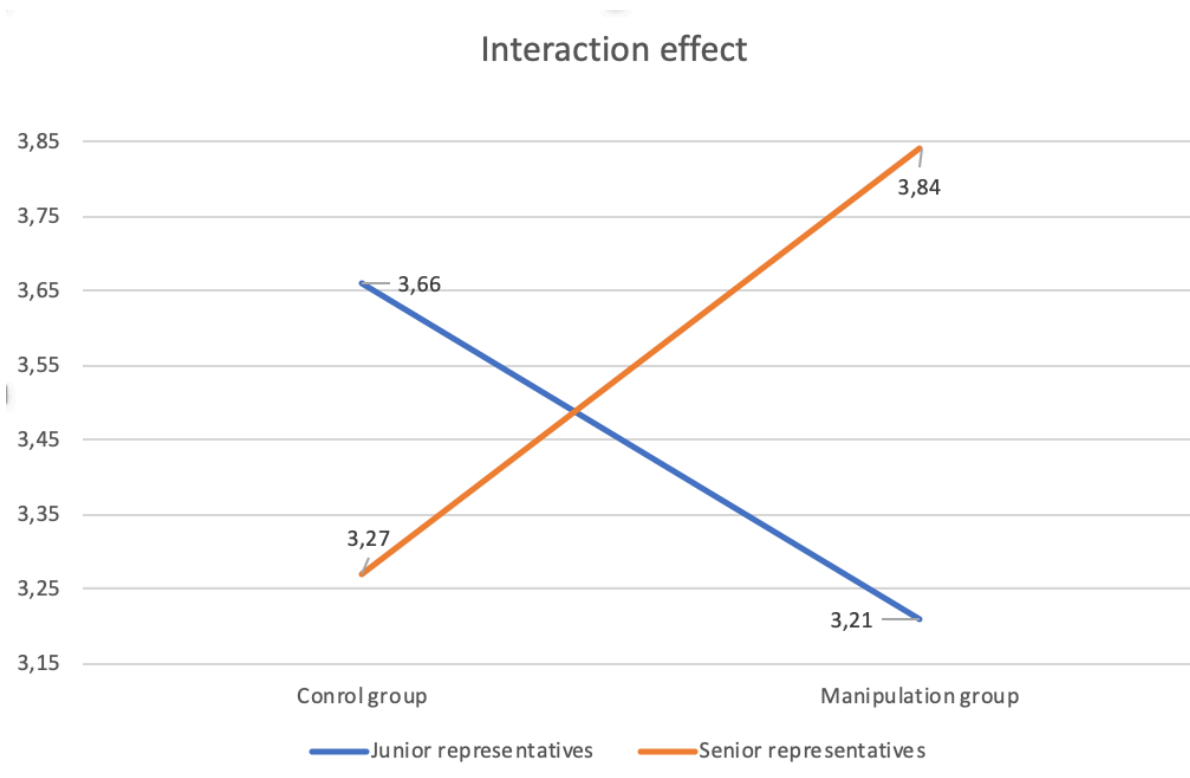


Figure 5.3 – Interaction graph of peer pressure and years of experience

Therefore, the results do not prove statistical evidence in support of hypothesis 3 (H3). However, peer pressure does affect less experienced salespeople differently, compared to more experienced salespeople, except it is opposite of what was hypothesized. More experienced sales representatives achieved higher productivity and therefore performed better due to peer pressure, compared to their peers in the control group. The junior representatives performed worse due to peer pressure, compared to their peers in the control group. This can also be less or more explained from the manipulation check, where the senior group answered to took more in consideration others did this as well. They pressured themselves to achieve to a certain level, to perform better than their fellow representatives in the control group, while the contrary was applicable for the junior group pressuring themselves with passive peer pressure, which resulted in less effective sales pitches.

6. Discussion

In this chapter, the theoretical implications, managerial implications and limitations of this study will be discussed. Furthermore, possibilities for future research will be proposed and the conclusion of this study will be conferred.

6.1. Theoretical implications

For starters, this thesis gives insights in two realms of literature, namely Sales Management Control System (SMCS) literature, and peer pressure literature. Because peer pressure is one subject within SMCS, the implications will be discussed from small to large, beginning with peer pressure.

This quantitative research does not indicate a direct positive effect of passive peer pressure on performance of salespeople. Therefore, the result of passive peer pressure from this study contradicts with the results of studies from Chan et al. (2014a&b) and Onyemah et al. (2010). This study also does not indicate a direct effect of years of experience a representative has on performance. This is in contradiction with the studies from Landau and Werbel (1995) and Lawrence (1984), which suggested a positive direct result from age, or in this case, years of experience. But a combination of peer pressure and years of experience (an interaction) does affect the performance of salespeople statistically significant different. This means that, the more experience a representative has, the better they can use passive peer pressure to achieve more desirable results and perform better, compared to others. The opposite applies for less experienced salespeople, performing worse when exposed to peer pressure. This is also coherent with Onyemah et al. (2010), which stated that competitive environment and behavior has a negative effect on the performance of salespeople, which happened with the less experienced salespeople. Moreover, in light of the social learning theory of Bandura (1977), Onyemah et al. (2010) also did show the same results Chiaburu and Harrison (2008) and Loughry and Tosi (2008) found, namely positive and significant effects for positive behavior (learning and information seeking) of peers on performance. Therefore, considering passive peer pressure, more experienced representatives achieve higher levels of performance due to (social) learning effects and peer pressure. When the environment gets competitive (which also occurred in

this study), peer pressure will hurt less experienced salespeople. Overall, peer pressure could also work in favor of less experienced salespeople, when guided correctly.

Secondly, peer pressure is a form of informal control. Informal control does have its place in SMCS. Generalizing, this study supports evidence in favor of scholars who advocated that having more than one type of control could benefit the results of the organization. Social control, specifically passive peer pressure, could be beneficial and be integrated within SMCS, which corresponds with previous literature. Jaworski (1988) spoke of limitations of only formal controls in place. Therefore, additional research from Jaworski et al. (1989) and Jaworski et al. (1993) on both formal and informal controls confirmed that one specific form of control could be dysfunctional and harmful for the organization. This result was also confirmed by Kreutzer et al. (2016), which advocates that informal controls enhance performance, the same result Panagopoulos et al. (2015) found. Therefore, this study confirms that informal, social control in the form of passive peer pressure could benefit salespeople and sales teams to align sales activities to company objectives.

6.2. Managerial implications

Based on the theoretical implications, considering passive peer pressure, representatives with more experience can cope with passive peer pressure better, compared to less experienced salespeople exposed to passive peer pressure. Therefore, in light with these insights, more experienced representatives could coach less experienced representatives on how to cope with these pressures to become better representatives and achieve higher levels of performance. When training salespeople, organizations should integrate this in coaching, so less experienced salespeople could use this passive peer pressure also to their benefit. Since passive peer pressure is something representatives pressure themselves with, it may be hard to teach people how to work with passive peer pressure. By giving every representative the same amount of information, and with formal controls (e.g. targets) in place, the organization could track which representative may benefit from a coaching concerning coping with passive peer pressure. Therefore, in line with this study, understanding the importance of several control types in place, and having at least one type of informal control (social/peer control) in place, could benefit the performance of salespeople, sales teams and organizations, if properly administered.

6.3. Limitations

Besides the study partially succeeded, some things could have been better. Therefore, these “pitfalls” are relevant for future research.

Firstly, the selected sample size ($n = 12$) of sales representatives. For quantitative studies, generally, a sample size of ($n = 30$) per condition is preferred, to make the sample fully external valid. Because a survey with 120 pitches and 60 comparisons was way too large for this thesis, the results are less externally valid due to the smaller sample size. However, the ANOVA analyses in study 2 were run on ($n = 486$) per condition, which partially tries to abolish the shortcoming of the sample size in study 1. Besides the ($n = 12$) in study 1, the sample of representatives only consisted of male representatives. Therefore, results could have been different when female representatives also had written some pitches. In future studies, the sample size of sales representatives writing a pitch should be larger, and more diverse in term of gender.

