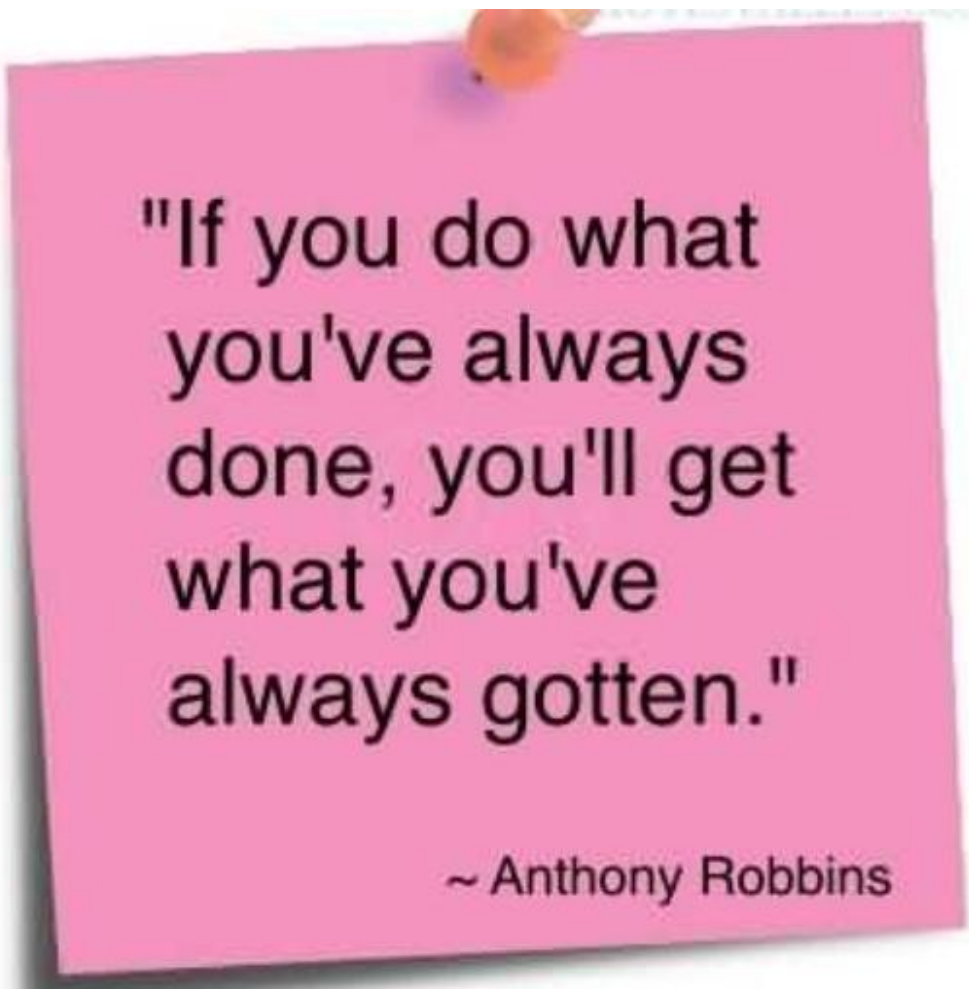


# *The same old thinking, the same old results?*

*The influence of the status quo bias on adolescents and young adults*



"If you do what  
you've always  
done, you'll get  
what you've  
always gotten."

~ Anthony Robbins

*Master thesis Behavioural Economics*

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## **Preface**

In this thesis I choose the status quo bias as my topic. Heuristics and biases following from these heuristics have always intrigued me, as they combine psychology and decision-making. Following the Master Behavioural Economics instigated my interest in the psychology of economic decision-making. Learning more about these heuristics and biases following from these heuristics, gave me a new way to think about the motivation of people and even my own decision-making. Therefore, I wanted to choose a topic for my Master thesis which was in line with these heuristics or biases following from these heuristics.

After changing my topic several times, I finally found a topic which I liked and still find really interesting. Although the status quo bias does not sound that interesting, I think it is almost one of the fundamental elements to think about in our own lives. For the reason, that the status quo bias instigates people to choose a status quo option in sequential decision-making. For me that means, in some occasions, that you choose the “safe” option. An option you know and know the consequences of, choosing this option probably leads to nothing new. In my life it is important that I grow and learn, and in my opinion, I do this by not choosing the “safe” option. Choosing new options can lead to the creation of new people to meet, new challenges to face and, when thinking economically, better financial deals.

For my Master thesis I was interested if certain groups of people were influenced by the status quo bias in economic decision-making. I focussed primarily on the future generation of managers, because there is evidence on the status quo bias being present in groups of managers, entrepreneurs and adults in general. Therefore, I wanted to research if this was also the case for young people and to investigate if highly educated adolescents and young adults already were influenced by the status quo bias or if it presented itself later on in life.

As a final word I would like to thank my supervisor and first reader Prof. Dr. K. Rohde for all the support and supervision during the whole process of writing the thesis. I would also like to thank my parents, Nicolaas de Jong and Maria de Jong-Wagenaar, for all their support and giving me the opportunity to develop myself academically. I have definitely learned a lot during this Master and I will do my best to use this knowledge to add some value to our society. Thank you for reading this thesis!

W.N. de Jong

24<sup>th</sup> of July 2015, Nieuwegein

## **Abstract**

*This paper investigated the status quo bias. The status quo bias happens when individual decision makers attach an extra value in their default or status quo option in sequential decision-making. This paper focussed on the presence of the status quo bias in economic decision-making and looked at the influence of personal characteristics, like being an adolescent or young adult, a “high” versus “low” confident individual, and a “high” versus “low” risk-seeking individual.*

*According to the results of this paper, the presence of the status quo bias does depend on if someone has a “high” or “low” confidence level. On the other hand, being an adolescent or a young adult, or having different levels of risk-seeking behaviour does not significantly influence the presence of a status quo bias in economic decision-making. Still, a few tests showed that adolescents were less influenced by the status quo bias compared to young adults. Therefore, it could be the case that the main factors influencing the presence of the status quo bias, come into play when someone becomes an adult.*

*Although behavioural biases have been investigated in many different areas, adolescents have been overlooked. Learning more about the presence and reasons behind possible “bad” biases influencing adolescents, could be very helpful. Knowing what kind of biases play a role influencing adolescents can help, to better educate a new generation of managers, who are less likely to fall for “bad” biases.*

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## **1.Introduction**

A considerable amount of evidence has been found, to support that individual decision makers attach an extra value in their default or status quo option (Samuelson & Zeckhauser, 1988; Hartman et al., 1991; Kahneman et al., 1991; Burmeister & Schade, 2006; Ortoleva, 2010). This phenomenon is called the status quo bias.

According to a broad range of empirical findings, most decision-makers use heuristics to simplify their decision making (Busenitz & Barney, 1997; Kahneman et al. 1982 and Zaiac & Bazerman 1991). According to Pitz & Sachs (1984), heuristics can be effective and efficient in times of environmental uncertainty and complexity. The use of these shortcuts allows us to spend less, valuable, time on decision making. Although these heuristics could be effective, it does not mean that these shortcuts per definition are effective, as they can also lead to biases.

Take, for example, the status quo bias. Samuelson & Zeckhauser (1988) state that individuals have a hard time switching from a low-paying to a high-paying job. Individuals see the process of searching for a better paying job as uncertain, slow and costly. Although this process of searching for a better job does not have to be the most economically efficient decision, individuals already beforehand overweigh the negative side of a possible change towards another job. This means that individuals tend to overweigh the negative sides of change, like uncertainty of getting a better job, a possible long duration to attain this job and possible high search costs.

As indicated by Kahneman et al. (1991), when deciding on a decision, the possible negative effect of change, is given a higher weight compared to the same positive effect of change. In this case, this could mean that individuals who objectively are economically better of finding a high-paying job, choose not to switch. Due to the overweighing of the negative effect of uncertainty, slow process and costs. Here our shortcuts, in the form of the status quo bias, tends to influence us negatively.

As indicated by literature, the status quo bias appears when individuals choose 401(k) plans, car insurance and resident electrical services (Samuelson & Zeckhauser, 1988; Kahneman et al., 1991; Hartman et al., 1991 and Madrian & Shea, 2000). Besides these choosing moments, manager's decision making also tends to stick with the status quo option, although it is not always the best option. As indicated by Kim & Mauborgne (2005) and Rosenbusch (2011),

practitioner-oriented literature states that businesses will only survive and grow in this world with increasingly hyper-competitive markets, by using innovation. Only, according to Dyer et al. (2009), most managers stick with understanding existing processes and try to improve their work gradually, which results in choosing the status quo option. In this thesis, the influence of the status quo bias is tested on the future generation of managers and entrepreneurs, the highly educated adolescents and young adults. Leading to the following research question:

*Does the status quo bias significantly influence highly educated adolescents and highly educated young adults?*

As indicated by Ortoleva (2010), numerous experiments and real market observations have shown the existence of the status quo bias with adults (Samuelson & Zeckhauser, 1988; Kahneman et al., 1991; Hartman et al., 1991 and Madrian & Shea, 2000). Current research on the status quo bias has provided information about the presence of the status quo bias in decision making and the difference of the effect between groups. Burmeister & Schade (2006) showed, for example, that entrepreneurs are more effected by the status quo bias compared to bankers, but equally affected as students, when making an economic decision.

Although the status quo bias is examined in many different areas, nobody so far has examined if adolescents experience the status quo bias in economic decision making and how much this effect differs with the effect on young adults. In this thesis, the effect of the status quo bias is tested for individuals with an age between 12-17 years old following HAVO/VWO or Gymnasium (adolescent) and individuals between 18 and 30 years old following HBO or WO (young adult). The results will show if the status quo bias has an effect on highly educated adolescents and young adults. Also the difference in influence of the status quo bias is tested between these two groups. In line with measuring the status quo bias, potential general indicators (self-confidence and risk-seeking) for the bias are investigated.

As indicated by Spear (2000), the main differences in behaviour between adolescents and young adults come from hormonal changes. These hormonal changes lead to different levels of risk-seeking and self-confidence. According to Trimpop et al. (1998), adolescents are more risk-seeking compared to other age groups. Nottelman et al. (1987) found that in early adolescence self-esteem is negatively influenced by adrenal androgens (for boys) and gonadotropins (for girls), leading to negative moods and behaviour. If there is a significant

difference in the effect of the status quo bias on adolescents and young adults, one or both of these potential general indicators can be the leading reason for this difference.

In this thesis, the method by Burmeister & Schade (2006) is used to measure the effect of the status quo bias during economic decision-making, between groups and separately. To measure overconfidence, the Rosenberg scale is used (Rosenberg, 1989). The risk attitude of the participants is measured with a multiple price list (MPL) (Holt & Laury, 2002). Results for this research were collected through two surveys (taken hard-copy, as well as online). Participants were collected through social media and gathering places of students nearby universities.

The results of this paper indicate that there is a difference in the level of presence of the status quo bias within the characteristics of an individual. According to the results of this paper, the presence of the status quo bias does depend on if someone has a “high” or “low” confidence level. On the other hand, being an adolescent or a young adult, or having different levels of risk-seeking behaviour does not significantly influence the presence of a status quo bias.

This study contributes to the current literature, as it provides data on when the status quo bias presents itself in the life phase of an individual. Although the results showed that the answers provided in the survey by adolescents were not significantly different compared to the young adults, still a few tests showed that adolescents were less influenced by the status quo bias compared to young adults. Therefore, it could be the case that the main factors influencing the presence of the status quo bias come into play when someone becomes an adult. If this is the case, the main instigators for the presence of the status quo bias shows itself during adulthood. Future research can focus on the differences between adults and adolescents, to see which factors influence the presence of the status quo bias.

This study contributes to the current literature, as it provides new data on the presence of the status quo bias within and between certain groups, which have not been investigated before (adolescents, “low” versus “high” confident / risk-seeking groups). With the new information, for example, that “low” confident individuals are influenced by the status quo bias, could lead to more reliable future hypotheses for analyzing the presence of the status quo bias for certain other groups, who have “low” confidence. Knowing this direct link between lower confidence and the status quo bias provides an extra piece of knowledge on why the status quo bias is



present.

This study contributes to lower confident individuals making a financial decision. As indicated by the results, lower confident individuals are influenced by the status quo bias and are more influenced by the status quo bias compared to higher confident individuals. As indicated by Evans (2008), individuals make decisions through System 1 or System 2. System 1 decision-making goes rapid, automatic and uses heuristics. System 2 goes controlled, slow and conscious. When lower confident individuals are aware and therefore conscious about the results that they are probably more susceptible for the status quo bias, leads them to think in System 2 decision-making and not System 1. Which leads to less use of heuristics and less lower confident individuals being influenced by the status quo bias.

This thesis is structured as follows. The second chapter reviews the literature on the status quo bias, self-confidence and risk-seeking, and the difference in behaviour between adolescents and adults. This chapter ends with the research hypotheses. In the third and fourth chapter, the research method and results are presented. In the fifth chapter, a summary and interpretation of the results is presented. Also the implications and limitations of the study are provided. The sixth chapter presents a small summary of the paper. The remaining chapters provide the Appendix and the reference list.

## **2. Literature review**

### *2.1 The status quo bias*

#### *2.1.1 Definition of the status quo bias*

According to literature, a considerable amount of evidence has been found to support that individual decision makers attach an extra value on their default or status quo option (Samuelson & Zeckhauser, 1988; Hartman et al., 1991; Kahneman et al., 1991; Burmeister & Schade, 2006; Ortoleva, 2010). This phenomenon is called, the status quo bias.

#### *2.1.2 Examples of the presence of the status quo bias*

Kahneman et al. (1991) refers to an experiment conducted, to show the presence of the status quo bias. In this setting, performed by Hartman et al. (1991), a survey on electric power consumers was used. This group of consumers were randomly divided in two parts, one with high service reliability and the other with low service reliability. Each group was asked to give a state of preference between service reliability and rates. They had the choice between a total of six combinations, where one of them was designed as the status quo. The results showed a preference for the status quo. In the high reliability group, for example, 60.2 percent choose the status quo and only 5.7 percent had a preference for the low reliability option, although it came with a 30 percent reduction in rates. In the low reliability group, 58.3 percent choose the status quo, and only 5.8 percent would prefer the high reliability option, although it would cost 30 percent more to get to this high reliability option. This shows that these consumers tend to be heavily influenced with a previous decision in sequential decision-making. This previous decision directly influences the second decision, even if it was made by someone else (referring to the random dividing into two groups within the experiment).

Madrian & Shea (2000) show through a real market observation the presence of the status quo bias. In their paper, they analyzed the impact of automatic enrolment on 401(k) savings behaviour in a large U.S. corporation. The paper analyzed how people changed their 401(k) savings behaviour, when the 401(k) plan changes. Before the change, if employees wanted to enrol in the 401(k) plan, they had to do that affirmatively. After the change, when people were

hired, they would be automatically enrolled in the 401(k) plan. If they did not want to, they affirmatively had to say no to the 401(k) plan. The content of the plan did not change, only the implementation of the plan changed. Madrian & Shea (2000) have found two key findings. First, the participation to the 401(k) plan increased significantly. Second, they found that participants who enrolled under the automatic enrolment kept the default contribution rate and fund allocation, whereas only a few of the employees hired before automatic enrolment picked these options. Madrian & Shea (2000) state that one explanation for this could be the status quo bias. They state that participants procrastinate their decision to make an optimal savings decision.

### *2.1.3 Reasons for the presence of the status quo bias*

Samuelson & Zeckhauser (1988) state that the explanations for the status quo bias fall into three categories. The status quo bias can be invoked by (1) rational decision making where there are transition costs and/or uncertainty; (2) (cognitive) misperceptions; and (3) psychological commitment due to regret avoidance, misperceived sunk costs, or consistency.