Secondly, the manipulation of the peer pressure has partially worked. The manipulation consisted of three possible drivers: the companies where the representatives worked for, their job titles and the time other representatives took. From the manipulation check, it turned out that the time other representatives took was the only manipulation which was statistically significant, resulting as the only significant driver for the manipulation of passive peer pressure. The representatives in the manipulation group more or less saw this as a competition, how fast sales representatives could write a pitch, where they pressured themselves with. Therefore, future research should try to elaborate on the manipulation, to influence the representatives in more ways compared to this study, so the effect of the (passive) peer pressure will be more nuanced in explaining the behavior and performance of salespeople. This possibly may also result in statistically significant direct effects of different types of (passive) peer pressure and possibly also be positive for less experienced salespeople.

A third limitation is that, besides the fact the representatives told they could only use 140 characters, which I translated into 30 to maximum 40 words, because the first representative used 36 words. Some of them used less words and some of them used more words. Besides the fact that the question on the wordcount was statistically significant, which means that they took in consideration the amount of words they could use, there were big differences in the amount of words used. The shortest pitch was 11 words, and the

longest pitch was 75 words. Because there is a larger variability in the amount of words used for the pitches, this could influence the effectiveness of the pitches, creating noise on the effect of the manipulation. It is of course not possible to get the exact same lengths of pitches, but for future research it could be helpful to track the length of the pitches more strictly, to have a cleaner effect of the manipulation, instead of the possibility representatives using more words, which means also more information in pitches. Another possibility for future research could be a control variable for equal lengths.

A fourth limitation of this study is that, when I wanted to start with the experiment, a global pandemic (Corona Virus) was affecting the way people could travel and do things, since we had to stay home as much as possible. Therefore, the experiment could not be conducted in person. For future research, it could be interesting to conduct the experiment in person, in two test groups, depending on the manipulation, to test if that will give different results. Maybe does the manipulation of the companies and job titles gets (more) significant then, since in that case they can connect faces from other persons and to certain companies and job titles.

6.4. Future research

In paragraph 6.3, the limitations were discussed and improvements for future research are suggested. Building on these limitations, some additional suggestions for future research will be discussed.

A future research could use the insights of this research, but elaborate on that. Since many scholars found positive effects of informal controls and in case of this study partially for passive peer pressure, future research could enhance this line of inquiry even more. A possible study of the effect of peer pressure on performance of salespeople could be elaborated with active peer pressure besides passive peer pressure. Besides the two types of peer pressure, a second product category could be added, to see if there are differences in effectiveness of product types (e.g. fast-moving consumer goods and luxury goods). Therefore, a framework of what the effect of all types of peer pressure has on behavior and performance of salespeople, correcting for different types of product could give interesting insights for managers, and how they could influence these types of pressures to work in their benefit as an organization.

6.5. Conclusion

In this quantitative study, the effect of peer pressure on the behavior and performance of salespeople was tested. Also, testing if years of experience made a difference on the performance, this variable was also added into the model. Using sales pitches written by 12 sales representatives, both passive peer pressure and years of experience did not have a direct effect on the performance of sales pitches, according to 162 respondents who rated the pitches. What does seem to have an effect the performance of the sales pitches is an interaction between the manipulation of the passive peer pressure and the years of experience. More experienced representatives (called senior representatives) performed better when exposed to peer pressure, compared to less experienced representatives (called junior representatives), who performed worse when exposed to peer pressure. Organizations could use informal controls like peer pressure in combination with formal controls (e.g. sales targets) to enhance incumbent Sales Management Controls Systems. This could be done by evaluation and coaching of representatives who may need some training by lacking performance. Additional research will be required to understand if there is a difference between the effect of active and passive peer pressure on performance of salespeople. Elaborating on that, maybe whether respondents (potential consumers) react different to the effectiveness of pitches on different types of products. These are interesting insights for managers, understanding their representatives and how they could improve their performance to benefit the organization.

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Appendix A – Experiment design and Conditions scheme

A.1. Experiment design

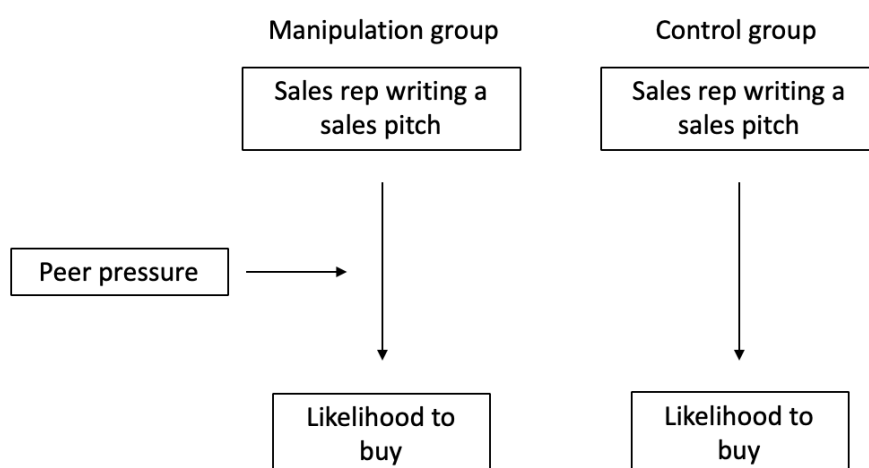


Figure A.1 – Experiment design

A.2. Conditions Scheme

Years of experience < 10 years of experience > 10 years of experience

Type of manipulation		
Peer pressure	Condition 1	Condition 3
Control group	Condition 2	Condition 4

Table A.1 – Conditions scheme

Appendix B – Experiment props, scripts and surveys

B.1. Experiment prop



Figure B.1 – Prop for experiment (FMCG)

B.2. Script control group (Study 1)

FACETIME/SKYPE CALL

Due to the corona virus, every call will be made via Facetime or Skype. I will be sitting on my own desk for each experiment. On beforehand, I will ask the participants to sit down somewhere where they are comfortable and alone. Right before each call, I will send them an Email with a brief description and with a Word file, with only their name in it, and a photo of the product. In the Email, it will be told that they have to open the Word file when I ask them to do. The reason for this is that before opening the Word file, I will have the call with them so I can introduce the experiment, so they will have no interference for other variables.

INTRODUCTION

First 2 minutes – small talk (small conversation how everything is going)

THE EXPERIMENT

After a small conversation and introduction of ourselves, I will introduce the experiment.

“You are one of the ten selected salespeople who will participate to help me with my thesis. I will ask you to write a sales pitch, Twitter style, from around 140 signs, on a fictional product. You may now open the Word file, and start writing your sales pitch in that Word document. If you are ready with writing the pitch, you can send it back to me. During the writing, I will mute my webcam and microphone. If there are any questions, now is the time to ask me. Otherwise, good luck, and I am looking forward reading your pitch.”

AFTER THE EXPERIMENT

When they are ready, I will hear them via the webcam. Right after that, I will send a link to the experiment survey, as presented in Appendix B.4. I will ask them to fill in the survey as honest as possible. When they received the Email, I will mute my webcam and microphone again. When they filled in the survey, I will have a little chat with them about how they thought it went, and after that I will thank them for participating and their time.

B.3. Script manipulation group (Study 1)

FACETIME/SKYPE CALL

Due to the corona virus, every call will be made via Facetime or Skype. I will be sitting on my own desk for each experiment. On beforehand, I will ask the participants to sit down somewhere where they are comfortable and alone. Right before each call, I will send them an Email with a brief description and a Word file, with only their name in it, and a photo of the product. In the Email, it will be told that they have to open the Word file when I ask them to do. The reason for this is that before opening the Word file, I will have the call with them so I can introduce the experiment, so they will have no interference for other variables.

INTRODUCTION

First 2 minutes – small talk (small conversation how everything is going)

THE EXPERIMENT

After a small conversation and introduction of ourselves, I will introduce the experiment.

“You are one of the ten selected salespeople who will participate to help me with my thesis. I will ask you to write a sales pitch, Twitter style, from around 140 signs, on a fictional product. Another group did this already. This group consisted of account managers and sales directors of a variety of companies as Bacardi, Remia, Red Bull and Warner Bros. The average time they took to write the pitch was XXX minutes. You may now open the Word file, and start writing your sales pitch in that Word document. If you are ready with writing the pitch, you can send it back to me. During the writing, I will mute my webcam and microphone. If there are any questions, now is the time to ask me. Otherwise, good luck, and I am looking forward reading your pitch.”

AFTER THE EXPERIMENT

When they are ready, I will hear them via the webcam. Right after that, I will send a link to the experiment survey, as presented in Appendix B.4. I will ask them to fill in the survey as honest as possible. When they received the Email, I will mute my webcam and microphone

again. When they filled in the survey, I will have a little chat with them about how they thought it went, and after that I will thank them for participating and their time.