Samuelson & Zeckhauser (1988) state that when an individual has to make sequential decisions they tend to be influenced by decisions made beforehand. When a second decision has to be made, it could be that just the switching from the status quo to another choice generates costs. These transition costs lead to a status quo bias, when this cost exceeds the benefit from a superior alternative. There are many examples of transition costs. For example, there are many, more efficient, alternatives for the classic keyboard we have today, still we use them. An another example is a buyer of a computer system, in the future this individual will purchase the same or compatible systems, even if there are better systems available on the market. For the reason, that changing is difficult and leads to using time and effort.

Another explanation for the status quo bias is the uncertainty faced when an individual has to make a decision. When an individual wants to change jobs, this individual may well stick with a low-paying job, because the process of searching for a better job can be uncertain, slow, and/or costly. According to Samuelson & Zeckhauser (1988), uncertainty can be the main explanation for the status quo bias. Therefore, explicit costs resulting from searching or switching a job are not needed to stay in the status quo, when uncertainty is present.

The second category Samuelson & Zeckhauser (1988) address is (cognitive) misperceptions. These (cognitive) misperceptions can be seen as biases individuals experience when making a

decision. An example of this is the endowment effect. Samuelson & Zeckhauser (1988) explain the endowment effect as follows. When an individual makes a sequential decision, they tend to take the first decision as a reference point. When making the second decision, the individual realizes he/she can make a better or worse decision compared to the former decision. Here, Samuelson & Zeckhauser (1988) state this second decision is influenced by a misperception, which is loss aversion. When making the second decision, a potential loss made on this decision receives a higher value compared to a potential benefit. Therefore, an individual tend to stay in the status quo, when making this second decision.

Another (cognitive) misperception, which can lead to the status quo bias, is anchoring. Individuals tend to use a common strategy when making a decision, which is taking the initial decision as a starting point and altering this decision in line with economic facts the individual takes into account. To provide more clarity, a variation of this anchoring goes as follows. Consider an employee who has to choose between a number of alternative health plans. Health plans have a lot of complex information, reading and understanding every health plan takes a lot of time and individuals do not want to spend all of their time on doing this task. As a shortcut, this individual uses its own health plan as a starting point, because the information presented in that plan is known by the individual. Then selecting and comparing several competing plans would be a reasonable strategy, because there are so many plans a selection is made to compare. In this case, due to anchoring and bounded rationality, the status quo alternative has a decision advantage compared to the average of all alternative health plans.

The third category described in Samuelson & Zeckhauser (1988) is psychological commitment. As indicated by a broad range of empirical findings, most decision-makers use biases and heuristics to simplify their decision making (Busenitz & Barney, 1997; Kahneman et al. 1982 and Zaiac & Bazerman 1991). One example, of a psychological commitment is taking into account *sunk cost* in decision making. According to Brockner et al. (1982), entrapping conflicts are present when decision makers continue the same line of decision making in order to justify previous costs. Based on the notions of Thaler (1980), an example of this situation is described here below. Take for example an individual who has prepaid for a concert series, but has conflicting appointments. This individual would rather have gone to these appointments, if he/she did not paid. Still, this individual goes to the concert, because he/she has paid for the concert. Even though the costs are already made, this individual cannot see the first decision (buy the concert tickets) from the second decision (go to the concert or

the appointment), as a separate decision. According to experiments from Samuelson & Zeckhauser (1988), the greater the investment in the status quo alternative, the higher the chance the status quo will be retained.

Another reason for the psychological commitment, according to Samuelson & Zeckhauser (1988) comes from *regret avoidance*. Individuals tend to avoid making the wrong decision. As stated by Kahneman et al. (1991) with loss aversion, individuals tend to see bad consequences coming from new actions, as more detrimental, compared to having the same bad consequences from inaction. Avoiding this regret leads to taking no action and choosing the status quo option. One example of this situation, is when parents with a baby leave their house to make an 15-minute errand. It is common that you do not leave the baby in the house, but take it with you. Even though, probably leaving the baby at home would be even more safe, compared to taking the baby for a drive. Here, keeping the baby with you and not leaving he/she at home, is the status quo option. Although leaving the baby at home is probably the safer option, the parents would feel much more regret and guilt when something bad happened when they left the baby at home, compared to having the same bad consequences when they take the baby with them for a drive.

Another reason for the psychological commitment described by Samuelson & Zeckhauser (1988) comes from *a drive for consistency*. According to the cognitive dissonance theory, individuals tend to find it difficult to have two conflicting stances or ideas at the same moment. To solve this problem, individuals choose their believes in line with the lowest amount of cognitive dissonance. Especially, when individuals are faced with new information they are influenced by these believes. Another reason for attaining decision consistency is not undermining their self-image as an able decision maker. Changing a decision can undermine this self-image, therefore staying in the status quo protects their self-image. Possible errors in the past are not recognized and there is no conflict with his/her self-image. *Self-perception theory* can also lead to this psychological commitment, according to Samuelson & Zeckhauser (1988). As the self-perception theory can lead, to seeing past decisions as a guide for future decisions. One can reckon that if the decisions before were good enough, they will be probably now fine too. Therefore the status quo tends to persist.

## 2.2 *Self-confidence and risk taking*

As referred to by Samuelson & Zeckhauser (1988), there are many reasons why the status quo

bias can happen. As an addition to their experiments, this paper investigates if the level of self-confidence and risk attitude has a significant link with the presence of the status quo bias within individuals.

### *2.2.1 Definitions of confidence and risk attitude on economic decision-making*

Literature states that overconfidence is the tendency of individuals to see themselves as “above average” (Kruger, 1999; Malmendier & Tate, 2005; Alicke, 1985; Svenson, 1981). The tendency of individuals to rate themselves as “above average” can be viewed in the literature in many different areas. For example, individuals rating their own driving skills (Svenson, 1981) or students rating the course grade at the completion of a course (Nowell & Alston, 2007). Campbell et al. (2004) defines overconfidence as a positive difference between average confidence and average accuracy. Whereas a negative difference between the two is called underconfidence and no difference is referred to as idealized calibration.

Campbell et al. (2004) states that an overconfident individual misreads actual risks and chances. They take as an example, an even-money bet with a 40 percent chance of winning. A well-calibrated individual will be less likely to accept this offer, but an overconfident individual may view it as a 60 percent chance of winning and will accept this bet much earlier. Therefore, these individuals are risk-seeking. As indicated by Campbell et al. (2004), overconfident people will inflate their own personal qualities and heightened risk-taking, which can lead to an extreme focus on success. In line with the reasoning of overconfident individuals, underconfident people will probably choose the other way around and will deflate their own personal qualities and be risk-averse. Whereas well-calibrated people do not inflate or deflate their personal qualities and are risk-neutral.

### *2.2.2 The link between the status quo bias, and the confidence level, risk attitude of the individual*

Knowing the definitions of different levels of risk attitude and confidence, gives the opportunity to link them to the status quo bias. As indicated by Samuelson & Zeckhauser (1988), the status quo bias can be invoked by reasons, like (cognitive) misperception, anchoring and retaining self-image. When linking these reasons with the definition of overconfidence by Campbell et al. (2004), it shows some overlap. For example, viewing an

even-money bet as a 60% percent chance of winning (an overconfident individual), can also be seen as a misperception by this individual, which is indicated as one of the reasons for the presence of the status quo bias. Another example is the inflating of someone's personal qualities, which is a reason behind the presence of a higher confidence level. When an individual makes a sequential decision with an "inflated" view of how good their capabilities are, they will misperceive how good the first option was in the sequential decision-making. This wrongfully increases the "value" of this status quo option for this individual and the presence of the status quo bias increases. The same argument can be made with underconfident people, only with the opposite result. When an individual makes a sequential decision with a "deflated" view of how good their capabilities are, they will misperceive how good the first option was in the sequential decision-making. Individuals will still misperceive their first option, but this will probably decrease the "value" of this status quo option.

Although risk-seeking and overconfidence can go hand-in-hand, as indicated by Campbell et al. (2004), it does not mean that highly risk-seeking individuals stick with their former decision-making. Risk-seeking individuals tend to choose the more risk-seeking options. This means that they overweigh the value of success of riskier options compared to safer options. Riskier options can be seen as options with a low percentage of success, but probably gives a high benefit. Where safe options can be seen as options with a high percentage of success, but probably gives a low benefit. In case of sequential decision-making, the chance is higher that high risk-seeking individuals will not choose the same option in the second round as in the first round, compared to low risk-seeking individuals. Therefore high risk-seeking individuals tend not to choose, in the second decision round, the status quo option. Whereas, low risk-seeking individuals tend to choose the status quo option, because they are risk-averse and want to limit the risk of making a "bad" decision. Therefore, they stick with the option they know most about.

## *2.3 The difference in behaviour between adolescents and adults*

### *2.3.1 Hormones influencing behaviour*

The difference in behaviour between adolescents and adults are fostered by two main elements, the surrounding factors influencing a person and the genetics of a person (Buchanan, 1992). Although surrounding factors have a large impact on how individuals

behave in society, still the determinant factor choosing to act in a certain way comes from the inside, the genetics of an individual. The genetics control how the body is influenced by matter, like hormones. These hormones help people them to react, in a certain way, when needed. According to Beach (1975), this corresponds for humans as well as animals. Beach (1975) gives the example of the male frog and toad, who during breeding season, enhance their more hormones to increase the size of its laryngeal apparatus. This allows them to perform the sex call necessary to attract females. When looking at human boys, testosterone increases during adolescents years, because of multiple reasons. One of them, is hunting. Although it is not necessary in this time period, generations ago boys needed to hunt and the testosterone increased the awareness and strength, and the likelihood a prey was captured.

The change in hormones varies across age groups and influences individuals differently at different moments, like when an individual is an adolescent or a young adult. Buchanan (1992) states that literature on hormone-behaviour relationship on adults gives four effects which influence the behaviour of adolescents, these are: activation effects, adjustment effects, irregularity effects and complex interactions. The activation effect states that the great variability, up and down, of hormones concentrations lead to high or low levels of moods or behaviour. The same goes for cyclical shifts in hormone levels, which lead to corresponding moods or behaviour to change in the same way. The adjustment effect states that when adolescents get older, the heightened hormone level does not affect them as much anymore. Meaning that effects of hormones influences older adolescents less in what can be seen in mood and behaviour. Literature has provided some evidence that high hormone level for adolescents lead to more negative moods states (Nottelman et al., 1987; Susman et al. 1985). Buchanan (1992) concludes that the findings in the literature are consistent with the notion of an adjustment period, early on in the adolescent period. The irregularity effect states that hormones not only tend to be higher in concentration, but also fluctuate more. This variability and irregularities can lead to instable and nervous functioning, influencing the moods and behaviour of the adolescent. In the literature, irregular or atypical hormone activity has been associated with negative moods and behaviour in adult women (Wide et al., 1976; Coppen & Kessel, 1963; Dennerstein et al., 1984). Besides the effects described before, the complex interactions between all these influence and others, like individual sensitivity to hormones and individual predispositions toward certain behaviour, influence the mood and behaviour of adolescents.



### *2.3.2 The effect of hormones on impulsiveness and self-esteem*

According to Buchanan's (1992) cross-sectional paper, hormones do affect behaviour, although it is not quite clear which behaviours are influenced. For example, some literature states that the anxiety level and concentration level is very different between adolescents and adults, whereas other literature do not support this claim (Buchanan, 1992). Still, there are some behaviours which are affected by hormones, and is agreed upon by the literature.

According to Buchanan (1992), studies provide some evidence of hormones influencing the impulsiveness of adolescents. According to literature, Estrogen tend to increase impulsivity in young adolescence girls (Warren & Brooks-Gunn, 1989). Especially in this period, because of rising oestrogen and irregularity of hormone levels. With boys, the higher levels of testosterone during adolescence, tends to have a lower effect compared to estrogen on impatience. On the other hand, Olweus et al. (1980) states that testosterone led to lower frustration tolerance, suggesting impatience and probably in these situations more impulsive reactions. Also adrenal androgens effect leads to more impulsive behaviour in boys.

According to Trimpop et al. (1998), adolescents are risk takers. They tend to be more sensation seeking, act recklessly and take more risks compared to other age groups. As indicated by Spear (2000), adolescents tend to make more risk-seeking choices compared to adults. According to Keating (1990), an explanation for this could be that the decision-making capacity of adolescents tend to be more vulnerable for disruptions, like stress and strains of everyday life. Therefore, they may exhibit poorer cognitive choice performance, compared to adults, when stress and strains of everyday life are included. In sum, when adolescents have to make a decision they tend to be more impulsive and risk-taking compared to adults.

According to Buchanan (1992), finding out if and how self-esteem / self-confidence is affected by hormones, is a complicated task. Reasons for this is diversity and many influences playing a role. Still, Nottelman et al. (1987) found that in early adolescence self-esteem is negatively influenced by adrenal androgens (for boys) and gonadotropins (for girls), leading to negative moods and behaviour. On the other hand, there are many influences influencing self-esteem, like body image (Buchanan, 1992). According to literature, boys tend to be positively influenced by the change in their bodies (Blyth et al, 1981), probably through more muscular development (Buchanan, 1992). Girls, on the other hand, experience less self-esteem, because of a worse body-image (Duncan, et al., 1985; Simmons, et al., 1983). In sum,

self-esteem is affected by hormones. Still, other influences also affect the level of self-esteem of an adolescent. Therefore, it cannot be stated from the literature that the level of self-esteem or self-confidence differs between adolescents and adults. On the other hand, the literature shows that adolescents level of self-esteem / self-confidence tends to be much more influenced by hormones, compared to adults.

#### *2.4 Hypotheses*

As indicated by literature, the status quo bias appears with adult individuals, when they choose 401(k) plans, car insurance and resident electrical services (Samuelson & Zeckhauser, 1988; Kahneman et al., 1991; Hartman et al., 1991 and Madrian & Shea, 2000). Which provides the first hypothesis:

*H1: The status quo bias significantly influences young adults.*

Although research has not investigated the presence of the status quo bias with adolescents, the difference in characteristics of young adults and adolescents can provide information on this subject. The main differences in behaviour between adolescents and young adults come from hormonal changes (Spear, 2000) and the adjustment of coping with the stress of everyday life (Keating, 1990). Research has shown that adolescents tend to be more impulsive and have a less balanced level of self-esteem/self-confidence (Buchanan, 1992). Another difference between adolescents and young adults is the difference in cognitive choice performance, which is better for adults compared to adolescents (Keating, 1990). This lower cognitive ability to make carefully considerate choices of adolescents can be directly linked with being more vulnerable to (cognitive) misperceptions and the cognitive dissonance theory, which are reasons for the presence of the status quo bias. This provides the second and third hypothesis:

*H2: The status quo bias significantly influences adolescents.*

*H3: The status quo bias significantly influences adolescents more compared to young adults.*

As indicated before by Samuelson & Zeckhauser (1988), the psychological commitment due to regret avoidance, consistency and uncertainty in sequential decision-making, can instigate the status quo bias. In all of these reasons, it can be argued that risk attitude of an individual can affect these reasons for the presence of the status quo bias. Especially over- and

underconfidence and the possible risk-seeking or lack of risk-seeking is of interested here, when it comes to influencing the level of status quo bias. In line with Campbell et al. (2004), the inflating of own capabilities can lead to overconfidence in own decision-making made beforehand, as in the case of the status quo bias. Linking this with the reasons for the status quo bias from Samuelson & Zeckhauser (1988), can result in multiple scenarios.

In the case of the status quo bias, individuals tend to be in a situation where someone has to make sequential decisions. Therefore, a decision is made beforehand. When an individual is overconfident, he/she will be likely to see the former the decision as a good one. This will provide this status quo option a stronger position compared to any other option in the last decision round.

When an individual is underconfident, he/she could be more likely to doubt their own capabilities and this can influence his/her decision-making in two ways. First, this individual could view its old decision as doubtful. Hereby lowering the importance of the status quo option in sequential decision making. Therefore, limiting a possible status quo effect due to consistency. On the other hand, this individual can doubt about their own decision-making qualities now and therefore prefer the choice option he/she had chosen before. Giving strength to the status quo option in sequential decision-making. As can be seen, it is unclear that an underconfident person prefers the status quo or any other option.