B.4. Manipulation check survey (Study 1)

Thank you for participating to my thesis research. As last, I will ask you to fill in this survey. This survey contains some questions about how you experienced the experiment, and some additional information relevant for this study. No question can be skipped, and per question only one answer is possible. There are no good or wrong answers, just try to fill in the survey as truthful as possible.

Proceed to survey

	Strongly disagree	Disagree	Nor agree/disagree	Agree	Strongly agree
1. When writing the sales pitch, I took in consideration other people writing a pitch too					
2. When writing the sales pitch, I thought about how many characters is could use					
3. When writing the sales pitch, I took in consideration the functions of the other salespeople who did this (Only for group 2)					
4. When writing the sales pitch, I took in consideration the companies where the other salespeople worked for (Only for group 2)					
5. When writing the sales pitch, I took in consideration the time other salespeople took to write the sales pitch (Only for group 2)					

At last, some demographic questions:

1. How many years of experience in sales do you have?

- Open question

2. What is your work occupation?

- Part-time working (< 36 hours a week)
- Full-time working (36 or > 36 hours a week)
- Unemployed (searching for a new job)
- Retired

3. What is your gender?

- Male
- Female

4. What is your age?

- Open question

5. What is your highest finished level of education?

- No education
- Primary school
- MAVO/VMBO
- MBO/MTS
- HAVO/VWO/Gymnasium
- HBO (bachelor or master degree)
- WO (bachelor or master degree)

B.5. Survey (Study 2)

Thank you for participating to this research. This survey is part of my thesis I'm currently working on at the Erasmus University Rotterdam. The survey will take approximately 10 minutes of your time. This survey is of course anonymously, and will be handled with care.

For my thesis I'm interested in some Twitter style sales pitches on which I will ask you to measure 5 times a comparison of two sales pitches on a likelihood to buy scale, in order to measure its effectiveness. Furthermore, some questions will be asked about personal and professional situation. No question can be skipped, and per question only one answer is possible. There are no good or wrong answers, just try to fill in the survey as truthful as possible.

Good luck with the survey. In case you have questions, or just interested in the results, you can contact me at cedrique.aardoom@gmail.com.

Cédrique Aardoom

MSc student Business & Economics, Erasmus University Rotterdam

Proceed to survey

1. On a scale on 0 to 7, where 0 is very bad and 7 is very good, how would you rate these two pitches compared to each other?

'Kickers' is een nieuw product van het welbekende A merk 'Mars'. Een smaak sensatie die u niet wilt missen. Wilt u het proberen, bestel dan nu een proefpakket.	De Kickstart van je dag. Boordevol gezonde noten en oliën omwikkeld door de lekkerste chocolade. Jouw verantwoorde boost, voor de laatste loodjes na een zware dag, of om je dag een echte "kickers boost te geven"
Likelihood to buy 1 2 3 4 5 6 7	Likelihood to buy 1 2 3 4 5 6 7

2. On a scale on 0 to 7, where 0 is very bad and 7 is very good, how would you rate these two pitches compared to each other?

Heb je trek? Zin in iets lekkers? Verantwoord en hoog in Proteïne? Probeer dan deze Kickers en dan krijg je van mij er 1 gratis bij ;).	De nieuwe naam in smaaksensatie. Omdat kicken beter is dan snikken.
Likelihood to buy 1 2 3 4 5 6 7	Likelihood to buy 1 2 3 4 5 6 7

3. On a scale on 0 to 7, where 0 is very bad and 7 is very good, how would you rate these two pitches compared to each other?

Genietmomentje voor jou alleen. Een heerlijke snack voor tussendoor en makkelijk mee te nemen. Eat & Enjoy	Kickers: een heerlijke snack als tussendoortje. Gemaakt met fair trade chocola. Kickers geeft je net die ene extra kick die je nodig hebt op het einde van de dag te halen.
Likelihood to buy 1 2 3 4 5 6 7	Likelihood to buy 1 2 3 4 5 6 7

4. Attention check 1 – What color is grass?

Think of a nice field of green grass. Make sure to select purple in order to make sure you are paying attention.

- ☐ Green
- ☐ Purple

5. On a scale on 0 to 7, where 0 is very bad and 7 is very good, how would you rate these two pitches compared to each other?

Energie nodig, een schop onder je kont zeg maar, dan hebben wij hiervoor een heerlijke nieuwe energie reep. Kickers! Ook nog eens gemaakt van 100% fair trade producten, maar vooral een energie booster van jewelste!	Hi, Aangenaam! Ik ben Oussama ben Touhami en ben benieuwd naar hoe het met u gaat in deze hectische periode. Gaat u ook graag naar buiten met dit lekkere weer? Neem dan een 'Kickers'. Voorziet u weer van nieuwe energie!
Likelihood to buy 1 2 3 4 5 6 7	Likelihood to buy 1 2 3 4 5 6 7

6. On a scale on 0 to 7, where 0 is very bad and 7 is very good, how would you rate these two pitches compared to each other?

Kickers is de nieuwe tussendoorsnack van de toekomst. Door de stoere naam die afgeleid is van Kicken, dekt dit helemaal de lading van de smaak. De milieu vriendelijke verpakking is helemaal van deze tijd. Kicken met Kickers!	Behoeftte aan energie? Met Kickers krijg je de kick die je nodig hebt. Snel, makkelijk, onwijs lekker en perfect tegen de snelle trek. Heerlijk voor onderweg of tijdens de drukste momenten van de dag.
Likelihood to buy 1 2 3 4 5 6 7	Likelihood to buy 1 2 3 4 5 6 7

7. On a scale on 0 to 7, where 0 is very bad and 7 is very good, how would you rate these two pitches compared to each other?

Dipje? Sneller dan met Kickers kom je niet opnieuw op snelheid. Alle ingrediënten zijn erop gericht je zo snel mogelijk weer nieuwe energie te geven. Klaar voor een nieuwe uitdaging in seconden.	Kent u dat? Tanken bij het benzine station en zin in wat lekkers maar u wilt geen suikerbom? of boodschappen doen met honger en dan meer kopen dan de bedoeling is? Als uw antwoord hierop 'ja' is, kijk dan even naar ons nieuwe product Kickers. Niet alleen lekker maar ook laag in suikers en vol met vezels voor het stille van dat vervelende hongergevoel. Eigenlijk bespaar je dus op boodschappen doen met de Kickers reep!
Likelihood to buy 1 2 3 4 5 6 7	Likelihood to buy 1 2 3 4 5 6 7

At last, some demographic questions:

8. What is your age?

- Open question

9. What is your gender?

- ☐ Male
- ☐ Female
- ☐ I rather don't say that

10. Where are you from?

- ☐ The Netherlands
- ☐ Outside the Netherlands, inside Europe
- ☐ Outside Europe

11. What is your main occupation?

- ☐ Student
- ☐ Part-time paid employment (< 36 hours a week)
- ☐ Fulltime paid employment (36 or > 36 hours a week)
- ☐ Self-employment
- ☐ Entrepreneur
- ☐ Unemployed
- ☐ Retired

12. What is your highest finished level of education?

- ☐ No education
- ☐ Primary school
- ☐ MAVO/VMBO
- ☐ MBO/MTS
- ☐ HAVO/VWO/Gymnasium
- ☐ HBO (bachelor or master degree)
- ☐ WO (bachelor or master degree)

13. If you are working, in what sector is that? (optional)

- Accounting/ Controlling (1)
- Architecture/ Design (2)
- Security services (3)
- Construction (4)
- Culture/ Recreation/ Sport (5)
- Pharmaceuticals/ Healthcare (6)
- Financial services (7)
- Horeca (8)
- Industry/ Technique (9)
- IT/ Automation/ Telecommunication (10)
- Legal services (11)
- Agriculture/ livestock farming(12)
- Social services (13)
- Real estate services (14)
- Media (15)

Thank you for participating.

Appendix C – SPSS output Study 1

C.1. Frequencies and descriptives

Frequency Table

Tijdens het schrijven van de pitch, hield ik er rekening mee dat andere mensen ook een pitch moesten schrijven

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mee oneens	6	50.0	50.0	50.0
	Mee eens noch oneens	1	8.3	8.3	58.3
	Mee eens	5	41.7	41.7	100.0
	Total	12	100.0	100.0	

Tijdens het schrijven van de pitch, hield ik rekening met het aantal leestekens/woorden wat ik kon gebruiken

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mee oneens	1	8.3	8.3	8.3
	Mee eens noch oneens	3	25.0	25.0	33.3
	Mee eens	4	33.3	33.3	66.7
	Heel erg mee eens	4	33.3	33.3	100.0
	Total	12	100.0	100.0	

Tijdens het schrijven van de pitch, hield ik er rekening mee bij welke bedrijven de andere werkten, die ook hebben meegedaan aan het experiment (Bacardi, Red Bull, Remia en Warner Bros etc.)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sterk mee oneens	1	8.3	16.7	16.7
	Mee oneens	3	25.0	50.0	66.7
	Mee eens noch oneens	2	16.7	33.3	100.0
	Total	6	50.0	100.0	
Missing	System	6	50.0		
Total		12	100.0		

Tijdens het schrijven van de pitch, hield ik rekening met de functies die de andere hadden, die ook hebben meegedaan aan het experiment (Salesmanagers, Accountmanagers en Sales Directors)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sterk mee oneens	1	8.3	16.7	16.7
	Mee oneens	4	33.3	66.7	83.3
	Mee eens	1	8.3	16.7	100.0
	Total	6	50.0	100.0	
Missing	System	6	50.0		
Total		12	100.0		

Tijdens het schrijven van de pitch, hield ik er rekening met hoe lang de anderen, die ook hebben meegedaan aan het experiment, er over hebben gedaan (gemiddeld 4:45, snelste 2:15)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mee oneens	1	8.3	16.7	16.7
	Mee eens	4	33.3	66.7	83.3
	Heel erg mee eens	1	8.3	16.7	100.0
	Total	6	50.0	100.0	
Missing	System	6	50.0		
Total		12	100.0		

Hoe veel jaar ervaring heeft u? (werkende in het sales werkveld) - Jaren ervaring in sales

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	8.3	8.3	8.3
	5	2	16.7	16.7	25.0
	6	2	16.7	16.7	41.7
	7	1	8.3	8.3	50.0
	11	1	8.3	8.3	58.3
	20	2	16.7	16.7	75.0
	25	2	16.7	16.7	91.7
	35	1	8.3	8.3	100.0
	Total	12	100.0	100.0	

Wat is uw voornaamste bezigheid?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Parttimebaan (< 36 uur per week)	3	25.0	25.0	25.0
	Fulltimebaan (36 of > 36 uur per week)	9	75.0	75.0	100.0
	Total	12	100.0	100.0	

Wat is uw geslacht?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	12	100.0	100.0	100.0

Wat is uw leeftijd? - Leeftijd

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	24	1	8.3	8.3	8.3
	25	1	8.3	8.3	16.7
	26	2	16.7	16.7	33.3
	28	1	8.3	8.3	41.7
	29	1	8.3	8.3	50.0
	31	1	8.3	8.3	58.3
	45	1	8.3	8.3	66.7
	49	1	8.3	8.3	75.0
	50	1	8.3	8.3	83.3
	51	1	8.3	8.3	91.7
	61	1	8.3	8.3	100.0
	Total	12	100.0	100.0	

Wat is uw hoogst afgeronde opleiding?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MBO/MTS	4	33.3	33.3	33.3
	HAVO/VWO/Gymnasium	2	16.7	16.7	50.0
	HBO (Bachelor en/of Master)	5	41.7	41.7	91.7
	WO (Bachelor en/of Master)	1	8.3	8.3	100.0
	Total	12	100.0	100.0	

Group man

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Control	6	50.0	50.0	50.0
	Manipulatie	6	50.0	50.0	100.0
	Total	12	100.0	100.0	

Group experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior	6	50.0	50.0	50.0
	Senior	6	50.0	50.0	100.0
	Total	12	100.0	100.0	

Time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.35	1	8.3	8.3	8.3
	1.40	1	8.3	8.3	16.7
	2.15	1	8.3	8.3	25.0
	2.50	1	8.3	8.3	33.3
	3.00	1	8.3	8.3	41.7
	3.30	2	16.7	16.7	58.3
	3.55	1	8.3	8.3	66.7
	4.30	1	8.3	8.3	75.0
	5.30	1	8.3	8.3	83.3
	7.00	1	8.3	8.3	91.7
	10.05	1	8.3	8.3	100.0

Total	12	100.0	100.0	
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Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Tijdens het schrijven van de pitch, hield ik er rekening mee dat andere mensen ook een pitch moesten schrijven	12	2	4	2.92	.996
Tijdens het schrijven van de pitch, hield ik rekening met het aantal leestekens/woorden wat ik kon gebruiken	12	2	5	3.92	.996
Tijdens het schrijven van de pitch, hield ik er rekening mee bij welke bedrijven de andere werkten, die ook hebben meegedaan aan het experiment (Bacardi, Red Bull, Remia en Warner Bros etc.)	6	1	3	2.17	.753
Tijdens het schrijven van de pitch, hield ik rekening met de functies die de andere hadden, die ook hebben meegedaan aan het experiment (Salesmanagers, Accountmanagers en Sales Directors)	6	1	4	2.17	.983
Tijdens het schrijven van de pitch, hield ik er rekening met hoe lang de anderen, die ook hebben meegedaan aan het experiment, er over hebben gedaan (gemiddeld 4:45, snelste 2:15)	6	2	5	3.83	.983
Hoe veel jaar ervaring heeft u? (werkende in het sales werkveld) - Jaren ervaring in sales	12	4	35	14.08	10.457
Wat is uw voornaamste bezigheid?	12	1	2	1.75	.452

Wat is uw geslacht?	12	1	1	1.00	.000
Wat is uw leeftijd? - Leeftijd	12	24	61	37.08	13.090
Wat is uw hoogst afgeronde opleiding?	12	4	7	5.25	1.055
Group man	12	0	1	.50	.522
Group experience	12	0	1	.50	.522
Time	12	.35	10.05	3.8500	2.61204
Valid N (listwise)	6				

C.2. T-tests manipulation check questions

T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Tijdens het schrijven van de pitch, hield ik er rekening mee dat andere mensen ook een pitch moesten schrijven	12	2.92	.996	.288
Tijdens het schrijven van de pitch, hield ik rekening met het aantal leestekens/woorden wat ik kon gebruiken	12	3.92	.996	.288
Tijdens het schrijven van de pitch, hield ik er rekening mee bij welke bedrijven de andere werkten, die ook hebben meegedaan aan het experiment (Bacardi, Red Bull, Remia en Warner Bros etc.)	6	2.17	.753	.307
Tijdens het schrijven van de pitch, hield ik rekening met de functies die de andere hadden, die ook hebben meegedaan aan het experiment (Salesmanagers, Accountmanagers en Sales Directors)	6	2.17	.983	.401
Tijdens het schrijven van de pitch, hield ik er rekening met hoe lang de anderen, die ook hebben meegedaan aan het experiment, er over hebben gedaan (gemiddeld 4:45, snelste 2:15)	6	3.83	.983	.401

One-Sample Test

Test Value = 2.5

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Tijdens het schrijven van de pitch, hield ik er rekening mee dat andere mensen ook een pitch moesten schrijven	1.449	11	.175	.417	-.22	1.05
Tijdens het schrijven van de pitch, hield ik rekening met het aantal leestekens/woorden wat ik kon gebruiken	4.926	11	.000	1.417	.78	2.05
Tijdens het schrijven van de pitch, hield ik er rekening mee bij welke bedrijven de andere werkten, die ook hebben meegedaan aan het experiment (Bacardi, Red Bull, Remia en Warner Bros etc.)	-1.085	5	.328	-.333	-1.12	.46

Tijdens het schrijven van de pitch, hield ik rekening met de functies die de andere hadden, die ook hebben meegedaan aan het experiment (Salesmanagers, Accountmanagers en Sales Directors)	- .830	5	.444	-.333	-1.37	.70
Tijdens het schrijven van de pitch, hield ik er rekening met hoe lang de anderen, die ook hebben meegedaan aan het experiment, er over hebben gedaan (gemiddeld 4:45, snelste 2:15)	3.322	5	.021	1.333	.30	2.37