Another reasoning goes for the risk-attitude of an individual. In the case of the status quo bias, individuals tend to be in a situation where someone has to make sequential decisions. Therefore, a decision is made beforehand. Low risk-seeking individuals tend to choose the option which provides the lowest risk. This option chosen, is probably the option were the individual has most information about. In a sequential decision-making scenario this is the status quo option. As other options are less known, they provide uncertainty about future predictions on how good these other options are. Therefore low risk-seeking individuals tend to choose the status quo option in sequential decision-making. High risk-seeking individuals have the tendency to choose riskier options compared to low risk-seeking individuals. If a risky option could generate a high benefit, the high risk-seeking individual is more likely to choose this option compared to the lower risk-seeking individual.

In sum, it can be concluded that the higher the confidence level and the lower the risk-seeking

level of an individual, the higher the chance they will choose the status quo option. This leads to the following hypotheses:

*H4: The higher the level of confidence, the higher the likelihood that an individual will choose the status quo option in sequential economic decision-making.*

*H5: The lower the level of risk-seeking, the higher the likelihood that an individual will choose the status quo option in sequential economic decision-making.*

### 3. Research method

#### 3.1 Survey procedure

To investigate the correctness of the hypotheses, surveys are used. For the collection of respondents, a hardcopy as well as online versions of the surveys were distributed to a large amount of potential respondents. The hardcopy versions of the surveys were distributed in locations in and around the University of Utrecht. The online versions were distributed through email by the coordinator of the High schools, teachers or myself. Due to limited time of High schools, conducting an online version of the survey was most practical for them. Therefore, all of the adolescents response comes from the online survey. In total there are 244 respondents, consisting of 115 adolescents and 129 young adults.

The respondents were presented with one of two distributed versions of the survey. The difference between the two surveys lies in the scenarios for measuring the status quo bias. In all surveys, the groups are first presented with three scenarios at which they had to make an economic decision. Only, some scenarios are from the Status Quo treatment, others from the NEUTRAL treatment. The respondents were only presented with the NEUTRAL treatment or the Status quo treatment scenarios, no combination of both. The example provided below shows an English version of a scenario presented to the respondents in the Neutral and Status Quo treatment. In the real surveys, Dutch versions are used.

Example (Burmeister & Schade, 2006, p.359):

***“Digital camera (NEUTRAL treatment):***

*Imagine yourself sitting in a street cafe´ in Florence thinking of all the great things you have been lucky enough to experience today. That same second you experience one of the possible dark sides of a holiday trip when you catch a glimpse of a thief vanishing with your camera. You have already planned an evening with your friends when you return home, and you do not want to miss showing the photos you were going to take on tomorrow’s sightseeing tour. Therefore, you decide to immediately buy a new camera on the Piazza. What camera are you going to buy?*

- *Digital camera A: 512 MB memory, 5 mega pixel, price: 399 EUR.*
- *Digital camera B: 256 MB memory, 3 mega pixel, price: 199 EUR.*
- *Digital camera C: 256 MB memory, 2 mega pixel, price: 99 EUR.*

***Digital camera (Status Quo treatment: Camera A)***

*Imagine yourself sitting in a street cafe´ in Florence thinking of all the great things you have been lucky enough to experience today. That same second you experience one of the possible dark sides of a holiday trip when you catch a glimpse of a thief vanishing with your camera. You have already planned an evening with your friends when you return home, and you do not want to miss showing the photos you were going to take on tomorrow’s sightseeing tour. Therefore, you decide to immediately buy a new camera on the Piazza. Your last photos were taken with digital camera A. What camera are you going to buy?*

- *Digital camera A: 512 MB memory, 5 mega pixel, price: 399 EUR.*
- *Digital camera B: 256 MB memory, 3 mega pixel, price: 199 EUR.*
- *Digital camera C: 256 MB memory, 2 mega pixel, price: 99 EUR.”*

As can be seen in the example above, both scenarios present the respondents with a story where they have to imagine themselves in a situation where they have to make an economic decision. In this case, the respondent is an individual who is on a holiday and lost his / her camera due to a thief. The respondent still wants to make pictures for their friends and this is quite important to him / her. Now the question remains: which replacement digital camera does the respondent want to buy? In the scenario description there was one difference between both scenarios. The Status Quo (SQ) treatment scenario has one more sentence included in the scenario description: “Your last photos were taken with digital camera A.” Adding this sentence gives the opportunity to measure the status quo bias, as is done in another paper by Burmeister & Schade (2006). Besides this scenario, two other scenarios are included which are presented in the same way. More information on these treatments will be provided in paragraph 3.2.

As indicated, the survey procedure starts, after a short introduction about myself, with three scenarios (one at a time). In all of these scenarios, the respondents were asked to choose between three options. After these scenarios, the groups were asked questions about their age, gender and chosen education profile. The survey is finished with a few questions to determine the level of self-confidence and the level of risk-seeking behaviour of the respondent. More information on the measurements of the level of self-confidence and risk-seeking will be provided in paragraphs 3.3 and 3.4.

### *3.2 Measuring the status quo*

To measure a possible status quo bias, the methods of Burmeister & Schade (2006) and Samuelson & Zeckhauser (1988) are used. The most direct measure found in the literature to measure status quo is through a questionnaire, as introduced by Burmeister & Schade (2006) and Samuelson & Zeckhauser (1988). The method used in this thesis, is directly in line with Burmeister & Schade (2006). In this thesis, adolescents and young adults are compared in a between-subject design, to see if one group is significantly more affected by a status quo bias compared to the other group.

In the questionnaire, three decision scenarios are presented to the participants. These scenarios, include buying a digital camera, renting an office and replacing a lost MP4 player. The participant can only choose one option per scenario. These scenarios are equal to the scenarios used by Burmeister & Schade (2006). The questions are translated in Dutch. For the main reason, that Dutch adolescents probably have not yet developed the skill of reading English for these higher level questions. To protect against errors of translation, both groups are provided with a Dutch version of the original scenarios presented by Burmeister & Schade (2006).

In total there are two versions of this part of the questionnaire. The participants are divided into one of these two versions, i.e. the experimental treatments. In line with Burmeister & Schade (2006) and Samuelson & Zeckhauser (1988), these versions consist of one status quo treatment (SQ) and one neutral treatment (NEUTRAL). Although Burmeister & Schade (2006) also include two alternative status quo (ASQ) scenarios in their research, they are not by definition necessary. Meaning that the ASQ's could be helpful finding more data, which could create significant results comparing these ASQ's with the SQ. In this thesis, not dividing our observations in four groups, but in two, needs less observations. Getting observations from different High schools costs a lot of time and effort. Therefore, this thesis uses two experimental treatments: one status quo (SQ) and one neutral treatment (NEUTRAL).

In both versions, the basic tenets are the same. Each participant is randomly divided into one of these two treatments. In all the scenarios of the SQ-treatment group, the status quo option is always option A. Examples of the treatments and scenarios are provided in Appendix A.

### *3.3 Measuring self-confidence levels*

#### *3.3.1 The choice of measure*

For the measurement and comparing of the self-confidence of the participants, the Rosenberg's Self-Esteem scale is chosen (RSE scale). Although the RSE scale is primarily used as a measure for global self-esteem (Gray & Little, 1997), a part of this scale can be used for measuring self-confidence (Owens, 1993). According to Owens (1993), self-esteem consists of self-confidence and self-depreciation. A direct measure for self-confidence is difficult to find in the literature. Whereas measures for global self-esteem have been used and developed for many years (Robins et al., 2001; Twenge & Campbell, 2001).

According to Robins et al. (2001), there are over the years a wide range of self-esteem measures introduced. According to literature, the Rosenberg Self-Esteem scale (RSE Scale) is by far the most widely used. The RSE scale has been the focus of numerous psychometric evaluations, and is used on widely varying populations (Gray-Little et al., 1997). Twenge and Campbell (2001) found that 199 studies have used the RSE scale. Also more current literature uses the RSE scale (Westaway et al., 2013; Zeigler-Hill et al., 2013 and Sinclair et al., 2010). According to research, the psychometric properties of the RSE scale gives an acceptable to high reliability for different groups of people (Ward, 1977; Fleming & Courtney, 1984 and McCarthy & Hoge, 1984). Furthermore, the RSE scale can be filled in a couple of minutes and does not require more than a fifth-grade reading level (Gray & Little, 1997). Although only self-confidence is measured in this thesis, the questionnaire of the RSE scale will not be altered, to protect the validity of the scale. Still, the questions are translated in Dutch. For the main reason, that Dutch adolescents probably have not yet developed the skill of reading English for these higher level questions.

#### *3.3.2 Method of measuring self-confidence*

As indicated by several studies, the RSE scale will consist of ten items, which refer to global self-esteem (Robins et al., 2001; Martin-Albo et al., 2007; Schmitt & Allik, 2005). The participant will provide each item with a score, on the basis of a four-point Likert-scale. As indicated by Hagborg (1993), most researchers use a four-point Likert-scale to assess the



score of each item. Before filling in this part of the survey, the participant will be instructed. In line with University of Maryland (2014), the scoring of the items goes as follows. For items one, two, four, six and seven: Strongly Agree = three points, Agree = two points, Disagree = one point, and Strongly Disagree = zero points. For items three, five, eight, nine and ten (scores are the other way around): Strongly Agree = zero points, Agree = one point, Disagree = two points, and Strongly Disagree = three points. The total scores can differ between zero and thirty points, where zero points states low self-esteem and thirty points state high self-esteem. In line with Owens (1993), only the positive wording items of the RSE scale can be used to estimate self-confidence. Therefore measuring self-confidence will be done by adding up the scores of RSE scale for the positive wording items, which are one, two, four, six and seven. The scores can differ between zero and twenty points, where zero points states low self-confidence and twenty points state high self-confidence.

The University of Maryland (2014) also state that levels of self-esteem cannot be exactly seen by the RSE scale. Therefore on the RSE scale the level of self-confidence cannot be seen. Most literature on the RSE scale is about comparing self-esteem levels between countries (Schmitt & Allik, 2005), investigating the RSE scale for a specific group of people (Martin-Albo et al., 2007) or specific country (Westaway et al., 2013; Sinclair et al., 2010) and investigating if the RSE scale is still a valid measure to measure self-esteem (Robins et al., 2001; Hagborg, 1993). Still, the goal of measuring the level of self-esteem / self-confidence is to find more information about the characteristics of adolescents, young adults and to see how the status quo bias is represented within these subject groups and how it differs between these groups. Therefore, knowing the exact levels of self-confidence is not a crucial factor, because this paper compares lower and higher levels of self-confidence, which can be measured by the RSE scale. More information about the procedure and content of the RSE scale can be found in Appendix B.

### *3.4 Measuring the risk attitude*

#### *3.4.1 Choice of measure*

To measure the risk attitude of the participants, a Multiple Price List (MPL) is used. According to Andersen et al. (2006), this measure is a relatively easy procedure for eliciting values from participants. The MPL has several variations, but the main procedure is as

follows with eliciting a risk attitude. The participant is presented with two tables containing ten horizontal rows. One table presents a fixed amount of money and the other table exists of money values combined with a chance percentage for obtaining these money values. As indicated by Andersen et al. (2006), multiple experiments have used the MPL-method to assess the risk attitudes of people (Binswanger, 1980; Laury & Holt, 2002; Beck, 1994; Harrison et al., 2005). Andersen et al. (2006) also state that the MPL is easy to explain and implement.

#### *3.4.2 Explanation of measure*

As can be seen in Appendix C, the participant is presented with two tables (A and B) containing six vertical rows. These rows include twelve money values combined with a chance percentage for obtaining these money values, six at each table. At each of the six rows, the participant has to choose between two money values with a certain percentage chance of obtaining these money values (option A or B). The tables are constructed in such a way that the participant in the beginning will choose option A, because it provides a much higher level of expected value compared to B. Every next row will enhance the expected value option B, whereas option A's expected value stays the same. This leads even to option B getting a higher expected value compared to option A. The measurement device is constructed in such a way that at a certain point the participant will switch from option A to option B, meaning that option B provides more value compared to A for this participant at that moment. When the participant changes from option A to B depends on his/her level of risk-seeking behaviour.

The goal of this measurement device is to find the so-called indifference point. The MPL is constructed in a way that it is easy to interpret the level of risk-seeking behaviour. The more rows the respondent chooses option A, the higher the risk-seeking behaviour of this person. Therefore, a participant who switches from option A to B at the fifth row is more risk-seeking compared to a participant who switches at the second row. More information about the procedure and the content of the MPL can be found in Appendix C.

#### *3.5 Analysis of results*

The result section begins with an overview of the sample selection of the research and a talk about the validity and reliability of this research.

The results section continues with the analysis on the verification of the status quo bias in the economic decision-making of all respondents, adolescents and young adults. In line with Burmeister & Schade (2006), three tables are presented containing the relative frequencies of the chosen options of each scenario version and the asymptotic significance levels of the Chi-squared statistics. The three tables are divided in data from every respondent (the adolescents plus young adults), the adolescents and young adults. The Chi-squared statistic provides, in this case, information to see if there is a significant difference between the answers provided by the SQ-treatment group and the Neutral group in each scenario and age groups (adolescents and young adults).

The analysis continues with measuring if adolescents (young adults) are significantly more influenced by the status quo bias compared to young adults (adolescents). To test if the answers provided by adolescents and young adults are significantly different, an Independent Samples t-test is carried out. This test helps to distinguish if there is a significant difference in the mean scores of both groups in each scenario. These numbers are put in a table. This table also includes a sum up of the relative frequencies of the status quo option chosen of each scenario version of the adolescents and young adults. These numbers are included to see the percentage change of the status quo option between the SQ-treatment group and the Neutral group. Comparing the adolescents and young adults percentage differences gives an indication, which group is more affected by the status quo bias. These numbers are necessary, because the Independent Samples t-test only shows if the answers provided by the adolescents and young adults are significantly different, but not who is more affected by the status quo bias. Therefore, these numbers are included to see which group is more affected.

The analyses of the verification of the status quo bias in the economic decision-making of the level of confident individuals and the level of risk-seeking individuals goes exactly the same, as the analysis with the adolescents and young adults. The only difference in the analysis is that different groups are analyzed and compared with each other. For example, instead of adolescents and young adults, “low” and “high” confident / risk-seeking individuals are analyzed to see if they are affected by the status quo bias and who is more affected by it. Explanation on the dividing in “low” and “high” confidence level and risk-seeking, can be found in the results section.

## 4. Results

### 4.1 Sample selection

As indicated in table 1, this research consists of a sample selection of 244 respondents and nineteen basic variables used in this research. All “additional” variables used in the data analysis are derived from the variables presented in table 1.

*Table 1: Descriptive data of sample selection, part 1.*

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Scenario 1</b>	244	1	3	1,670	0,754
<b>Scenario 2</b>	244	1	3	2,420	0,835
<b>Scenario 3</b>	244	1	3	1,780	0,786
<b>Version survey</b> (Dummy, 0=Neutral version survey, 1=SQ-treatment survey)	244	0	1	0,460	0,500
<b>Gender</b> (Dummy, 0=woman, 1=man)	244	0	1	0,430	0,496
<b>Age (years)</b>	244	14	30	19,210	4,238
<b>Level of education</b> (Dummy, 1=HAVO/VWO, 2=Gymnasium, 3=Not Applicable)	244	1	3	2,070	0,966
<b>Risk-seeking</b>	244	0	6	3,881	1,812
<b>Self-esteemQ1</b>	244	1	4	1,620	0,646
<b>Self-esteem Q2</b>	244	1	4	1,550	0,603
<b>Self-esteem Q3</b>	244	1	4	3,490	0,694

<b>Self-esteem Q4</b>	244	1	4	1,870	0,740
<b>Self-esteem Q5</b>	244	1	4	3,110	0,756
<b>Self-esteem Q6</b>	244	1	4	1,890	0,622
<b>Self-esteem Q7</b>	244	1	4	1,800	0,639
<b>Self-esteem Q8</b>	244	1	4	2,740	0,830
<b>Self-esteem Q9</b>	244	1	4	2,910	0,867
<b>Self-esteem Q10</b>	244	1	4	2,920	0,897
<b>Self-confidence score</b> (combined score from part of self-esteem questions)	244	1	16	4,734	2,410

Table 1 shows the variables derived from the answers of the survey. The table describes the minimum, maximum, mean and standard deviation of all the variables. To provide more clarity about the descriptive data, table 2 presents a more in depth overview on some of the variables, which are not explained in table 1, the research method section and the Appendix.