C.3. ANOVA analysis manipulation check control vs manipulation group

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
Tijdens het schrijven van de pitch, hield ik er rekening mee dat andere mensen ook een pitch moesten schrijven	Control	6	2.50	.837	.342	1.62	3.38	2	4	
	Manipulatie	6	3.33	1.033	.422	2.25	4.42	2	4	
	Total	12	2.92	.996	.288	2.28	3.55	2	4	
	Model			.940	.271	2.31	3.52			
	Random Effects				.417	-2.38	8.21			.200
Tijdens het schrijven van de pitch, hield ik rekening met het aantal leestekens/woorden wat ik kon gebruiken	Control	6	3.83	.753	.307	3.04	4.62	3	5	
	Manipulatie	6	4.00	1.265	.516	2.67	5.33	2	5	
	Total	12	3.92	.996	.288	3.28	4.55	2	5	
	Model			1.041	.300	3.25	4.59			
	Random Effects				.300 ^a	.10 ^a	7.73 ^a			-.167
Time	Control	6	4.6000	2.91153	1.18863	1.5445	7.6555	2.15	10.05	

	Manipulatie	6	3.1000	2.27662	.92943	.7108	5.4892	.35	7.00	
	Total	12	3.8500	2.61204	.75403	2.1904	5.5096	.35	10.05	
	Model Fixed Effects			2.61343	.75443	2.1690	5.5310			
	Random Effects				.75443 ^a	-5.7360 ^a	13.4360 ^a			-.01333

a. Warning: Between-component variance is negative. It was replaced by 0.0 in computing this random effects measure.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Tijdens het schrijven van de pitch, hield ik er rekening mee dat andere mensen ook een pitch moesten schrijven	Between Groups	2.083	1	2.083	2.358	.156
	Within Groups	8.833	10	.883		
	Total	10.917	11			
Tijdens het schrijven van de pitch, hield ik rekening met het aantal leestekens/woorden wat ik kon gebruiken	Between Groups	.083	1	.083	.077	.787
	Within Groups	10.833	10	1.083		
	Total	10.917	11			
Time	Between Groups	6.750	1	6.750	.988	.344
	Within Groups	68.300	10	6.830		
	Total	75.050	11			

C.4. ANOVA analysis manipulation check junior vs senior group

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
Tijdens het schrijven van de pitch, hield ik er rekening mee dat andere mensen ook een pitch moesten schrijven	Junior	6	2.50	.837	.342	1.62	3.38	2	4	
	Senior	6	3.33	1.033	.422	2.25	4.42	2	4	
	Total	12	2.92	.996	.288	2.28	3.55	2	4	
	Model			.940	.271	2.31	3.52			
	Random Effects				.417	-2.38	8.21			.200
Tijdens het schrijven van de pitch, hield ik rekening met het aantal leestekens/woorden wat ik kon gebruiken	Junior	6	4.17	.983	.401	3.13	5.20	3	5	
	Senior	6	3.67	1.033	.422	2.58	4.75	2	5	
	Total	12	3.92	.996	.288	3.28	4.55	2	5	
	Model			1.008	.291	3.27	4.57			
	Random Effects				.291 ^a	.22 ^a	7.62 ^a			-.044
Tijdens het schrijven van	Junior	3	2.67	.577	.333	1.23	4.10	2	3	
	Senior	3	1.67	.577	.333	.23	3.10	1	2	

de pitch, hield ik er rekening mee bij welke bedrijven de andere werkten, die ook hebben meegedaan aan het experiment (Bacardi, Red Bull, Remia en Warner Bros etc.)	Total	6	2.17	.753	.307	1.38	2.96	1	3	
	Model	Fixed Effects			.577	.236	1.51	2.82		
		Random Effects				.500	-4.19	8.52		.389
Tijdens het schrijven van de pitch, hield ik rekening met de functies die de andere hadden, die ook hebben meegedaan aan het experiment (Salesmanagers, Accountmanagers en Sales Directors)	Junior	3	2.00	.000	.000	2.00	2.00	2	2	
	Senior	3	2.33	1.528	.882	-1.46	6.13	1	4	
	Total	6	2.17	.983	.401	1.13	3.20	1	4	
	Model	Fixed Effects			1.080	.441	.94	3.39		
		Random Effects				.441 ^a	-3.44 ^a	7.77 ^a		-.333

Tijdens het schrijven van de pitch, hield ik er rekening met hoe lang de anderen, die ook hebben meegedaan aan het experiment, er over hebben gedaan (gemiddeld 4:45, snelste 2:15)	Junior	3	4.00	.000	.000	4.00	4.00	4	4	
	Senior	3	3.67	1.528	.882	-.13	7.46	2	5	
	Total	6	3.83	.983	.401	2.80	4.87	2	5	
	Mo del	Fixed Effects			1.080	.441	2.61	5.06		
		Random Effects				.441 ^a	-1.77 ^a	9.44 ^a		-.333
Time	Junior	6	3.9917	1.58253	.64607	2.3309	5.6524	2.50	7.00	
	Senior	6	3.7083	3.52951	1.44092	.0043	7.4123	.35	10.05	
	Total	12	3.8500	2.61204	.75403	2.1904	5.5096	.35	10.05	
	Mo del	Fixed Effects			2.73513	.78956	2.0907	5.6093		
		Random Effects				.78956 ^a	-6.1823 ^a	13.8823 ^a		-1.20668

a. Warning: Between-component variance is negative. It was replaced by 0.0 in computing this random effects measure.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Tijdens het schrijven van de pitch, hield ik er rekening mee dat andere mensen ook een pitch moesten schrijven	Between Groups	2.083	1	2.083	2.358	.156
	Within Groups	8.833	10	.883		
	Total	10.917	11			
Tijdens het schrijven van de pitch, hield ik rekening met het aantal leestekens/woorden wat ik kon gebruiken	Between Groups	.750	1	.750	.738	.411
	Within Groups	10.167	10	1.017		
	Total	10.917	11			
Tijdens het schrijven van de pitch, hield ik er rekening mee bij welke bedrijven de andere werkten, die ook hebben meegedaan aan het experiment (Bacardi, Red Bull, Remia en Warner Bros etc.)	Between Groups	1.500	1	1.500	4.500	.101
	Within Groups	1.333	4	.333		
	Total	2.833	5			
Tijdens het schrijven van de pitch, hield ik rekening	Between Groups	.167	1	.167	.143	.725
	Within Groups	4.667	4	1.167		

met de functies die de andere hadden, die ook hebben meegedaan aan het experiment (Salesmanagers, Accountmanagers en Sales Directors)	Total	4.833	5			
Tijdens het schrijven van de pitch, hield ik er rekening met hoe lang de anderen, die ook hebben meegedaan aan het experiment, er over hebben gedaan (gemiddeld 4:45, snelste 2:15)	Between Groups	.167	1	.167	.143	.725
	Within Groups	4.667	4	1.167		
	Total	4.833	5			
Time	Between Groups	.241	1	.241	.032	.861
	Within Groups	74.809	10	7.481		
	Total	75.050	11			

C.5. Levene's test manipulation check questions

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Tijdens het schrijven van de pitch, hield ik er rekening mee dat andere mensen ook een pitch moesten schrijven	Based on Mean	1.039	1	10	.332
	Based on Median	.094	1	10	.765
	Based on Median and with adjusted df	.094	1	9.587	.765
	Based on trimmed mean	.905	1	10	.364
Tijdens het schrijven van de pitch, hield ik rekening met het aantal leestekens/woorden wat ik kon gebruiken	Based on Mean	.039	1	10	.847
	Based on Median	.179	1	10	.682
	Based on Median and with adjusted df	.179	1	8.448	.683
	Based on trimmed mean	.047	1	10	.833
Tijdens het schrijven van de pitch, hield ik er rekening mee bij welke bedrijven de andere werkten, die ook hebben meegedaan aan het experiment (Bacardi, Red Bull, Remia en Warner Bros etc.)	Based on Mean	.000	1	4	1.000
	Based on Median	.000	1	4	1.000
	Based on Median and with adjusted df	.000	1	4.000	1.000
	Based on trimmed mean	.000	1	4	1.000
Tijdens het schrijven van de pitch, hield ik rekening met de functies die de andere hadden, die ook hebben	Based on Mean	7.692	1	4	.051
	Based on Median	3.000	1	4	.158
	Based on Median and with adjusted df	3.000	1	2.000	.225

meegedaan aan het experiment (Salesmanagers, Accountmanagers en Sales Directors)	Based on trimmed mean	7.289	1	4	.054
Tijdens het schrijven van de pitch, hield ik er rekening met hoe lang de anderen, die ook hebben meegedaan aan het experiment, er over hebben gedaan (gemiddeld 4:45, snelste 2:15)	Based on Mean	7.692	1	4	.051
	Based on Median	3.000	1	4	.158
	Based on Median and with adjusted df	3.000	1	2.000	.225
	Based on trimmed mean	7.289	1	4	.054
Time	Based on Mean	2.784	1	10	.126
	Based on Median	1.429	1	10	.259
	Based on Median and with adjusted df	1.429	1	7.386	.269
	Based on trimmed mean	2.464	1	10	.148