Table 2: Descriptive data of sample selection, part 2.

	Respondents	
	Adolescents (N=115)	Adults (N=129)
Male	44	68
Female	71	61
<b>Total gender</b>	<b>115</b>	<b>129</b>
HAVO/VWO	99	6
Gymnasium	16	0
HBO/WO	0	123
<b>Total education</b>	<b>115</b>	<b>129</b>
Survey with SQ-scenario	58	55
Survey without SQ-scenario	57	74
<b>Total respondents survey</b>	<b>115</b>	<b>129</b>

As indicated in table 2, the sample selection of 244 respondents are divided into 115 adolescents below the age of 18 (following HAVO/VWO or Gymnasium) and 129 young adults (following, or have finished, HBO or WO). From the 115 adolescents, 58 filled in the survey with the SQ-scenarios and 57 filled in the survey without the SQ-scenarios. From the 129 young adults, 55 filled in the survey with the SQ-scenarios and 74 filled in the survey without the SQ-scenarios. 123 young adults followed an University or HBO study and 6 were still at High school following HAVO/VWO. From the adolescents, 99 followed HAVO/VWO and 16 Gymnasium classes.

#### 4.2 Validity and reliability of the research

The validity and reliability is an important part of the quality of this research. Therefore, a few precautions were made to protect the content and external validity, and reliability of the research.

Nuijten (2012, p.74) states that: *content validity concerns the degree to which items in an instrument reflect the content universe to which the instrument will be generalized.* According

to Straub et al. (2004), the validity is attained through literature reviews and experts. As indicated by Shadish et al. (2002), the external validity of a research depends on whether a cause-effect relationship holds in a variation of different settings, persons and treatments.

To protect the content and external validity of this research, all research methods used to measure the status quo bias, level of confidence and risk-attitude have been used in many other papers and in many different settings (Samuelson & Zeckhauser, 1988; Burmeister & Schade, 2006; Martin-Albo et al., 2007; Westaway et al., 2013; Sinclair et al., 2010; Binswanger, 1980; Holt & Laury, 2002; Beck, 1994; Harrison et al., 2005).

In line with Nuijten (2012), the reliability is enhanced by using native language, use of Likert-scale questions and procedures from other papers to test the presence of the status quo bias. As indicated by Nuijten (2012), the survey questions are presented in the native language of the respondents, Dutch. As the survey questions are answered, partially, by adolescents, it is not clear if they would have understood all the texts and questions found in the survey, if they were written in English. Therefore, using the native language limits the possibility of misinterpretations and increases the reliability of the answers provided by the adolescents.

In line with Nuijten (2012), multiple choice questions are presented to create an open nature of the questions. As indicated by Braster (2000), more open questions allow the respondent to pay more attention to detail. In this case, Likert-scale questions are used to get a better indication of the self-confidence level of the respondent.

Besides the precautions taken, to protect the validity and reliability of this research, there are tests to see if there is reliability in the research. For example, Cronbach's Alpha test is used for assessing the reliability of scales (Santos, 1999). In this paper, different questions with scales are used to assess the level of self-confidence of the respondent. Table 3 shows the results from the Cronbach's Alpha test.

Table 3: Cronbach's alpha test.

	<b>Cronbach's Alpha if Item Deleted</b>
Question 1	0.775
Question 2	0.739
Question 4	0.779
Question 6	0.743
Question 7	0.732
	<b>Cronbach's Alpha</b>
	<b>0.793</b>

Only these question numbers were used for assessing the level of self-confidence of the respondents.

Table 3 shows that Cronbach's Alpha has a high level of internal consistency with a value of 0.793. As indicated by Nuijten (2012), a high level of consistency corresponds with a high level of reliability. Furthermore, table 3 shows that if any question was deleted from the survey, this would lower Cronbach's Alpha. This would lead to a lower level of consistency and hereby a lower level of reliability.

In sum, this section shows that the content and external validity, and reliability have been taken into account to make sure that this research delivers a high quality product.

#### *4.3 Verifying the status quo bias in economic decision-making of all respondents, adolescents and young adults*

To verify the status quo bias, the frequency of choice of a status quo option is compared to the frequency of this option in the neutral version. Tables 4, 5, 6 show the frequencies and asymptotic significant levels of the Chi-squared statistics for all respondents (adolescents and young adults).

In Table 4, the relative frequencies of all the respondents are presented. To make clear what information the tables hold, an example is presented. As can be seen in Table 4, 63,7 percent of all respondents in the Status quo (SQ) treatment choose option A in the digital camera scenario. Whereas only 38,9 percent of all the respondents in the Neutral treatment choose



option A in the digital camera scenario. Meaning that there is a substantial difference in percentage in this scenario. To acknowledge that there is a significant difference, a threshold is used at a significance level of 10 percent. This threshold is used for all tests, where a significance level is measured. In this case, this means that when the p-value of the Chi-squared statistic is below 0.10, there is a significant difference between the answers of an individual in the SQ-treatment group compared to the Neutral group. If the p-value of the Chi-squared statistic is above 0.10, there is no significant difference between the answers of an individual in the SQ-treatment group compared to the Neutral group.

As indicated by the p-value of 0.001 at scenario 1, there is a significant difference in choice, when a respondent is put in the SQ-treatment group compared to the control Neutral group. It can be seen that the direction of the change in choice is in line with the reasoning behind the status quo bias. Individuals tend to be very much influenced by previous decision making. As in the case here, individuals who probably would have chosen option B or C, without knowledge of a previous decision, tend to switch to option A, when they have chosen this option before.

*Table 4: Relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for all respondents (adolescents and young adults).*

<b>Scenario</b>	<b>Option</b>	<b>SQ-treatment</b>	<b>Neutral</b>	<b>P-level (SQ-Neut)*</b>
Digital camera	A	72 / 113 = 0.637	51 / 131 = 0.389	0.001
	B	26 / 113 = 0.230	53 / 131 = 0.405	
	C	15 / 113 = 0.133	27 / 131 = 0.206	
Office space	A	25 / 113 = 0.221	30 / 131 = 0.229	0.709
	B	17 / 113 = 0.150	15 / 131 = 0.115	
	C	71 / 113 = 0.628	86 / 131 = 0.656	
MP4 player	Panasonic	58 / 113 = 0.513	50 / 131 = 0.382	0.109
	Phillips	32 / 113 = 0.283	50 / 131 = 0.382	
	iRiver	23 / 113 = 0.204	31 / 131 = 0.237	

*\*The P-level generated holds for the whole question, not just for the first option.*

Scenario 2 and 3 presented in Table 4, provide a somewhat different conclusion. Especially in scenario 2, the office space scenario, it can be seen that the frequency of the status quo option in both the SQ-treatment and Neutral group are almost the same. For example, the difference

between the options is 0,8 percentage point. This small change can also be seen in the high p-value of 0.709, meaning that there is no significant difference between the answers provided in the control and treatment group.

More in line with scenario 1, it can be seen that in scenario 3, the MP4 player scenario, individuals tend to switch to the status quo option (option A), when comparing the treatment group with the control group. Where 38,2 percent of the respondents in the Neutral treatment choose option A, 51,3 percent of the respondents in the SQ-treatment group choose option A. Although this is a big difference and in line with the reasoning behind the status quo bias, it cannot be concluded that this difference is significant, as indicated by the p-value of 0.109.

It can be concluded that in two out of three cases there is a shift in choices made from option B and C to A, when comparing the SQ-treatment group and the Neutral group. The results are in line with Burmeister & Schade (2006), who also had a highly significant difference in the digital camera scenario, an almost significant difference in the MP4 scenario (in their case, MP3) and no significant difference in the office space scenario.

*Table 5: Relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for adolescents.*

<b>Scenario</b>	<b>Option</b>	<b>SQ-treatment</b>	<b>Neutral</b>	<b>P-level (SQ-Neut)*</b>
Digital camera	A	32 / 58 = 0.552	24 / 57 = 0.421	0.272
	B	19 / 58 = 0.328	27 / 57 = 0.474	
	C	7 / 58 = 0.121	6 / 57 = 0.105	
Office space	A	19 / 58 = 0.328	21 / 57 = 0.368	0.018
	B	12 / 58 = 0.207	2 / 57 = 0.035	
	C	27 / 58 = 0.466	34 / 57 = 0.596	
MP4 player	Panasonic	34 / 58 = 0.586	26 / 57 = 0.456	0.135
	Phillips	14 / 58 = 0.241	12 / 57 = 0.211	
	iRiver	10 / 58 = 0.172	19 / 57 = 0.333	

*\*The P-level generated holds for the scenario question, not just for the first option.*

Table 5 describes the relative frequencies of all adolescents. Here it can be seen that the results are very much in line with the relative frequencies of all respondents. In the digital

camera scenario and the MP4 player scenario it can be seen that there is shift in choices made from option B and C to A, when comparing the SQ-treatment group and the Neutral group. In the digital camera scenario, option A is chosen 42,1 percent of the time in the Neutral group, whereas in the SQ-treatment group option A is chosen 55,2 percent of the time. The same goes for the MP4 player scenario, option A is chosen 45,6 percent of the time in the Neutral group, whereas in the SQ-treatment group option A is chosen 58,6 percent of the time. Although these frequencies look much larger, this does not mean that the difference is significant. The p-value of the digital camera scenario is 0.272 and the p-value of the MP4 player is 0.135, which is higher compared to the 10 percent threshold.

The office space scenario does give a p-value which is lower than the threshold, with a p-value of 0.018. Although this number states that there is a significant difference between the numbers of both groups, that does not mean that there is a status quo bias effect. This case shows that in the Neutral group 36,8 percent of the adolescents choose option A, whereas only 32,8 percent of the adolescents in the SQ-treatment group choose option A. Therefore there cannot be a status quo bias, otherwise the amount of adolescents who had chosen option A in the SQ-treatment group would have been higher, compared to the amount of adolescents who choose option A in the Neutral group.

It can be concluded that none of the scenarios have significantly proven that there was a significant difference between the SQ-treatment group choices and the Neutral group choices. This means no status quo bias is present. Therefore, the second hypothesis of this paper: *the status quo bias significantly influences adolescents*, can be rejected.

Table 6: Relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for young adults.

Scenario	Option	SQ-treatment	Neutral	P-level (SQ-Neut)*
Digital camera	A	40 / 55 = 0.727	27 / 74 = 0.365	0.000
	B	7 / 55 = 0.127	26 / 74 = 0.351	
	C	8 / 55 = 0.145	21 / 74 = 0.284	
Office space	A	6 / 55 = 0.109	9 / 74 = 0.122	0.355
	B	5 / 55 = 0.091	13 / 74 = 0.176	
	C	44 / 55 = 0.800	52 / 74 = 0.703	
MP4 player	Panasonic	24 / 55 = 0.436	24 / 74 = 0.324	0.106
	Phillips	18 / 55 = 0.327	38 / 74 = 0.514	
	iRiver	13 / 55 = 0.236	12 / 74 = 0.162	

\*The P-level generated holds for the whole scenario, not just for the first option.

Table 6 describes the relative frequencies of all young adults. Here it can be seen that the results are very much in line with the relative frequencies of all respondents. In the digital camera scenario and the MP4 player scenario it shows that there is shift in choices made from option B and C to A, when comparing the SQ-treatment group and the Neutral group. In the digital camera scenario, option A is chosen 36,5 percent of the time in the Neutral group, whereas in the SQ-treatment group option A is chosen 72,7 percent of the time. The same goes for the MP4 player scenario, option A is chosen 32,4 percent of the time in the Neutral group, whereas in the SQ-treatment group option A is chosen 43,6 percent of the time. Here there is a difference in significance level between the two scenarios. The MP4 player scenario presents a p-value of 0.106, therefore again stating no significant difference. Whereas, the digital camera scenario provides a p-value of 0.000, meaning that this value is significant. Therefore, in the digital camera scenario there is significant difference between choices made in SQ-treatment group compared to the Neutral group. Again the difference falls in the right direction, because 72,7 percent of the young adults in the SQ-treatment group choose option A, whereas only 36,5 percent of the young adults choose option A in the Neutral group.

The office space scenario gives again no statistical difference with a p-value of 0.355 and provides a smaller percentage of young adults choosing option A in the SQ-treatment group compared to the Neutral group.

In sum, it can be concluded that in one of the three scenarios there is prove of a significant difference between the answers of the SQ-treatment group and the control group. Therefore, acknowledging the presence of the status quo bias in at least one of the scenarios. This leads to the acceptance of the first hypothesis for the first scenario: *the status quo bias significantly influences young adults.*

#### 4.4 Adolescent and young adult comparison

To verify the status quo bias, the frequency of choice of the status quo option is compared to the frequency of this option in the neutral version for adolescents and adults. Table 7 presents a sum up of these basic frequencies comparing adolescents and young adults choice preference for the status quo option in all the scenarios.

Table 7: Basic frequencies comparisons between adolescents and young adults choosing the status quo option.

Scenario	SQ-treatment (%)	Neutral (%)	Difference (%)	Independent Samples t-test (p-value)
<b>Digital camera</b>				0.408
<i>Adolescents</i>	55,2	42,1	13,1	
<i>Young adults</i>	72,7	36,5	36,2	
<b>Office space</b>				0.445
<i>Adolescents</i>	32,8	36,8	-4,0	
<i>Young adults</i>	10,9	12,2	-1,3	
<b>MP4 player</b>				0.091
<i>Adolescents</i>	58,6	45,6	13,0	
<i>Young adults</i>	43,6	32,4	11,2	

Table 7 shows that in all three scenarios, both groups (adolescents and young adults) follow the same direction in individuals switching from one group towards the other. As can be seen at the percentage differences, the first and third scenario present a positive change from individuals choosing the status quo option more often in the SQ-treatment group compared to

the Neutral treatment group. Whereas in the second scenario it is the other way around. In scenarios 2 and 3 the percentage point difference is almost the same, 4 percent versus 1,3 percent and 13,0 percent versus 11,2 percent.

The main difference between the percentages lies in the digital camera scenario. Here for young adults the choice difference is 36,2 percentage point and for the adolescents 13,1 percentage point. This is quite a difference. In the first scenario, the status quo bias is much more present in the young adults group compared to the adolescents group.

To test if the answers provided by adolescents and young adults are significantly different, an Independent Samples t-test was carried out. This test helps to distinguish if there is a significant difference in the mean scores of both groups in each scenario. As the respondents had to choose between answers 1, 2 and 3 in each scenario, these means fall into this range. In this test, adolescents and adults were used as the grouping variable and the scores of each scenario, individually, as the test variable. The results can be seen in Table 7.

Table 7 shows that the p-values in scenarios one and two are higher than the threshold with p-values of 0.408 and 0.445. This means that there is no significant difference between the mean scores of adolescents and young adults in these scenarios. On the other hand, scenario three reveals a p-value of 0.091. This means that in scenario three there is a significant difference between the mean scores of adolescents and young adults.

To conclude, the tests show that the third hypothesis: *the status quo bias significantly influences adolescents more compared to young adults*, does not hold in two out of three scenarios. On the other hand, scenario three does show a significant difference between the answers provided by adolescents and young adults. Furthermore, the percentage change of individuals choosing the status quo option more in the SQ-treatment group and Neutral group is slightly more in the adolescent group compared to the young adult group. This suggests that the hypothesis for scenario three cannot be rejected.

#### 4.5 Verifying the status quo bias in economic decision-making of “high” and “low” confident individuals

To verify the status quo bias, the frequency of choice of a status quo option is compared to the frequency of this option in the neutral version for “high” and “low” confident individuals. The respondents are divided into two groups. The first group has a “high” confidence level and the second group has a “low” confidence level. The groups are divided based on the median. The 50 percent lowest scoring individuals, according to the Rosenberg scale (1989), fall in the group “low” confident individuals. The 50 percent highest scoring individuals, according to the Rosenberg scale (1989), fall in the group “high” confident individuals. Here it should be taken into account that this dividing only means that one group compared to the other group contain higher/lower confident individuals and this is not a comparison between low versus highly confident people. Tables 8 and 9 present the relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for the two groups.

*Table 8: Relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for “high” self-confidence respondents.*

<b>Scenario</b>	<b>Option</b>	<b>SQ-treatment</b>	<b>Neutral</b>	<b>P-level (SQ-Neut)*</b>
Digital camera	A	33 / 65 = 0.508	24 / 68 = 0.353	0.184
	B	22 / 65 = 0.338	32 / 68 = 0.471	
	C	10 / 65 = 0.154	12 / 68 = 0.176	
Office space	A	16 / 65 = 0.246	17 / 68 = 0.250	0.827
	B	10 / 65 = 0.154	8 / 68 = 0.118	
	C	39 / 65 = 0.600	43 / 68 = 0.632	
MP4 player	Panasonic	33 / 65 = 0.508	33 / 68 = 0.485	0.838
	Phillips	19 / 65 = 0.292	23 / 68 = 0.338	
	iRiver	13 / 65 = 0.200	12 / 68 = 0.176	

*\*The P-level generated holds for the whole scenario, not just for the first option.*

Table 8 shows that “high” self-confident people tend to be not affected by a status quo bias in all three scenarios. Comparing the percentages change between the chosen status quo option (the first option) shows little difference between the SQ-treatment group and the Neutral group. The biggest difference is presented in the digital camera scenario, which shows an increase from 35,3 percent to 50,8 percent. Although this looks like a big difference, it is not a

significant difference with a p-value of 0.184. It can be concluded that in this three scenarios, “high” self-confident people are not influenced by previous choices and therefore are less vulnerable for a status quo bias.

*Table 9: Relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for “low” self-confidence respondents.*

<b>Scenario</b>	<b>Option</b>	<b>SQ-treatment</b>	<b>Neutral</b>	<b>P-level (SQ-Neut)*</b>
Digital camera	A	39 / 48 = 0.813	27 / 63 = 0.429	0.000
	B	4 / 48 = 0.083	21 / 63 = 0.333	
	C	5 / 48 = 0.104	15 / 63 = 0.238	
Office space	A	9 / 48 = 0.188	13 / 63 = 0.206	0.852
	B	7 / 48 = 0.146	7 / 63 = 0.111	
	C	32 / 48 = 0.667	43 / 63 = 0.683	
MP4 player	Panasonic	25 / 48 = 0.521	17 / 63 = 0.270	0.026
	Phillips	13 / 48 = 0.271	27 / 63 = 0.429	
	iRiver	10 / 48 = 0.208	19 / 63 = 0.302	

*\*The P-level generated holds for the whole scenario, not just for the first option.*

Table 9 shows that “low” confident individuals tend to be influenced by the status quo bias. As can be seen in scenarios one and three, there is a huge difference between the percentage of individuals who choose the status quo option in the SQ-treatment group compared to the Neutral group. The digital camera scenario shows that 42,9 percent of the respondents in the Neutral group choose the status quo option, whereas 81,3 percent of the SQ-treatment group choose the status quo option. The MP4 player scenario shows that 27,0 percent of the Neutral group respondents choose the status quo option, whereas 52,1 percent of the SQ-treatment group choose the status quo option. Table 9 also shows that these differences in scenarios one and three are significantly different with p-values of 0.000 and 0.026. Here it can be concluded that in two out of three scenarios, individuals with “low” self-confidence tend to be significantly influenced by the status quo bias.



#### 4.6 “High” and “low” confidence comparison

Table 10: Independent Samples t-test between “high” and “low” self-confident respondents.

Scenario	SQ-treatment (%)	Neutral (%)	Difference (%)	Independent Samples t-test (p-value)
<b>Digital camera</b>				0.119
“High” self-confidence	50,8	35,3	15,5	
“Low” self-confidence	81,3	42,9	38,3	
<b>Office space</b>				0.311
“High” self-confidence	24,6	25,0	-0,4	
“Low” self-confidence	18,8	20,6	-1,8	
<b>MP4 player</b>				0.058
“High” self-confidence	50,8	48,5	2,3	
“Low” self-confidence	52,1	27,0	25,1	

Although tables 8 and 9 provide a big difference in result, it does not mean that there is a significant difference between both groups. Table 10 shows the Independent Samples t-test for each scenario. Only the third scenario shows a significant difference between the answers provided by the “high” confident individuals compared to the “low” confident individuals, with a p-value of 0.058. Whereas, the first scenario almost has a significant difference with a p-value of 0.119, almost being below the threshold of 10 percent significance. The second scenario has a p-value of 0.311 clearly showing no significant difference in answers between both groups.

In sum, it can be concluded that hypothesis four: *the higher the level of confidence, the higher*

*the likelihood that an individual will choose the status quo option in sequential economic decision-making*, can be rejected in all of the scenarios. The first two scenarios show no significant difference in answers between “high” confident individuals and “low” confident individuals. Although scenario three shows a significant difference in answers between both groups, the percentage change of individuals choosing the status quo option more in the SQ-treatment group compared to the Neutral group is much higher in the “low” confident group. Therefore, it does not correspond with the hypothesis.

#### *4.7 Verifying the status quo bias in economic decision-making of “high” and “low” risk-seeking individuals*

To understand if the level of risk-seeking of an individual plays a role in the presence of the status quo bias, the same procedure is used as with analyzing the influence of the level of self-confidence. Again, two tables with basic frequencies are presented. Tables 11 and 12 present relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for “low” and “high” risk-seeking respondents. The respondents are divided into two groups. The first group has a “high” risk-seeking level and the second group has a “low” risk-seeking level. The groups are divided based on the median. The 50 percent lowest scoring individuals, according to the results from the MPL, fall in the group “low” risk-seeking individuals. The 50 percent highest scoring individuals, according to the results of the MPL, fall in the group “high” risk-seeking individuals. Here it should be taken into account that this dividing only means that one group compared to the other group contain higher/lower risk-seeking individuals and this is not a comparison between low versus highly risk-seeking people. Tables 11 and 12 present the relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for the two groups.

Table 11: Relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for “low” risk-taking individuals.

Scenario	Option	SQ-treatment	Neutral	P-level (SQ-Neut)*
Digital camera	A	34 / 48 = 0.708	18 / 53 = 0.340	0.001
	B	11 / 48 = 0.229	23 / 53 = 0.434	
	C	3 / 48 = 0.063	12 / 53 = 0.226	
Office space	A	8 / 48 = 0.167	11 / 53 = 0.208	0.867
	B	7 / 48 = 0.146	7 / 53 = 0.132	
	C	33 / 48 = 0.688	35 / 53 = 0.660	
MP4 player	Panasonic	25 / 48 = 0.521	18 / 53 = 0.340	0.182
	Phillips	14 / 48 = 0.083	22 / 53 = 0.415	
	iRiver	9 / 48 = 0.188	13 / 53 = 0.245	

\*The P-level generated holds for the scenario question, not just for the first option.

As indicated in table 11, the first and third scenario show an increase in the frequency of the status quo option, when comparing the SQ-treatment group and the Neutral group. Whereas scenario two does not. In the digital camera scenario, the percentage of individuals choosing option A grows from 34.0 percent to 70.8 percent. In the MP4 player scenario, the percentage of individuals choosing the first option grows from 34.0 percent to 52.1 percent. They both show the potential of being affected by the status quo bias. Looking at the p-value of both scenarios it can be seen that only in the digital camera scenario the p-value is significant, with a p-value of 0.001. Therefore, only in one out of three scenarios there is a significant difference in answering within “low” risk-seeking individuals.

Table 12: Relative frequencies and asymptotic significance levels of the Chi-squared statistics (2-sided) for “high” risk-taking individuals.

Scenario	Option	SQ-treatment	Neutral	P-level (SQ-Neut)*
Digital camera	A	38 / 65 = 0.585	33 / 78 = 0.423	0.103
	B	15 / 65 = 0.231	30 / 78 = 0.385	
	C	12 / 65 = 0.185	15 / 78 = 0.192	
Office space	A	17 / 65 = 0.262	19 / 78 = 0.244	0.589
	B	10 / 65 = 0.154	8 / 78 = 0.103	
	C	38 / 65 = 0.585	51 / 78 = 0.654	
MP4 player	Panasonic	33 / 65 = 0.508	32 / 78 = 0.410	0.468
	Phillips	18 / 65 = 0.277	28 / 78 = 0.346	
	iRiver	14 / 65 = 0.215	18 / 78 = 0.231	

\*The P-level generated holds for the scenario question, not just for the first option.

As indicated in table 12, all scenarios show an increase in the frequency of the status quo option, when comparing the SQ-treatment group and the Neutral group. In the digital camera scenario, the percentage of individuals choosing option A grows from 42.3 percent to 58.5 percent. In the office space scenario, the percentage of respondents choosing option A grows from 24.4 percent to 26.2 percent. In the MP4 player scenario, the percentage of individuals choosing the first option grows from 41.0 percent to 52.3 percent. They all show the potential of being affected by the status quo bias. Looking at the p-value of the scenarios it can be seen that none of the scenarios have a p-value which is significant, with p-values of 0.103, 0.589 and 0.468. Therefore, in none of the scenarios there is a significant difference in answering within higher risk-taking individuals.

#### 4.8 “High” and “low” risk-seeking comparison

Table 13: Independent Samples t-test between “high” and “low” risk-seeking respondents.

Scenario	SQ-treatment (%)	Neutral (%)	Difference (%)	Independent Samples t-test (p-value)
<b>Digital camera</b>				0.551
“High” risk-seeking	58,5	42,3	16,2	
“Low” risk-seeking	70,8	34,0	36,8	
<b>Office space</b>				0.286
“High” risk-seeking	26,2	24,4	1,8	
“Low” risk-seeking	16,7	20,8	-4,1	
<b>MP4 player</b>				0.824
“High” risk-seeking	50,8	41,0	9,8	
“Low” risk-seeking	52,1	34,0	18,1	

The results from tables 11 and 12 already showed that the status quo bias is only present in one out of six scenarios. Still, it is interesting to see if there is a significant difference between the answers provided by “high” and “low” risk-seeking individuals in each scenario. Table 13 provides evidence that there is no significant difference between both groups. The Independent Samples t-test shows p-values well above the significance threshold for all scenarios, with p-values of 0.551, 0.286 and 0.824.

In sum, it can be concluded that hypothesis five: *the lower the level of risk-seeking, the higher the likelihood that an individual will choose the status quo option in sequential economic decision-making*, can be rejected. In all the scenarios there was no significant difference between the answers provided by “high” versus “low” risk-seeking individuals.

## 5. Discussion

### *5.1 Summary and interpretation of results*

This paper investigated the influence of the status quo bias on adolescents and young adults, when making an economic decision. It also investigated a possible link between the level of self-confidence and risk-seeking and the presence of the status quo bias, when making an economic decision.

This paper shows that it can be concluded that there is a difference in the level of presence of the status quo bias within the characteristics of an individual. According to the results of this paper, the presence of the status quo bias does depend on if someone has a “high” or “low” confidence level. On the other hand, being an adolescent or a young adult, or having different levels of risk-seeking behaviour does not significantly influence the presence of a status quo bias.

This paper shows a possible difference between the presence of the status quo bias at economic decision-making when someone is a young adult or an adolescent. For example, in one out of three scenarios conducted in this paper, there was a significant difference between the answers provided by young adults in the scenarios, when comparing the SQ-treatment group and the Neutral group. In another scenario, the results were barely not significant with a p-value just above the threshold of 10 percent. In this scenario, the percentage of individuals choosing the status quo option grew from 32.4 percent in the Neutral group to 43.6 percent in the SQ-treatment group. On the other hand, adolescents tend to be less affected by the status quo bias. In none of the scenarios, there was a relevant significant difference between the answers provided in SQ-treatment group and Neutral group. This suggests that adolescents do not experience the status quo bias at all. Therefore, from these tests it looks like young adults are more influenced by the status quo bias, compared to adolescents.

To see if there was a significant difference between the answers provided by the adolescents and young adults, an Independent Samples t-test was carried out. According to the results, in one out of three scenarios there was a significant difference between the answers provided by the adolescents and the answers of young adults. In addition, the percentage of adolescents choosing the status quo option in the SQ-treatment group was 13.0 percentage point higher compared to the Neutral group, whereas the percentage of young adults choosing the status

quo option in the SQ-treatment group was 11.2 percentage point higher compared to the Neutral group. This suggests that in this situation adolescents tend to be significantly more influenced by the status quo bias compared to young adults. Although this result looks promising, it does not correspond with the other results to fit the hypothesis that adolescents are significantly more influenced by the status quo bias compared to young adults. First, the percentage difference of individuals choosing the status quo option at the SQ-treatment and the Neutral group should have been larger for the adolescents to fit the hypothesis, which is not the case here. Second, according to the Independent Samples t-test there was a significant difference in answers within scenario three, but looking at the Chi-squared tests to analyse the presence of the status quo bias at each scenario, adolescents and young adults did not experience the status quo bias. Therefore, with no status quo bias present according to the Chi-squared test, it does not matter if one group has significantly answered the question at scenario three differently, to agree with the hypothesis.

A first indication showed that different levels of self-confidence had a link with being more vulnerable to the status quo bias. The Chi-squared tests showed that “high” self-confident individuals were not vulnerable to the status quo bias. Although in two out of three scenarios the amount of individuals choosing the status quo option increased, comparing the Neutral group to the SQ-treatment group, this difference never became significant. On the other hand, “low” self-confident individuals were significantly affected in two out of the three scenarios. In these scenarios the amount of individuals choosing the status quo option increased, comparing the Neutral group with the SQ-treatment group. For example, the digital camera scenario showed that 42,9 percent of the Neutral group respondents choose the status quo option, whereas 81,3 percent of the SQ-treatment group also choose the status quo option. The MP4 player scenario showed that 27,0 percent of the Neutral group respondents choose the status quo option, whereas 52,1 percent of the SQ-treatment group also choose the status quo option. Therefore, it looks like that “low” confident individuals are more affected by the status quo bias compared to “high” confident individuals. This conclusion is the opposite of the statement made in the hypothesis, where it is suggested that the higher the level of confidence, the more this individual is affected by the status quo bias.

To see if there was a significant difference between the answers provided by the “low” and “high” confident individuals, an Independent Samples t-test was carried out. According to the results, in one out of three scenarios there was a significant difference between the answers

provided by “low” confident individuals and the answers of the “high” confident individuals. In line with the Chi-squared test, this scenario (scenario three) presented the status quo bias in the “low” confident individuals group. Therefore, it can be concluded that “low” confident individuals tend to be more influenced by the status quo bias, compared to “high” confident individuals.

In line with the level of self-confidence, the level of risk-seeking behaviour of individuals can also be linked with more vulnerability to the status quo bias. The first tests showed that “high” risk-seeking individuals tend to be less vulnerable to the status quo option, compared to “low” risk-seeking individuals. As indicated in the results, none of the scenarios provided significant differences in answers between the Neutral group and SQ-treatment group with “high” risk-seeking individuals. Whereas, in one of the scenarios of the “low” risk-taking group there was a significant difference. The first results from these tests gave the impression that the hypothesis that “low” risk-seeking individuals are more vulnerable to the status quo bias, compared to “high” risk-seeking individuals, could not be rejected.