Appendix D – SPSS output Study 2

D.1. Frequencies and descriptives

Frequency Table

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?
(Lees eerst beide pitches voor u de beoordeling doet) - 'Kickers' is een nieuw product van het welbekende A merk 'Mars'. Een smaak sensatie die u niet wilt missen. Wilt u het proberen, bestel dan nu een proefpakket.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	3	1.9	1.9	1.9
	1.00	35	21.6	21.6	23.5
	2.00	30	18.5	18.5	42.0
	3.00	30	18.5	18.5	60.5
	4.00	29	17.9	17.9	78.4
	5.00	18	11.1	11.1	89.5
	6.00	13	8.0	8.0	97.5
	7.00	4	2.5	2.5	100.0
	Total	162	100.0	100.0	

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?
(Lees eerst beide pitches voor u de beoordeling doet) - De Kickstart van je dag. Boordevol gezonde noten en oliën omwikkeld door de lekkerste chocolade. Jouw verantwoorde boost, voor de laatste loodjes na een zware dag, of om je dag een echte "kickers boost te geven"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	3	1.9	1.9	1.9
	1.00	9	5.6	5.6	7.4
	2.00	13	8.0	8.0	15.4
	3.00	20	12.3	12.3	27.8
	4.00	18	11.1	11.1	38.9
	5.00	38	23.5	23.5	62.3
	6.00	45	27.8	27.8	90.1
	7.00	16	9.9	9.9	100.0

Total	162	100.0	100.0	
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Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?

(Lees eerst beide pitches voor u de beoordeling doet) - Heb je trek? Zin in iets lekkers? Verantwoord en hoog in Proteïne? Probeer dan deze Kickers en dan krijg je van mij er 1 gratis bij ;).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.6	.6	.6
	1.00	14	8.6	8.6	9.3
	2.00	16	9.9	9.9	19.1
	3.00	23	14.2	14.2	33.3
	4.00	26	16.0	16.0	49.4
	5.00	34	21.0	21.0	70.4
	6.00	33	20.4	20.4	90.7
	7.00	15	9.3	9.3	100.0
	Total	162	100.0	100.0	

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?

(Lees eerst beide pitches voor u de beoordeling doet) - De nieuwe naam in smaaksensatie. Omdat kicken beter is dan snikken.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	9	5.6	5.6	5.6
	1.00	49	30.2	30.2	35.8
	2.00	33	20.4	20.4	56.2
	3.00	20	12.3	12.3	68.5
	4.00	19	11.7	11.7	80.2
	5.00	15	9.3	9.3	89.5
	6.00	11	6.8	6.8	96.3
	7.00	6	3.7	3.7	100.0
	Total	162	100.0	100.0	

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?
(Lees eerst beide pitches voor u de beoordeling doet) - Genietmomentje voor jou alleen. Een heerlijke snack voor tussendoor en makkelijk mee te nemen. Eat & Enjoy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.6	.6	.6
	1.00	16	9.9	9.9	10.5
	2.00	30	18.5	18.5	29.0
	3.00	30	18.5	18.5	47.5
	4.00	33	20.4	20.4	67.9
	5.00	23	14.2	14.2	82.1
	6.00	25	15.4	15.4	97.5
	7.00	4	2.5	2.5	100.0
	Total	162	100.0	100.0	

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?
(Lees eerst beide pitches voor u de beoordeling doet) - Kickers: een heerlijke snack als tussendoortje. Gemaakt met fair trade chocola. Kickers geeft je net die ene extra kick die je nodig hebt op het einde van de dag te halen.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.6	.6	.6
	1.00	10	6.2	6.2	6.8
	2.00	15	9.3	9.3	16.0
	3.00	26	16.0	16.0	32.1
	4.00	28	17.3	17.3	49.4
	5.00	36	22.2	22.2	71.6
	6.00	39	24.1	24.1	95.7
	7.00	7	4.3	4.3	100.0
	Total	162	100.0	100.0	

Welke kleur is gras?

Denk aan een groen grasveld. Om ervoor te zorgen dat u oplet, wil ik u vragen om paars aan te vinken.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Paars	162	100.0	100.0	100.0

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?

(Lees eerst beide pitches voor u de beoordeling doet) - Energie nodig, een schop onder je kont zeg maar, dan hebben wij hiervoor een heerlijke nieuwe energie reep. Kickers! Ook nog eens gemaakt van 100% fair trade producten, maar vooral een energie booster van jewelste!

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	6	3.7	3.7	3.7
	1.00	19	11.7	11.7	15.4
	2.00	27	16.7	16.7	32.1
	3.00	22	13.6	13.6	45.7
	4.00	25	15.4	15.4	61.1
	5.00	36	22.2	22.2	83.3
	6.00	21	13.0	13.0	96.3
	7.00	6	3.7	3.7	100.0
	Total	162	100.0	100.0	

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?
(Lees eerst beide pitches voor u de beoordeling doet) - Hi, Aangenaam! Ik ben Oussama ben Touhami en ben benieuwd naar hoe het met u gaat in deze hectische periode. Gaat u ook graag naar buiten met dit lekkere weer? Neem dan een 'Kickers'. Voorziet u weer van nieuwe energie!

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	17	10.5	10.5	10.5
	1.00	54	33.3	33.3	43.8
	2.00	29	17.9	17.9	61.7
	3.00	30	18.5	18.5	80.2
	4.00	14	8.6	8.6	88.9
	5.00	10	6.2	6.2	95.1
	6.00	4	2.5	2.5	97.5
	7.00	4	2.5	2.5	100.0
	Total	162	100.0	100.0	

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?
(Lees eerst beide pitches voor u de beoordeling doet) - Kickers is de nieuwe tussendoorsnack van de toekomst. Door de stoere naam die afgeleid is van Kicken, dekt dit helemaal de lading van de smaak. De milieu vriendelijke verpakking is helemaal van deze tijd. Kicken met Kickers!

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	10	6.2	6.2	6.2
	1.00	36	22.2	22.2	28.4
	2.00	40	24.7	24.7	53.1
	3.00	25	15.4	15.4	68.5
	4.00	21	13.0	13.0	81.5
	5.00	18	11.1	11.1	92.6
	6.00	10	6.2	6.2	98.8
	7.00	2	1.2	1.2	100.0
	Total	162	100.0	100.0	

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?
 (Lees eerst beide pitches voor u de beoordeling doet) - Behoeftte aan energie?
 Met Kickers krijg je de kick die je nodig hebt. Snel, makkelijk, onwijs lekker en perfect tegen de snelle trek. Heerlijk voor onderweg of tijdens de drukste momenten van de dag.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.6	.6	.6
	1.00	8	4.9	4.9	5.6
	2.00	13	8.0	8.0	13.6
	3.00	22	13.6	13.6	27.2
	4.00	34	21.0	21.0	48.1
	5.00	42	25.9	25.9	74.1
	6.00	32	19.8	19.8	93.8
	7.00	10	6.2	6.2	100.0
	Total	162	100.0	100.0	

Op een schaal van 1 to 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?
 (Lees eerst beide pitches voor u de beoordeling doet) - Dipje? Sneller dan met Kickers kom je niet opnieuw op snelheid. Alle ingrediënten zijn erop gericht je zo snel mogelijk weer nieuwe energie te geven. Klaar voor een nieuwe uitdaging in seconden.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	3	1.9	1.9	1.9
	1.00	15	9.3	9.3	11.1
	2.00	31	19.1	19.1	30.2
	3.00	30	18.5	18.5	48.8
	4.00	35	21.6	21.6	70.4
	5.00	35	21.6	21.6	92.0
	6.00	10	6.2	6.2	98.1
	7.00	3	1.9	1.9	100.0
	Total	162	100.0	100.0	

Op een schaal van 1 tot 7, waar 1 helemaal niet effectief en 7 heel erg effectief is, hoe zou u deze pitches ten opzichte van elkaar beoordelen?
 (Lees eerst beide pitches voor u de beoordeling doet) - Kent u dat? Tanken bij het benzine station en zin in wat lekkers maar u wilt geen suikerbom? of boodschappen doen met honger en dan meer kopen dan de bedoeling is? Als uw antwoord hierop 'ja' is, kijk dan even naar ons nieuwe product Kickers. Niet alleen lekker maar ook laag in suikers en vol met vezels voor het stille van dat vervelende hongergevoel. Eigenlijk bespaar je dus op boodschappen doen met de Kickers reep!