Still, to see if there was a significant difference between the answers provided by the “low” and “high” risk-seeking individuals, an Independent Samples t-test was carried out. According to the results, in none of three scenarios there was a significant difference between the answers provided by “low” risk-seeking individuals and the answers of the “high” risk-seeking individuals. Although the first tests showed a possible significant difference between “low” and “high” risk-seeking individuals being affected by the status quo bias, the Independent Samples t-test shows a different result. Therefore, the hypothesis that “low” risk-seeking individuals are more vulnerable to the status quo bias, compared to “high” risk-seeking individuals, can be rejected.

In sum, the results from the research were not always in line with the hypotheses provided in the literature. For example, adolescents were not at all influenced by a possible status quo bias. On the other hand, being a “low” confident individual did significantly decrease the level of influence of the status quo bias in economic decision-making, compared to being a “high” confident individual.



Putting the literature, research method and results together, provides some help to explain the difference between the hypotheses and the results of this paper. Taking the literature and using the results of the paper leads, for example, to a better explanation of why the status quo bias is not present in adolescent decision-making. According to the theory, adolescents have less cognitive ability to make carefully considerate choices compared to adults. Although this makes them vulnerable towards (cognitive) misperceptions and the cognitive dissonance theory, it looks like they are not at all influenced by their former decision. Therefore, they probably did not consider that their former decision could have been made after serious thinking (less cognitive choice performance). Instead of this, they use their impulsiveness and pick what they want, not considering past decisions. This might also explain that the first tests showed that young adults were more affected by the status quo bias. As they probably have a higher ability to make carefully considerate choices and are less affected by impulsiveness, compared to adolescents, they might be more affected by the status quo bias.

As indicated in the literature, individuals with a higher level of self-confidence seem to be very confident in their own decision making. One interesting part of the results is that higher self-confident individuals tend to be confident about their ability to choose now, because past decision-making looks much less important to them, compared to lower self-confident people. Although this result could be the same in real life, it probably is not. This is the case, because no effort was used to make the first decision. In the survey, higher self-confident individuals were provided with a first decision. Not making the decision themselves probably lowered the value of this decision. This lowered valued decision was compared to their own, current, highly valued, second decision. Therefore, higher self-confident individuals would choose their own current option before the provided option in the survey. This could be one reason why these results were not in line with the hypothesis, that “high” self-confident individuals would be more vulnerable to the status quo bias.

### *5.2 Limitations of this research*

As indicated, some of the hypotheses were rejected. Why these hypotheses were rejected, can depend on multiple reasons. For example, one of them is limitations of the research. Burmeister & Schade (2006) acknowledged some limitations of their own research, which are in line with this one. First, there is no incentive compatibility. The decisions made in the survey were hypothetical without any (monetary) consequences. As indicated by Schade

(2005), incentive compatible experimentation can be found less or more important, all depending on the research question. As can be seen with “high” confident individuals, no incentive compatibility can lower the value of the decision, whereas in real life these decisions could be much more important to the respondents of the survey.

In line with Burmeister & Schade (2006) no incentive compatibility was used, because the research should be close enough to be comparable with the studies of Burmeister & Schade (2006) and Samuelson & Zeckhauser (1988). Another reason, why this paper did not choose a more incentive compatible research comes from difficulty of experimentation. As indicated by Burmeister & Schade (2006), it is difficult to manipulate the status quo in real business decisions.

Another limitation of the investigation, was the use of an internet survey. Although an internet survey was the best way to reach out to the target groups, it has a few limitations. For example, individual answers could have been influenced by outside parties, like people surrounding them when filling in the survey and/or texting meanwhile filling in the survey. The use of a laboratory environment could have excluded these possible negative effects.

## **6. Conclusion**

This paper investigated the status quo bias. The status quo bias happens when individual decision makers attach an extra value in their default or status quo option in sequential decision-making. This paper focussed on the presence of the status quo bias in economic decision-making and looked at the influence of personal characteristics, like being a highly educated adolescent or young adult, a highly educated “high” versus “low” confident individual, and a highly educated “high” versus “low” risk-seeking individual.

According to the results of this paper, the presence of the status quo bias does depend on if someone has a “high” or “low” confidence level. On the other hand, being an adolescent or a young adult, or having different levels of risk-seeking behaviour does not significantly influence the presence of a status quo bias in economic decision-making.

The results in this paper provide an extra dimension to the literature on the status quo bias and biases in general. Although literature has investigated the presence of the status quo bias in

multiple groups, this paper includes new groups, like adolescents, “low” and “high” confident individuals, and “low” and “high” risk-seeking individuals. With the new information, for example, that “low” confident individuals are influenced by the status quo bias, could lead to more reliable future hypotheses for analyzing the presence of the status quo bias for certain groups of people.

Although the results showed that the answers provided in the survey by adolescents were not significantly different compared to the answers of young adults, still a few tests showed that adolescents were less influenced by the status quo bias compared to young adults. Therefore, it could be the case that the main factors influencing the presence of the status quo bias, come into play when someone becomes an adult. If this is the case, the main instigators for the presence of the status quo bias shows itself during adulthood.

Although behavioural biases have been investigated in many different areas, adolescents have been overlooked. Learning more about the presence and reasons behind possible “bad” biases influencing adolescents, could be very helpful. Knowing what kind of biases play a role influencing adolescents can help, to better educate a new generation of managers, who are less likely to fall for “bad” biases.

## **7. Appendix**

### *7.1 Appendix A*

In this part of the Appendix, the different versions of the decision scenarios are presented. As stated, each scenario and version comes from Burmeister & Schade (2006). From every decision scenario, the NEUTRAL and the SQ is presented. As a side note, everything is translated into Dutch for the survey:

#### **Decision scenario one**

Burmeister & Schade (2006, p.359):

##### **“Digital camera (neutral treatment):**

Imagine yourself sitting in a street cafe´ in Florence thinking of all the great things you have been lucky enough to experience today. That same second you experience one of the possible dark sides of a holiday trip when you catch a glimpse of a thief vanishing with

your camera. You have already planned an evening with your friends when you return home, and you do not want to miss showing the photos you were going to take on tomorrow's sightseeing tour. Therefore, you decide to immediately buy a new camera on the Piazza. What camera are you going to buy?

- Digital camera A: 512 MB memory, 5 mega pixel, price: 399 EUR.
- Digital camera B: 256 MB memory, 3 mega pixel, price: 199 EUR.
- Digital camera C: 256 MB memory, 2 mega pixel, price: 99 EUR.

### **Digital camera (status quo treatment: Camera A)**

Imagine yourself sitting in a street cafe´ in Florence thinking of all the great things you have been lucky enough to experience today. That same second you experience one of the possible dark sides of a holiday trip when you catch a glimpse of a thief vanishing with your camera. You have already planned an evening with your friends when you return home, and you do not want to miss showing the photos you were going to take on tomorrow's sightseeing tour. Therefore, you decide to immediately buy a new camera on the Piazza. Your last photos were taken with digital camera A. What camera are you going to buy?

- Digital camera A: 512 MB memory, 5 mega pixel, price: 399 EUR.
- Digital camera B: 256 MB memory, 3 mega pixel, price: 199 EUR.
- Digital camera C: 256 MB memory, 2 mega pixel, price: 99 EUR.”

### **Decision scenario two:**

Burmeister & Schade (2006, p.360-361):

#### **“Office rental (Neutral treatment)**

Due to a lack of space, you, as the owner of a service company, decide to rent new office space. After having looked at different locations, there are three that could work. The office spaces are located in different areas of the city, have different layouts, and have different rental costs. Which office space will you rent?

- Office accommodation A: average area, average layout, high price.
- Office accommodation B: bad area, very good layout, medium price.
- Office accommodation C: good area, inconvenient layout, good price.

**Office rental (SQ treatment: Medium)**

Due to a lack of space, you, as the owner of a service company, decide to rent new office space. After having looked at different locations, there are three that could work. The office spaces are located in different areas of the city, have different layouts, and have different rental costs. Your current offices are located in an average area. Which office space will you rent?

- Office accommodation A: average area, average layout, high price.
- Office accommodation B: bad area, very good layout, medium price.
- Office accommodation C: good area, inconvenient layout, good price”.

**Decision scenario three:**

Burmeister & Schade (2006, p.358), changed a few names to make it more authentic for this day and age:

**MP4–Player (neutral treatment):**

Since your newly purchased MP4-Player fell into the water on your last boat trip, you are planning on buying a new one. Which model do you favour as a replacement?

- You decide in favour of a Panasonic (55 h play time, 69 EUR).
- You decide in favour of a Philips (35 h play time, 49 EUR).
- You decide in favour of an iRiver (70 h play time, 99 EUR).

**MP4–Player (SQ treatment: Panasonic):**

Since your newly purchased portable MP4–Player (from Panasonic) fell into the water on your last boat trip, you are planning on buying a new one. Which model do you favour as a replacement?

- You decide in favour of a Panasonic (55 h play time, 69 EUR).
- You decide in favour of a Philips (35 h play time, 49 EUR).
- You decide in favour of an iRiver (70 h play time, 99 EUR).

## 7.2 Appendix B

The University of Maryland (2014) provides a list with the content of the ten items, how the participant of the survey is informed and how the point system works.

Before filling in the scale, the participant is provided with the following text (University of Maryland, 2014):

“Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, fill in SA. If you agree with the statement, fill in A. If you disagree, fill in D. If you strongly disagree, fill in SD.”

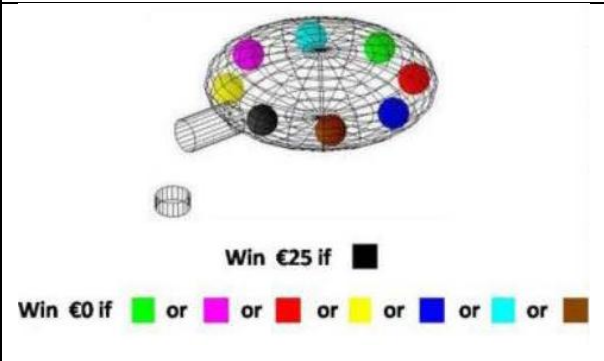
Rosenberg self-esteem scale (Rosenberg, 1989):

		1.	2	3.	4.
		STRONGLY		STRONGLY	
		AGREE	AGREE	DISAGREE	DISAGREE
1.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
2.	I feel that I have a number of good qualities.	SA	A	D	SD
3.	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.	I feel I do not have much to be proud of.	SA	A	D	SD

6.	I take a positive attitude toward myself.	SA	A	D	SD
7.	On the whole, I am satisfied with myself.	SA	A	D	SD
8.	I wish I could have more respect for myself.	SA	A	D	SD
9.	I certainly feel useless at times.	SA	A	D	SD
10.	At times I think I am no good at all.	SA	A	D	SD

### 7.3 Appendix C

In line with Holt & Laury (2002) the risk attitude of the participants is measured with a MPL. The basic concept of their model is used for assessing the risk attitude. The main difference is that this MPL uses less chance variables making it a simpler version of theirs, because this thesis deals with adolescents. The advantage of using this model is that adolescents probably understand this MPL better compared to Holt & Laury's (2002) MPL. The disadvantage is that the indifference point setting is probably less accurate, because of less options and the higher difference between the option values of B.

Option A		1	2	Option B
				Receive this amount for sure
		<input type="radio"/>	<input type="radio"/>	0 €
		<input type="radio"/>	<input type="radio"/>	5 €
		<input type="radio"/>	<input type="radio"/>	10 €
		<input type="radio"/>	<input type="radio"/>	15 €
		<input type="radio"/>	<input type="radio"/>	20 €
		<input type="radio"/>	<input type="radio"/>	25 €

#### 7.4 Appendix D

##### Example Dutch version survey

*There are two versions of the survey. The difference lies in the scenarios for measuring the status quo bias, the one described here is provided with the NEUTRAL treatment. The scenarios with the Status Quo treatment can be found in Appendix A.*

*Pagina 1*

Beste deelnemer,

Dank je voor je deelname aan dit onderzoek. Graag wil ik door middel van verschillende vraagstukken meer te weten komen over keuzes die mensen maken.

Het onderzoek wordt uitgevoerd door Walter de Jong, een Masterstudent Behavioural Economics (Gedragseconomie) voor zijn eindproject. Het invullen van deze enquête zal ongeveer tussen de 5-10 minuten duren. Bij elke vraag zal duidelijk worden aangegeven wat er gevraagd wordt.

Alle antwoorden zullen vertrouwelijk en anoniem behandeld worden. Dit betekent dat alleen de onderzoeker toegang heeft tot de ingevulde enquêtes en dat de individuele resultaten van



dit onderzoek niet openbaar worden gemaakt. De gegevens zullen alleen gebruikt worden voor academische doeleinden.

### *Pagina 2*

De enquête begint met een drietal scenario's. Bij elk van deze scenario's heb je de keuze tussen drie mogelijkheden. Tussen deze drie mogelijkheden mag je maar één antwoord kiezen.

### *Pagina 3*

#### **Scenario 1**

Stel jezelf eens voor dat je zit in een café in Florence (Italië), nadenkend over alle leuke dingen die je die dag heb meegemaakt. Op hetzelfde moment, beleef je één van de vervelendste momenten die je op vakantie kan tegenkomen, wanneer een dief met je camera ervandoor gaat. Het is vooral vervelend, omdat je al een avond had ingepland met vrienden om al je foto's te laten zien. Vooral de stadstour van morgen wilde je via je foto's laten zien. Daarom besluit je om direct een nieuwe camera te kopen bij de Piazza (een bekend winkelcentrum in Florence). Stel je voor dat je genoeg geld hebt om ze alle drie te kopen.

Welke camera ga je kopen?

- Digitale camera A: 512 MB memory, 5 mega pixel, prijs: 399 EUR.
- Digitale camera B: 256 MB memory, 3 mega pixel, prijs: 199 EUR.
- Digitale camera C: 256 MB memory, 2 mega pixel, prijs: 99 EUR.

### *Pagina 4*

#### **Scenario 2**

Stel je voor, je bent de eigenaar van een bedrijf en je hebt ruimte nodig om je bedrijf uit te breiden. Je besluit om een nieuwe kantoorruimte te huren. Nadat je hebt gezocht op meerdere locaties, heb je drie plekken gevonden, die zouden kunnen werken. De kantoorruimtes zijn verdeeld over verschillende locaties in de stad, hebben verschillende indelingen en verschillende huurkosten. Welke kantoorruimte zou jij huren?

- Kantoorruimte A: gemiddelde locatie, gemiddelde indeling, hoge prijs.
- Kantoorruimte B: slechte locatie, zeer goede indeling, gemiddelde prijs.
- Kantoorruimte C: goede locatie, onhandige indeling, goede prijs.

*Pagina 5*

**Scenario 3**

Tijdens het maken van een boottocht is je nieuwe MP4-speler in het water gevallen. Nu wil je toch graag weer een nieuwe hebben. Welk model zou je kiezen als vervanger?

- Je kiest voor een Panasonic (55 uur speeltijd, 69 EUR).
- Je kiest voor een Philips (35 uur speeltijd, 49 EUR).
- Je kiest voor een iRiver (70 uur speeltijd, 99 EUR).

*Pagina 6*

Nu worden er een paar vragen gesteld over jou persoonlijk.

Wat is je geslacht? – man / vrouw

Wat is je leeftijd? ..... jaar

Welk middelbaar niveau ben je aan het volgen:

- HAVO/VWO
- Gymnasium
- Nvt

Welke studie volg je? ..... of nvt

*Pagina 7 en 8*

Hier beneden is een lijst weergegeven met uitspraken over algemene gevoelens over jezelf. Wanneer je het met een uitspraak **absoluut eens** bent, dan omcirkel je AE. Wanneer je het met een uitspraak **eens** bent, omcirkel je ME. Wanneer je **oneens** bent met een uitspraak, omcirkel je MO. Wanneer je het **absoluut oneens** met een uitspraak bent, omcirkel je AMO.

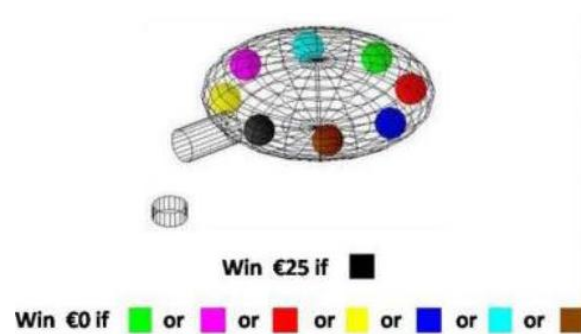
	1.	2	3.	4.	
	ABSOLUUT			ABSOLUUT	
	EENS	MEE EENS	MEE ONEENS	MEE ONEENS	
1.	Ik heb het gevoel dat ik een waardig persoon ben, die op gelijke voet staat met andere mensen.	AE	ME	MO	AMO
2.	Ik heb het gevoel dat ik over een paar goede kwaliteiten beschik.	AE	ME	MO	AMO
3.	Alles meegenomen, denk ik dat ik een mislukkeling ben.	AE	ME	MO	AMO
4.	Ik ben in staat om dingen net zo goed te doen als de meeste andere personen.	AE	ME	MO	AMO
5.	Ik heb het gevoel dat er weinig dingen zijn waar ik echt trots op kan zijn.	AE	ME	MO	AMO
6.	Ik kijk positief naar de dingen die ik zeg en doe.	AE	ME	MO	AMO
7.	Over het algemeen ben ik tevreden met	AE	ME	MO	AMO

	mezelf.				
	Ik zou graag willen dat ik wat meer respect had voor mezelf.				
8.		AE	ME	MO	AMO
	Ik voel me soms absoluut nutteloos.				
9.		AE	ME	MO	AMO
	Op sommige momenten denk ik, dat ik niets kan.				
10.		AE	ME	MO	AMO

*Pagina 9 en 10*

We spelen hieronder een fictieve loterij. De loterij gaat als volgt: je hebt een keus tussen twee opties, A of B.

Bij optie A heb je de kans om € 25,- te winnen. Zoals het plaatje al aangeeft, zitten er in het rad 8 verschillende kleuren balletjes. Alleen wanneer er een zwart balletje uit het rad komt verdien je € 25,-. Als er een andere kleur uit het rad komt, verdien je helemaal niets.



Bij optie B is de kans 100% dat je het aangegeven geldbedrag wint. **Hieronder moet je op elke rij een keuze maken tussen optie A en B.**

*Notitie 1:* Houd er rekening mee dat na elke rij het rad, met de acht ballen, opnieuw draait.

Oftewel de kans per rij op € 25,- blijft hetzelfde.

*Notitie 2:* Houd er rekening mee dat wanneer je eenmaal gewisseld bent van optie A naar optie B of andersom, je niet meer terug mag wisselen naar optie A of B.

**Vraag (Vul in 1 voor A of 2 voor B):**

<b>Optie A</b>	<b>1</b>	<b>2</b>	<b>Optie B</b> <b>Krijg dit geld zeker</b>
1/8 kans op €25 en 7/8 kans op €0,-	<input type="radio"/>	<input type="radio"/>	0 €
1/8 kans op €25 en 7/8 kans op €0,-	<input type="radio"/>	<input type="radio"/>	5 €
1/8 kans op €25 en 7/8 kans op €0,-	<input type="radio"/>	<input type="radio"/>	10 €
1/8 kans op €25 en 7/8 kans op €0,-	<input type="radio"/>	<input type="radio"/>	15 €
1/8 kans op €25 en 7/8 kans op €0,-	<input type="radio"/>	<input type="radio"/>	20 €
1/8 kans op €25 en 7/8 kans op €0,-	<input type="radio"/>	<input type="radio"/>	25 €

## 7.5 Appendix E

Appendix E contains all SPSS data used for making all the tables in this paper.

### 7.5.1 Descriptive data and reliability test

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Scenario 1	244	1	3	1,67	,754
Scenario 2	244	1	3	2,42	,835
Scenario 3	244	1	3	1,78	,786
Versionsurvey0withoutstatu squo1withstatusquo	244	0	1	,46	,500
Geslacht (1=man, 0=vrouw)	244	0	1	,43	,496
Age	244	14	30	19,21	4,238
Levelofeducation	244	1	3	2,07	,966
Riskattitude	244	,00	6,00	3,8811	1,81166
TestSelfConfidence1	244	1	4	1,62	,646
TestSelfConfidence2	244	1	4	1,55	,603
TestSelfConfidence3	244	1	4	3,49	,694
TestSelfConfidence4	244	1	4	1,87	,740
TestSelfConfidence5	244	1	4	3,11	,756
TestSelfConfidence6	244	1	4	1,89	,622
TestSelfConfidence7	244	1	4	1,80	,639
TestSelfConfidence8	244	1	4	2,74	,830
TestSelfConfidence9	244	1	4	2,91	,867
TestSelfConfidence10	244	1	4	2,92	,897
SelfConfidence.score	244	1,00	16,00	4,7336	2,41027
Valid N (listwise)	244				

*Percentages men and women, above and below 18 years*

**Adult.above.18**

		Frequency	Percent	Valid Percent	Cumulative Percent
	,00	68	27,9	52,7	52,7
Valid	1,00	61	25,0	47,3	100,0
	Total	129	52,9	100,0	
Missing	System	115	47,1		
Total		244	100,0		

**Adolescent.below.18**

		Frequency	Percent	Valid Percent	Cumulative Percent
	,00	71	29,1	61,7	61,7
Valid	1,00	44	18,0	38,3	100,0
	Total	115	47,1	100,0	
Missing	System	129	52,9		
Total		244	100,0		

In these tables, “0” stands for women and “1” stands for men.

*Percentages of respondents following education, above and below 18 years*

**Level.of.education.adolescent**

		Frequency	Percent	Valid Percent	Cumulative Percent
	1,00	99	40,6	86,1	86,1
Valid	2,00	16	6,6	13,9	100,0
	Total	115	47,1	100,0	
Missing	System	129	52,9		
Total		244	100,0		

In this table, “1” stands for HAVO/VWO and “2” stands for Gymnasium.

**Level.of.education.adult**

		Frequency	Percent	Valid Percent	Cumulative Percent
	1,00	6	2,5	4,7	4,7
Valid	3,00	123	50,4	95,3	100,0
	Total	129	52,9	100,0	
Missing	System	115	47,1		
Total		244	100,0		

In this table, “1” stands for HAVO/VWO and “3” stands for NVT (in this case, HBO/WO).

*Percentages of respondents who filled in version 1 or 2 of the survey, above and below 18 years*

**Versionsurvey.adult**

		Frequency	Percent	Valid Percent	Cumulative Percent
	,00	74	30,3	57,4	57,4
Valid	1,00	55	22,5	42,6	100,0
	Total	129	52,9	100,0	
Missing	System	115	47,1		
Total		244	100,0		

**Versionsurvey.adolescent**

		Frequency	Percent	Valid Percent	Cumulative Percent
	,00	57	23,4	49,6	49,6
Valid	1,00	58	23,8	50,4	100,0
	Total	115	47,1	100,0	
Missing	System	129	52,9		
Total		244	100,0		



In this table, “1” stands for the survey with status quo framing and “0” stands for the survey without status quo framing.

*Reliability test*

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,793	,797	5

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
TestSelfConfidence1	7,11	4,077	,503	,286	,775
TestSelfConfidence2	7,18	3,951	,624	,401	,739
TestSelfConfidence4	6,86	3,791	,510	,287	,779
TestSelfConfidence6	6,84	3,926	,607	,423	,743
TestSelfConfidence7	6,93	3,806	,640	,460	,732

7.5.2 Basic frequencies status quo bias measuring

7.5.2.1 Measuring frequencies for all respondents (adolescents and young adults)

**Choice.scenario1.withSQ**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	72	29,5	63,7	63,7
Valid 2,00	26	10,7	23,0	86,7
Valid 3,00	15	6,1	13,3	100,0
Total	113	46,3	100,0	
Missing System	131	53,7		
Total	244	100,0		

**Choice.scenario2.withSQ**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	25	10,2	22,1	22,1
Valid 2,00	17	7,0	15,0	37,2
Valid 3,00	71	29,1	62,8	100,0
Total	113	46,3	100,0	
Missing System	131	53,7		
Total	244	100,0		

**Choice.scenario3.withSQ**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	58	23,8	51,3	51,3
Valid 2,00	32	13,1	28,3	79,6
Valid 3,00	23	9,4	20,4	100,0
Total	113	46,3	100,0	
Missing System	131	53,7		
Total	244	100,0		

**Choice.scenario1.withoutSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
	1,00	51	20,9	38,9	38,9
Valid	2,00	53	21,7	40,5	79,4
	3,00	27	11,1	20,6	100,0
	Total	131	53,7	100,0	
Missing	System	113	46,3		
Total		244	100,0		

**Choice.scenario2.withoutSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
	1,00	30	12,3	22,9	22,9
Valid	2,00	15	6,1	11,5	34,4
	3,00	86	35,2	65,6	100,0
	Total	131	53,7	100,0	
Missing	System	113	46,3		
Total		244	100,0		

**Choice.scenario3.withoutSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
	1,00	50	20,5	38,2	38,2
Valid	2,00	50	20,5	38,2	76,3
	3,00	31	12,7	23,7	100,0
	Total	131	53,7	100,0	
Missing	System	113	46,3		
Total		244	100,0		

In these tables, option 1, 2 and 3 stand for option A, B and C in the surveys.

7.5.2.2 *Measuring frequencies for adolescents*

**Choice.adolescent.scenario1.withSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
	1,00	32	13,1	55,2	55,2
Valid	2,00	19	7,8	32,8	87,9
	3,00	7	2,9	12,1	100,0
	Total	58	23,8	100,0	
Missing	System	186	76,2		
Total		244	100,0		

**Choice.adolescent.scenario2.withSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
	1,00	19	7,8	32,8	32,8
Valid	2,00	12	4,9	20,7	53,4
	3,00	27	11,1	46,6	100,0
	Total	58	23,8	100,0	
Missing	System	186	76,2		
Total		244	100,0		

**Choice.adolescent.scenario3.withSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	34	13,9	58,6	58,6
	2,00	14	5,7	24,1	82,8
	3,00	10	4,1	17,2	100,0
	Total	58	23,8	100,0	
Missing	System	186	76,2		
Total		244	100,0		

**Choice.adolescent.scenario1.withoutSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	24	9,8	42,1	42,1
	2,00	27	11,1	47,4	89,5
	3,00	6	2,5	10,5	100,0
	Total	57	23,4	100,0	
Missing	System	187	76,6		
Total		244	100,0		

**Choice.adolescent.scenario2.withoutSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	21	8,6	36,8	36,8
	2,00	2	,8	3,5	40,4
	3,00	34	13,9	59,6	100,0
	Total	57	23,4	100,0	
Missing	System	187	76,6		
Total		244	100,0		

**Choice.adolescent.scenario3.withoutSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	26	10,7	45,6	45,6
	2,00	12	4,9	21,1	66,7
	3,00	19	7,8	33,3	100,0
	Total	57	23,4	100,0	
Missing	System	187	76,6		
Total		244	100,0		

In these tables, option 1, 2 and 3 stand for option A, B and C in the surveys.

### 7.5.2.3 Measuring frequencies for young adults

**Choice.adult.scenario1.withSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	40	16,4	72,7	72,7
	2,00	7	2,9	12,7	85,5
	3,00	8	3,3	14,5	100,0
	Total	55	22,5	100,0	
Missing	System	189	77,5		
Total		244	100,0		

**Choice.adult.scenario2.withSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	6	2,5	10,9	10,9
	2,00	5	2,0	9,1	20,0
	3,00	44	18,0	80,0	100,0
	Total	55	22,5	100,0	
Missing	System	189	77,5		
Total		244	100,0		

**Choice.adult.scenario3.withSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	24	9,8	43,6	43,6
	2,00	18	7,4	32,7	76,4
	3,00	13	5,3	23,6	100,0
	Total	55	22,5	100,0	
Missing	System	189	77,5		
Total		244	100,0		

**Choice.adult.scenario1.withoutSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	27	11,1	36,5	36,5
	2,00	26	10,7	35,1	71,6
	3,00	21	8,6	28,4	100,0
	Total	74	30,3	100,0	
Missing	System	170	69,7		
Total		244	100,0		

**Choice.adult.scenario2.withoutSQ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	9	3,7	12,2	12,2
	2,00	13	5,3	17,6	29,7
	3,00	52	21,3	70,3	100,0
	Total	74	30,3	100,0	
Missing	System	170	69,7		
Total		244	100,0		

**Choice.adult.scenario3.withoutSQ**

	Frequency	Percent	Valid Percent	Cumulative Percent
1,00	24	9,8	32,4	32,4
Valid 2,00	38	15,6	51,4	83,8
3,00	12	4,9	16,2	100,0
Total	74	30,3	100,0	
Missing System	170	69,7		
Total	244	100,0		

In these tables, option 1, 2 and 3 stand for option A, B and C in the surveys.

*7.5.2.4 Chi-Square tests*

**Chi-Square Tests for scenario 1, all respondents**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14,996 <sup>a</sup>	2	,001
Likelihood Ratio	15,167	2	,001
Linear-by-Linear Association	11,014	1	,001
N of Valid Cases	244		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 19,45.

**Chi-Square Tests for scenario 2, all respondents**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,689 <sup>a</sup>	2	,709
Likelihood Ratio	,686	2	,709
Linear-by-Linear Association	,036	1	,849
N of Valid Cases	244		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 14,82.



**Chi-Square Tests for scenario 3, all respondents**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,689 <sup>a</sup>	2	,709
Likelihood Ratio	,686	2	,709
Linear-by-Linear Association	,036	1	,849
N of Valid Cases	244		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 14,82.

**Chi-Square Tests for scenario 1, adolescents**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,603 <sup>a</sup>	2	,272
Likelihood Ratio	2,613	2	,271
Linear-by-Linear Association	,822	1	,364
N of Valid Cases	115		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,44.

**Chi-Square Tests for scenario 2, adolescents**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8,038 <sup>a</sup>	2	,018
Likelihood Ratio	8,821	2	,012
Linear-by-Linear Association	,274	1	,601
N of Valid Cases	115		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,94.

**Chi-Square Tests for scenario 3, adolescents**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,005 <sup>a</sup>	2	,135
Likelihood Ratio	4,055	2	,132
Linear-by-Linear Association	3,441	1	,064
N of Valid Cases	115		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 12,89.

**Chi-Square Tests for scenario 1, adults**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16,857 <sup>a</sup>	2	,000
Likelihood Ratio	17,412	2	,000
Linear-by-Linear Association	11,940	1	,001
N of Valid Cases	129		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 12,36.

**Chi-Square Tests for scenario 2, adults**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,069 <sup>a</sup>	2	,355
Likelihood Ratio	2,146	2	,342
Linear-by-Linear Association	,810	1	,368
N of Valid Cases	129		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,40.

**Chi-Square Tests for scenario 3, adults**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,482 <sup>a</sup>	2	,106
Likelihood Ratio	4,534	2	,104
Linear-by-Linear Association	,084	1	,772
N of Valid Cases	129		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 10,66.