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	8	4.9	4.9	4.9
	1.00	40	24.7	24.7	29.6
	2.00	25	15.4	15.4	45.1
	3.00	24	14.8	14.8	59.9
	4.00	20	12.3	12.3	72.2
	5.00	23	14.2	14.2	86.4
	6.00	18	11.1	11.1	97.5
	7.00	4	2.5	2.5	100.0
	Total	162	100.0	100.0	

Wat is uw leeftijd ? - Leeftijd

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	17.00	1	.6	.6	.6
	19.00	1	.6	.6	1.2
	20.00	4	2.5	2.5	3.7
	21.00	2	1.2	1.2	4.9
	22.00	8	4.9	4.9	9.9
	23.00	18	11.1	11.1	21.0
	24.00	19	11.7	11.7	32.7
	25.00	25	15.4	15.4	48.1
	26.00	8	4.9	4.9	53.1
	27.00	4	2.5	2.5	55.6
	28.00	1	.6	.6	56.2
	29.00	4	2.5	2.5	58.6
	30.00	2	1.2	1.2	59.9
	32.00	2	1.2	1.2	61.1
	34.00	1	.6	.6	61.7
	35.00	2	1.2	1.2	63.0

	36.00	1	.6	.6	63.6
	40.00	1	.6	.6	64.2
	42.00	1	.6	.6	64.8
	43.00	1	.6	.6	65.4
	45.00	3	1.9	1.9	67.3
	46.00	3	1.9	1.9	69.1
	47.00	6	3.7	3.7	72.8
	48.00	4	2.5	2.5	75.3
	50.00	5	3.1	3.1	78.4
	51.00	3	1.9	1.9	80.2
	52.00	3	1.9	1.9	82.1
	53.00	5	3.1	3.1	85.2
	54.00	2	1.2	1.2	86.4
	55.00	3	1.9	1.9	88.3
	56.00	2	1.2	1.2	89.5
	57.00	2	1.2	1.2	90.7
	58.00	2	1.2	1.2	92.0
	59.00	2	1.2	1.2	93.2
	60.00	3	1.9	1.9	95.1
	61.00	1	.6	.6	95.7
	62.00	2	1.2	1.2	96.9
	63.00	1	.6	.6	97.5
	64.00	1	.6	.6	98.1
	66.00	1	.6	.6	98.8
	74.00	2	1.2	1.2	100.0
	Total	162	100.0	100.0	

Wat is uw geslacht?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	74	45.7	45.7	45.7
	Vrouw	86	53.1	53.1	98.8
	Zeg ik liever niet	2	1.2	1.2	100.0
	Total	162	100.0	100.0	

Waar komt u vandaan?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nederland	160	98.8	98.8	98.8
	Van buiten Nederland, maar binnen Europa	2	1.2	1.2	100.0
	Total	162	100.0	100.0	

Wat is uw voornaamste bezigheid?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	44	27.2	27.2	27.2
	Parttimebaan (< 36 hours a week)	35	21.6	21.6	48.8
	Fulltimebaan (36 or > 36 hours a week)	46	28.4	28.4	77.2
	ZZP'er	14	8.6	8.6	85.8
	Ondernemer	15	9.3	9.3	95.1
	Werkzoekende	2	1.2	1.2	96.3
	Met pensioen	6	3.7	3.7	100.0
	Total	162	100.0	100.0	

Wat is uw hoogst afgeronde opleiding?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MAVO/VMBO	15	9.3	9.3	9.3
	MBO/MTS	21	13.0	13.0	22.2
	HAVO/VWO/Gymnasium	33	20.4	20.4	42.6
	HBO (bachelor or master)	57	35.2	35.2	77.8
	WO (bachelor or master)	36	22.2	22.2	100.0
	Total	162	100.0	100.0	

Als u werkt, in welke sector bent u dan werkzaam? (Optioneel)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accounting/ Controlling (1)	2	1.2	1.5	1.5
	Architectuur/ Design (2)	5	3.1	3.8	5.3
	Beveiliging/ Bewaking (3)	3	1.9	2.3	7.6
	Bouw (4)	4	2.5	3.0	10.6
	Cultuur/ Recreatie/ Sport (5)	11	6.8	8.3	18.9
	Farmaceutisch/ Gezondheidszorg (6)	14	8.6	10.6	29.5
	Financiële Dienstverlening (7)	12	7.4	9.1	38.6
	Horeca (8)	18	11.1	13.6	52.3
	Industrie/ Techniek (9)	12	7.4	9.1	61.4
	IT/ Automatisering/ Telecommunicatie (10)	14	8.6	10.6	72.0
	Juridische Dienstverlening (11)	1	.6	.8	72.7
	Landbouw/ Bosbouw/ Visserij (12)	1	.6	.8	73.5
	Maatschappelijke Dienstverlening (13)	20	12.3	15.2	88.6
	Makelaardij/ Vastgoed (14)	2	1.2	1.5	90.2
	Media/ Entertainment (15)	13	8.0	9.8	100.0
	Total	132	81.5	100.0	
Missing	System	30	18.5		
Total		162	100.0		

Descriptives

Descriptive Statistics

	N	Mini mum	Maxi mum	Mean	Std. Deviation	Time
'Kickers' is een nieuw product van het welbekende A merk 'Mars'. Een smaaksensatie die u niet wilt missen. Wilt u het proberen, bestel dan nu een proefpakket.	162	.00	7.00	3.0679	1.72352	4:30
- De Kickstart van je dag. Boordevol gezonde noten en oliën omwikkeld door de lekkerste chocolade. Jouw verantwoorde boost, voor de laatste loodjes na een zware dag, of om je dag een echte "kickers boost te geven"	162	.00	7.00	4.5617	1.78309	3:00
Heb je trek? Zin in iets lekkers? Verantwoord en hoog in Proteïne? Probeer dan deze Kickers en dan krijg je van mij er 1 gratis bij ;).	162	.00	7.00	4.2716	1.79379	2:50
De nieuwe naam in smaaksensatie. Omdat kicken beter is dan snikken.	162	.00	7.00	2.6790	1.87714	0:35
Genietmomentje voor jou alleen. Een heerlijke snack voor tussendoor en makkelijk mee te nemen. Eat & Enjoy	162	.00	7.00	3.6481	1.66987	3:30
Kickers: een heerlijke snack als tussendoortje. Gemaakt met fair trade chocola. Kickers geeft je net die ene extra kick die je nodig hebt op het einde van de dag te halen.	162	.00	7.00	4.2778	1.64279	1:40

Energie nodig, een schop onder je kont zeg maar, dan hebben wij hiervoor een heerlijke nieuwe energie reep. Kickers! Ook nog eens gemaakt van 100% fair trade producten, maar vooral een energie booster van jewelste!	162	.00	7.00	3.6235	1.84497	2:15
Hi, Aangenaam! Ik ben Oussama ben Touhami en ben benieuwd naar hoe het met u gaat in deze hectische periode. Gaat u ook graag naar buiten met dit lekkere weer? Neem dan een 'Kickers'. Voorziet u weer van nieuwe energie!	162	.00	7.00	2.2222	1.67925	7:00
Kickers is de nieuwe tussendoorsnack van de toekomst. Door de stoere naam die afgeleid is van Kicken, dekt dit helemaal de lading van de smaak. De milieuvriendelijke verpakking is helemaal van deze tijd. Kicken met Kickers!	162	.00	7.00	2.7099	1.71831	10:05
Behoeftte aan energie? Met Kickers krijg je de kick die je nodig hebt. Snel, makkelijk, onwijs lekker en perfect tegen de snelle trek. Heerlijk voor onderweg of tijdens de drukste momenten van de dag.	162	.00	7.00	4.3704	1.57578	3:30
- Dipje? Sneller dan met Kickers kom je niet opnieuw op snelheid. Alle ingrediënten zijn erop gericht je zo snel mogelijk weer nieuwe energie te geven. Klaar voor een nieuwe uitdaging in seconden.	162	.00	7.00	3.4753	1.56515	5:30

Wat is uw leeftijd? - Leeftijd	162	17.00	74.00	35.1111	14.55766
Wat is uw geslacht?	162	1	3	1.56	.523
Waar komt u vandaan?	162	1	2	1.01	.111
Wat is uw voornaamste bezigheid?	162	1	7	2.70	1.545
Wat is uw hoogst afgeronde opleiding?	162	3	7	5.48	1.232
Als u werkt, in welke sector bent u dan werkzaam? (Optioneel)	132	1	15	8.77	3.714
Valid N (listwise)	132				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Performance sales pitch	1944	0	7	3.50	1.880
Manipulation	1944	0	1	.50	.500
Experience	1944	0	1	.50	.500
Valid N (listwise)	1944				

D.2. Univariate ANOVA analysis effectiveness pitches

Univariate Analysis of Variance

Between-Subjects Factors			
		Value Label	N
Manipulation	0	Control	972
	1	Manipulated	972
Experience	0	Senior	972
	1	Junior	972

Descriptive Statistics				
Dependent Variable: Performance sales pitch				
Manipulation	Experience	Mean	Std. Deviation	N
Control	Senior	3.27	1.756	486
	Junior	3.66	1.795	486
	Total	3.47	1.786	972
Manipulated	Senior	3.84	1.952	486
	Junior	3.21	1.942	486
	Total	3.53	1.971	972
Total	Senior	3.55	1.877	972
	Junior	3.44	1.883	972
	Total	3.50	1.880	1944

Test of Between-Subjects Effects

Dependent Variable: Performance sales pitch

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	134.967 ^a	3	44.989	12.959	.000
Intercept	23758.033	1	23758.033	6843.442	.000
Manipulation	1.730	1	1.730	.498	.480
Experience	6.685	1	6.685	1.926	.165
Manipulation * Experience	126.551	1	126.551	36.453	.000
Error	6735.000	1940	3.472		
Total	30628.000	1944			
Corrected Total	6869.967	1943			

a. R Squared = ,020 (Adjusted R Squared = ,018)

Custom Hypothesis Tests #1

Contrast Results (K Matrix)

		Dependent Variable Performance sales pitch
Manipulation Simple Contrast ^a		
Level 1 vs. Level 2	Contrast Estimate	-.060
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	-.060
	Std. Error	.085
	Sig.	.480
	95% Confidence Interval for Difference	
	Lower Bound	-.225
	Upper Bound	.106

a. Reference category = 2

Test Results

Dependent Variable: Performance sales pitch

Source	Sum of Squares	df	Mean Square	F	Sig.
Contrast	1.730	1	1.730	.498	.480
Error	6735.000	1940	3.472		

Custom Hypothesis Tests #2

Contrast Results (K Matrix)

Experience Simple Contrast ^a		Dependent Variable Performance sales pitch
Level 1 vs. Level 2	Contrast Estimate	.117
	Hypothesized Value	0
	Difference (Estimate - Hypothesized)	.117
	Std. Error	.085
	Sig.	.165
	95% Confidence Interval for Difference	Lower Bound Upper Bound
		-.048 .283

a. Reference category = 2

Test Results

Dependent Variable: Performance sales pitch

Source	Sum of Squares	df	Mean Square	F	Sig.
Contrast	6.685	1	6.685	1.926	.165
Error	6735.000	1940	3.472		

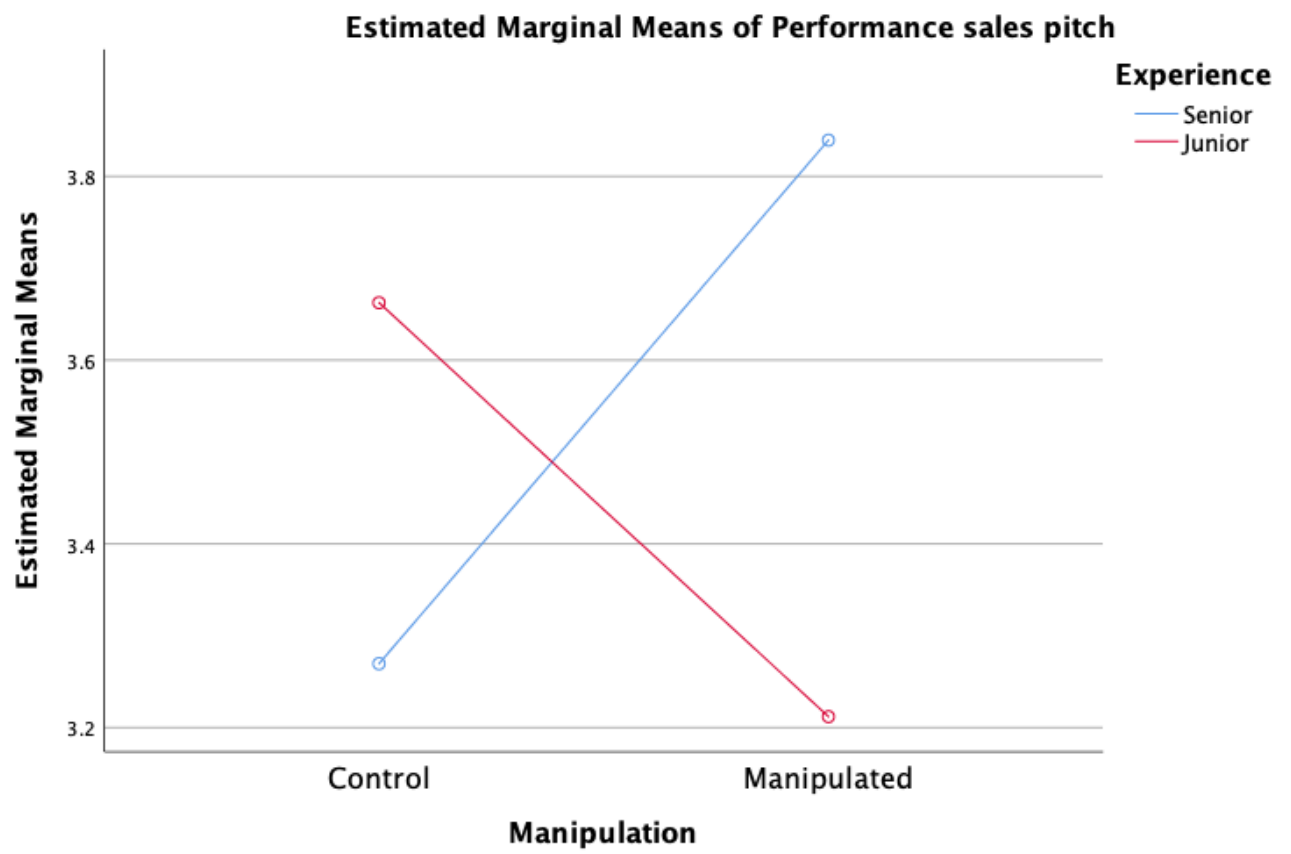
Estimated Marginal Means

Grand Mean

Dependent Variable: Performance sales pitch

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
3.496	.042	3.413	3.579

Profile Plots



D.3. Levene's test and Brown Forsythe test

Levene's Test of Equality of Error Variances^{a,b}

		Levene Statistic	df1	df2	Sig.
Performance sales pitch	Based on Mean	4.763	3	1940	.003
	Based on Median	4.035	3	1940	.007
	Based on Median and with adjusted df	4.035	3	1935.099	.007
	Based on trimmed mean	4.631	3	1940	.003

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.^{a,b}

a. Dependent variable: Performance sales pitch

b. Design: Intercept + Manipulation + Experience + Manipulation * Experience

Robust Tests of Equality of Means

Performance sales pitch

	Statistic ^a	df1	df2	Sig.
Welch	.489	1	1923.342	.484
Brown-Forsythe	.489	1	1923.342	.484

a. Asymptotically F distributed.

Robust Tests of Equality of Means

Performance sales pitch

	Statistic ^a	df1	df2	Sig.
Welch	1.892	1	1941.985	.169
Brown-Forsythe	1.892	1	1941.985	.169

a. Asymptotically F distributed.