*7.5.2.5 Independent Samples t-test*

**Group Statistics**

	Adult.in.survey	N	Mean	Std. Deviation	Std. Error Mean
Scenario 1	,00	115	1,63	,681	,064
	1,00	129	1,71	,814	,072

In these tables, ,00 stands for adolescents and 1,00 stands for adults

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Scenario 1	8,662	,004	-,820	242	,413	-,079	,097	-,270	,111
Equal variances not assumed			-,828	241,070	,408	-,079	,096	-,268	,109

**Group Statistics**

	Adult.in.survey	N	Mean	Std. Deviation	Std. Error Mean
Scenario 2	,00	115	2,18	,923	,086
	1,00	129	2,63	,685	,060

In these tables, ,00 stands for adolescents and 1,00 stands for adults

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Scenario 2	46,201	,000	Equal variances assumed	-4,307	242	,000	-,445	,103	-,649	-,242
			Equal variances not assumed	-4,235	208,689	,000	-,445	,105	-,653	-,238

**Group Statistics**

	Adult.in.survey	N	Mean	Std. Deviation	Std. Error Mean
Scenario 3	,00	115	1,73	,841	,078
	1,00	129	1,82	,734	,065

In these tables, ,00 stands for adolescents and 1,00 stands for adults

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	9,685	,002	-,905	242	,366	-,091	,101	-,290	,107
Equal variances not assumed			-,898	227,773	,370	-,091	,102	-,291	,109

*7.5.3 Comparing level of confidence with the status quo bias*

*7.5.3.1 Measuring frequencies for different levels of confidence*

**Statistics**

SelfConfidence.score

N	Valid	244
	Missing	0
Median		5,0000

Respondents divided into two groups (1: with above and equal to median self-confidence score, and 2. with below median self-confidence score)

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Above.equal.to.Median.SC.score	133	5,00	16,00	6,4586	1,73429
Below.Median.SC.score	111	1,00	4,00	2,6667	1,14680
Valid N (listwise)	0				

*7.5.3.2 Measuring frequencies for “high” confident respondents*

**Scenario 1 \* Above.SC.score.VersionSQ Crosstabulation**

Count

		Above.SC.score.VersionSQ							Total	
		5,00	6,00	7,00	8,00	9,00	10,00	11,00		12,00
Scenario 1	1	11	13	3	1	0	3	1	1	33
	2	7	4	2	6	1	1	0	1	22
	3	4	4	0	0	1	1	0	0	10
Total		22	21	5	7	2	5	1	2	65

**Scenario 1 \* Above.SC.score.VersionNeutral Crosstabulation**

Count

		Above.SC.score.VersionNeutral					Total	
		5,00	6,00	7,00	8,00	9,00		16,00
Scenario 1	1	10	8	3	0	2	1	24
	2	5	17	5	3	2	0	32
	3	2	8	2	0	0	0	12
Total		17	33	10	3	4	1	68

**Scenario 2 \* Above.SC.score.VersionSQ Crosstabulation**

Count

		Above.SC.score.VersionSQ							Total	
		5,00	6,00	7,00	8,00	9,00	10,00	11,00		12,00
Scenario 2	1	5	5	3	1	1	1	0	0	16
	2	5	3	0	1	0	0	0	1	10
	3	12	13	2	5	1	4	1	1	39
Total		22	21	5	7	2	5	1	2	65

**Scenario 2 \* Above.SC.score.VersionNeutral Crosstabulation**

Count

		Above.SC.score.VersionNeutral					Total	
		5,00	6,00	7,00	8,00	9,00		16,00
Scenario 2	1	5	10	2	0	0	0	17
	2	3	3	2	0	0	0	8
	3	9	20	6	3	4	1	43
Total		17	33	10	3	4	1	68

**Scenario 3 \* Above.SC.score.VersionSQ Crosstabulation**

Count

		Above.SC.score.VersionSQ							Total	
		5,00	6,00	7,00	8,00	9,00	10,00	11,00		12,00
Scenario 3	1	10	12	1	2	1	4	1	2	33
	2	8	6	2	3	0	0	0	0	19
	3	4	3	2	2	1	1	0	0	13
Total		22	21	5	7	2	5	1	2	65

**Scenario 3 \* Above.SC.score.VersionNeutral Crosstabulation**

Count

		Above.SC.score.VersionNeutral					Total	
		5,00	6,00	7,00	8,00	9,00		16,00
Scenario 3	1	9	15	3	3	3	0	33
	2	5	12	5	0	1	0	23
	3	3	6	2	0	0	1	12
Total		17	33	10	3	4	1	68

*7.5.3.3 Measuring frequencies for “low” confident respondents*

**Crosstab**

Count

		Below.Median.SC.score.VersionSQ				Total
		1,00	2,00	3,00	4,00	
Scenario 1	1	8	7	11	13	39
	2	1	1	1	1	4
	3	2	2	0	1	5
Total		11	10	12	15	48

**Crosstab**

Count

		Below.Median.SC.score.VersionNeutral				Total
		1,00	2,00	3,00	4,00	
Scenario 1	1	8	6	6	7	27
	2	3	4	7	7	21
	3	3	2	4	6	15
Total		14	12	17	20	63



**Scenario 2 \* Below.Median.SC.score.VersionSQ Crosstabulation**

Count

		Below.Median.SC.score.VersionSQ				Total
		1,00	2,00	3,00	4,00	
Scenario 2	1	2	2	3	2	9
	2	3	2	0	2	7
	3	6	6	9	11	32
Total		11	10	12	15	48

**Scenario 2 \* Below.Median.SC.score.VersionNeutral Crosstabulation**

Count

		Below.Median.SC.score.VersionNeutral				Total
		1,00	2,00	3,00	4,00	
Scenario 2	1	4	3	1	5	13
	2	1	2	1	3	7
	3	9	7	15	12	43
Total		14	12	17	20	63

**Scenario 3 \* Below.Median.SC.score.VersionSQ Crosstabulation**

Count

		Below.Median.SC.score.VersionSQ				Total
		1,00	2,00	3,00	4,00	
Scenario 3	1	4	6	6	9	25
	2	4	3	4	2	13
	3	3	1	2	4	10
Total		11	10	12	15	48

**Scenario 3 \* Below.Median.SC.score.VersionNeutral Crosstabulation**

Count

	Below.Median.SC.score.VersionNeutral				Total
	1,00	2,00	3,00	4,00	
1	4	4	4	5	17
Scenario 3 2	5	4	9	9	27
3	5	4	4	6	19
Total	14	12	17	20	63

*7.5.3.4 Chi-Square tests*

**Chi-Square Tests for scenario 1, "high" confident group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3,389 <sup>a</sup>	2	,184
Likelihood Ratio	3,404	2	,182
Linear-by-Linear Association	1,978	1	,160
N of Valid Cases	133		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 10,75.

**Chi-Square Tests for scenario 2, "high" confident group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,380 <sup>a</sup>	2	,827
Likelihood Ratio	,381	2	,827
Linear-by-Linear Association	,037	1	,848
N of Valid Cases	133		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 8,80.

**Chi-Square Tests for scenario 3, "high" confident group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,353 <sup>a</sup>	2	,838
Likelihood Ratio	,354	2	,838
Linear-by-Linear Association	,000	1	,993
N of Valid Cases	133		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 12,22.

**Chi-Square Tests for scenario 1, "low" confidence group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17,026 <sup>a</sup>	2	,000
Likelihood Ratio	18,067	2	,000
Linear-by-Linear Association	12,006	1	,001
N of Valid Cases	111		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 8,65.

**Chi-Square Tests for scenario 2, "low" confidence group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,319 <sup>a</sup>	2	,852
Likelihood Ratio	,317	2	,853
Linear-by-Linear Association	,000	1	,985
N of Valid Cases	111		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,05.

**Chi-Square Tests for scenario 3, "low" confidence group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7,324 <sup>a</sup>	2	,026
Likelihood Ratio	7,345	2	,025
Linear-by-Linear Association	5,111	1	,024
N of Valid Cases	111		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 12,54.

*7.5.3.5 Independent Samples t-test*

**Group Statistics**

	SC.score.divided.in.below.and.above.and.equal.to.median	N	Mean	Std. Deviation	Std. Error Mean
Scenario 1	,00	111	1,59	,780	,074
	1,00	133	1,74	,727	,063

In these tables, ,00 stands for "low" confidence group and 1,00 stands for "high" confidence group.

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Scenario 1	2,060	,153	-	242	,119	-,151	,097	-,342	,039
			Equal variances assumed						
Scenario 1	2,060	,153	-	227,627	,121	-,151	,097	-,343	,040
			Equal variances not assumed						

**Group Statistics**

	SC.score.divided.in.below.and.above.and.equal.to.median	N	Mean	Std. Deviation	Std. Error Mean
Scenario 2	,00	111	2,48	,807	,077
	1,00	133	2,37	,857	,074

In these tables, ,00 stands for “low” confidence group and 1,00 stands for “high” confidence group.

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Scenario 2	2,370	,125	1,016	242	,311	,109	,107	-,102	,320
			1,022	238,446	,308	,109	,107	-,101	,319

**Group Statistics**

	SC.score.divided.in.below.and.above.and.equal.to.median	N	Mean	Std. Deviation	Std. Error Mean
Scenario 3	,00	111	1,88	,795	,075
	1,00	133	1,69	,770	,067

In these tables, ,00 stands for “low” confidence group and 1,00 stands for “high” confidence group.

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Scenario 3									
Equal variances assumed	,139	,709	1,902	242	,058	,191	,100	-,007	,389
Equal variances not assumed			1,897	231,534	,059	,191	,101	-,007	,390

*7.5.4 Comparing level of risk-seeking with the status quo bias*

*7.5.4.1 Measuring frequencies for different levels of risk-seeking*

**Statistics**

Riskattitude

N	Valid	244
	Missing	0
Median		4,0000

Respondents divided into two groups (1: with above and equal to median risk-seeking score, and 2. with below median risk-seeking score)

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Below.risk.attitude	101	,00	3,00	2,0297	,97422
Above.equal.risk.attitude	143	4,00	6,00	5,1888	,88772
Valid N (listwise)	0				

*7.5.4.2 Measuring frequencies for “low” risk-seeking respondents*

**Scenario 1 \* Below.risk.attitude.versionSQ Crosstabulation**

Count

		Below.risk.attitude.versionSQ				Total
		,00	1,00	2,00	3,00	
Scenario 1	1	2	2	15	15	34
	2	2	1	3	5	11
	3	0	0	3	0	3
Total		4	3	21	20	48

**Scenario 1 \* Below.risk.attitude.versionNeutral Crosstabulation**

Count

		Below.risk.attitude.versionNeutral				Total
		,00	1,00	2,00	3,00	
Scenario 1	1	3	1	8	6	18
	2	6	1	10	6	23
	3	0	2	6	4	12
Total		9	4	24	16	53

**Scenario 2 \* Below.risk.attitude.versionSQ Crosstabulation**

Count

		Below.risk.attitude.versionSQ				Total
		,00	1,00	2,00	3,00	
Scenario 2	1	2	0	2	4	8
	2	0	1	5	1	7
	3	2	2	14	15	33
Total		4	3	21	20	48

**Scenario 2 \* Below.risk.attitude.versionNeutral Crosstabulation**

Count

		Below.risk.attitude.versionNeutral				Total
		,00	1,00	2,00	3,00	
Scenario 2	1	4	2	2	3	11
	2	0	0	5	2	7
	3	5	2	17	11	35
Total		9	4	24	16	53

**Scenario 3 \* Below.risk.attitude.versionSQ Crosstabulation**

Count

		Below.risk.attitude.versionSQ				Total
		,00	1,00	2,00	3,00	
Scenario 3	1	2	2	9	12	25
	2	1	0	8	5	14
	3	1	1	4	3	9
Total		4	3	21	20	48



**Scenario 3 \* Below.risk.attitude.versionNeutral Crosstabulation**

Count

		Below.risk.attitude.versionNeutral				Total
		,00	1,00	2,00	3,00	
Scenario 3	1	3	1	9	5	18
	2	3	1	9	9	22
	3	3	2	6	2	13
Total		9	4	24	16	53

*7.5.4.3 Measuring frequencies for “high” risk-seeking respondents*

**Scenario 1 \* Above.equal.risk.attitude.versionSQ Crosstabulation**

Count

		Above.equal.risk.attitude.versionSQ			Total
		4,00	5,00	6,00	
Scenario 1	1	15	5	18	38
	2	6	1	8	15
	3	5	3	4	12
Total		26	9	30	65

**Scenario 1 \* Above.equal.risk.attitude.versionNeutral Crosstabulation**

Count

		Above.equal.risk.attitude.versionNeutral			Total
		4,00	5,00	6,00	
Scenario 1	1	9	4	20	33
	2	6	6	18	30
	3	4	7	4	15
Total		19	17	42	78

**Scenario 2 \* Above.equal.risk.attitude.versionSQ Crosstabulation**

Count

		Above.equal.risk.attitude.versionSQ			Total
		4,00	5,00	6,00	
Scenario 2	1	4	3	10	17
	2	3	3	4	10
	3	19	3	16	38
Total		26	9	30	65

**Scenario 2 \* Above.equal.risk.attitude.versionNeutral Crosstabulation**

Count

		Above.equal.risk.attitude.versionNeutral			Total
		4,00	5,00	6,00	
Scenario 2	1	2	8	9	19
	2	3	3	2	8
	3	14	6	31	51
Total		19	17	42	78

**Scenario 3 \* Above.equal.risk.attitude.versionSQ Crosstabulation**

Count

		Above.equal.risk.attitude.versionSQ			Total
		4,00	5,00	6,00	
Scenario 3	1	13	6	14	33
	2	9	1	8	18
	3	4	2	8	14
Total		26	9	30	65

**Scenario 3 \* Above.equal.risk.attitude.versionNeutral Crosstabulation**

Count

		Above.equal.risk.attitude.versionNeutral			Total
		4,00	5,00	6,00	
Scenario 3	1	6	6	20	32
	2	8	7	13	28
	3	5	4	9	18
Total		19	17	42	78

*7.5.4.4 Chi-Square tests*

**Chi-Square Tests for scenario 1, "low" risk-seeking group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14,346 <sup>a</sup>	2	,001
Likelihood Ratio	14,866	2	,001
Linear-by-Linear Association	13,370	1	,000
N of Valid Cases	101		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,13.

**Chi-Square Tests for scenario 2, "low" risk-seeking group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,286 <sup>a</sup>	2	,867
Likelihood Ratio	,287	2	,866
Linear-by-Linear Association	,184	1	,668
N of Valid Cases	101		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,65.

**Chi-Square Tests for scenario 3, "low" risk-seeking group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3,405 <sup>a</sup>	2	,182
Likelihood Ratio	3,421	2	,181
Linear-by-Linear Association	2,373	1	,123
N of Valid Cases	101		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 10,46.

**Chi-Square Tests for scenario 1, “high” risk-seeking group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,541 <sup>a</sup>	2	,103
Likelihood Ratio	4,600	2	,100
Linear-by-Linear Association	1,707	1	,191
N of Valid Cases	143		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 12,27.

**Chi-Square Tests for scenario 2, “high” risk-seeking group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,059 <sup>a</sup>	2	,589
Likelihood Ratio	1,056	2	,590
Linear-by-Linear Association	,363	1	,547
N of Valid Cases	143		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 8,18.

**Chi-Square Tests for scenario 3, “high” risk-seeking group**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,520 <sup>a</sup>	2	,468
Likelihood Ratio	1,525	2	,467
Linear-by-Linear Association	,717	1	,397
N of Valid Cases	143		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 14,55.

### 7.5.4.5 Independent Samples t-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Scenario 1	Equal variances assumed	,642	,424	-,598	242	,551	-,059	,098	-,252	,135
	Equal variances not assumed			-,603	222,278	,547	-,059	,097	-,250	,133
Scenario 2	Equal variances assumed	3,606	,059	1,056	242	,292	,115	,108	-,099	,328
	Equal variances not assumed			1,070	225,411	,286	,115	,107	-,096	,325
Scenario 3	Equal variances assumed	,259	,611	,223	242	,824	,023	,102	-,179	,224
	Equal variances not assumed			,224	217,908	,823	,023	,102	-,178	,224

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